

## TAMIL

**பகுதி – 1 தமிழ் முதற் பருவம்**

**தாள்: 1 (செய்யுள், உரைநடை, இலக்கணம், இலக்கிய வரலாறு) (RSGT1)**

**நோக்கம்:**

1. சமூக மாற்றத்தில் புதுக்கவிதையின் சிறப்பை எடுத்துரைத்தல்
2. சமூக சிந்தனையைத் தூண்டுதல்
3. படைப்பாற்றல் ஆளுமையை வளர்த்தல்

**பாடம்சார் பயன் (Course Outcomes)**

**மாணவர்கள், (RSGT1) – தமிழ்த்தாள் –I பாடத்தைக் கற்றுத் தேர்ந்த பின்,**

**CO1:** கவிதைப் பொருண்மைகளையும் கவிதை வரலாற்றையும் அறிய இயலும்

**CO2:** மொழி,இலக்கண அறிவினைப் புரிந்துகொள்ள வழிவகுக்கும்

**CO3:** பல்வேறு துறை சார்ந்த கவிதை,கதைப் படைப்புகளை ஒப்பிட்டு அறிய வழிவகைகள் உள்ளன

**CO4:** பல்வேறு துறைப் பின்புலங்களோடு பதிவுபெற்றுள்ள இலக்கியச் சிந்தனைக் களங்களை மதிப்பிட்டுத் தெளிய இயலும்

**CO5:** உலகளாவிய நவீனக்கவிதை, சிறுகதைப் படைப்புகளைக் கற்றுப் படைப்பாளனாக உருவாக வழிகள் உள்ளன.

**பகுதி – 1 தமிழ் இரண்டாம் பருவம் (RSGT2)**

**தாள்: 2 (செய்யுள், சிறுகதை, தமிழ்ச் செம்மொழி வரலாறு, இலக்கிய வரலாறு)**

**நோக்கம்:**

1. பக்தி நெறியின் தன்மையை உணர்த்துதல்
2. நாயன்மார்கள், ஆழ்வார்களின் பக்திச் சிறப்பை அறியச் செய்தல்
3. சிற்றிலக்கிய வகைமைகளை எடுத்துரைத்தல்

**பாடம்சார் பயன் (Course Outcomes)**

**மாணவர்கள், (RSGT2)– தமிழ்த்தாள் –II பாடத்தைக் கற்றுத் தேர்ந்த பின்,**

**CO1:** தூது, உலா, அந்தாதி, விலாசம் போன்ற சிற்றிலக்கிய வகைகளுக்கான வரையறையை அறிந்து கொள்ள இயலும்

**CO2:** சமய இலக்கியங்கள் உணர்த்தும் சமூகப் பண்பாடுகளையும் மொழிப் பண்பாடுகளையும் தேர்ந்தறிய வாய்ப்புகள் உள்ளன

**CO3:** சமய, வரலாற்றுச்சான்றோர்களின் வாழ்வியல் மேன்மைகளைப் பின்பற்றிச் சமூகநலன் சார்ந்து வாழ உதவும்

**CO4:** நடிப்புத்திறனோடும் ஆளுமைப் பண்போடும் சமூகத்தில் கலைத் தாக்கத்தை ஏற்படுத்திட வழிவகுக்கும்

**CO5:** பல்வேறு போட்டித்தேர்வுகளை எதிர்கொள்ளும் திறன் உருவாக வழிகள் உள்ளன. கருத்துப் பிழைகள், சொற்பிழைகள் இன்றி எழுதக் கற்றுக் கொள்வர்.

### பகுதி – 1 தமிழ் மூன்றாம் பருவம் (RSGT3)

தாள்: 3 (செய்யுள், நாடகம், எழுத்தாற்றலை வளர்த்தல், இலக்கிய வரலாறு)

#### நோக்கம்:

1. காப்பிய இலக்கியத்தின் செழுமையை உணர்த்துதல். 2. காப்பியங்களின் உட்பொருளையும் கவியழகையும் புகட்டுதல். 3. நாடகத்தின் மேன்மையை உணரச் செய்தல்.

பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்

CO1: காப்பியகால நகரச்சூழல், காப்பிய மாந்தரின் ஆன்மநேயச் சிந்தனைகளை வரலாற்றுப் பின்புலத்தோடு அறிய இயலும்

CO2: காப்பிய, இதிகாச, புராணக் கதைகள், இக்காலப் புதினம் சுட்டும் வாழ்வியல் நெறிகளைத் தேர்ந்து பயன்படுத்த வழிவகைகள் உள்ளன

CO3: இயற்கை வாழ்வாதாரப் பாதுகாப்பு, அயலகச்சுற்றுலாப் பயன்பாடு குறித்த விழிப்புணர்வைச் செயல்படுத்திக் காண இயலும்

CO4: இலக்கியங்களின் வழி பயணங்களின் இன்றியமையாமையினை மதிப்பிட்டறிய வாய்ப்புகள் உள்ளன

CO5: இலக்கண, இலக்கிய ஆர்வத்துடன் பாடல் இயற்றும் படைப்பாற்றலைப் பெற வழி வகுக்கும்

### பகுதி – 1 தமிழ் நான்காம் பருவம் (RSGT4)

தாள்: 4 (செய்யுள், புதினம், இலக்கணம், இலக்கிய வரலாறு)

#### நோக்கம்:

1. அக, புற இலக்கியங்கள் பற்றி விளக்குதல். 2. சங்கப் புலவர்களின் புலமைச் சிறப்பை எடுத்துரைத்தல். 3. சங்ககால மக்களின் இல்லற மாண்பினை உணர்த்துதல்.

பாடம்சார் பயன் (Course Outcomes)

மாணவர்கள், RSGT4 – தமிழ்த்தாள்-IV பாடத்தைக் கற்றுத் தேர்ந்த பின்,

CO1: சங்க மாந்தரின் அக, புற வாழ்வியல், கலைச் சிந்தனைகளைச் சங்க கால வரலாற்றுப் பின்புலத்தோடு அறிய இயலும்

CO2: செவ்வியல் இலக்கியங்களில் பதிவு பெறும் பல்துறைச் சிந்தனைகளை அடையாளம் காண வாய்ப்புகள் உள்ளன

CO3: சங்கச் சொற் பயன்பாட்டுத்திறன், பேச்சுக்கலைத் திறனை வளர்த்தெடுக்க வழிவகைகள் உள்ளன

CO4: சங்கப் பண்பாடு, சுற்றுலாவியல் சிந்தனை குறித்த தாக்கத்தைச் சமூகத்தில் ஏற்படுத்த இயலும்

CO5: இலக்கணம் சார்ந்த அக, புறக்கொள்கைகளையும் அணிகளின் அழகியலையும் தேர்ந்து கவிதை படைக்கும் திறனை மேம்படுத்திக் காண வழிவகுக்கும்.

#### பகுதி – IV சிறப்புத் தமிழ் (RSNMHTEC1)

தாள்: 1 (செய்யுள், உரைநடை, இலக்கணம், இலக்கிய வரலாறு)

நோக்கம்:

- 1.இக்காலத் தமிழ்க்கவிதை, சிறுகதை முதலானவற்றை அறிமுகப்படுத்துதல்.
- 2.தமிழ் சைவ, வைணவ இலக்கியங்களை அறிமுகப்படுத்துதல்.
- 3.தமிழ்ச் சிற்றிலக்கியங்களின் இலக்கியச் சிறப்பைக் கற்பித்தல்.

#### பாடம்சார் பயன் (Course Outcomes)

மாணவர்கள்(RSNMHTEC1) –சிறப்புத்தமிழ் தாள் – I பாடத்தைக் கற்றுத் தேர்ந்த பின்,

CO1: படைப்புகளின் வழியாகமொழியின் பெருமைகளையும் படைப்பிலக்கிய நயங்களையும் அறிந்திட இயலும்

CO2: படைப்பு ஆளுமையை இனம் காண்பதோடு இலக்கியம் புனையும் ஆற்றலையும் பெற்றிடக் கூடும் சமூக சிந்தனையைப் பெறுவர்

CO3: இலக்கிய உணர்வையும் இலக்கியப் போர் நெறியையும் வரையறுத்துக் காண இயலும்

CO4: இலக்கியம் வழியாக மனித வாழ்க்கைச் சிக்கல்களை மதிப்பிட்டு அறிய உதவும்

CO5: சமயங்களின் வழி வாழ்வியல் நெறிமுறைகளை உணர்தல்

#### பகுதி – IV சிறப்புத் தமிழ் (RSNMHTEC2)

தாள்: 2 (செய்யுள், சிறுகதை, எழுத்தாற்றலை வளர்த்தல், இலக்கிய வரலாறு)

நோக்கம்

- 1.தமிழ் மொழியின் இலக்கியச் செழுமையை அறிந்து கொள்ளுதல்.
- 2.தமிழ் மொழியின் இலக்கணச் சிறப்பை அறிதல்.
- 3.அரசுப் பணித்தேர்வுக்கு மாணவர்களைத் தகுதி பெறச் செய்தல்.

#### பாடம்சார் பயன் (Course Outcomes)

மாணவர்கள்(RSNMTEC2) –சிறப்புத்தமிழ் தாள் – II பாடத்தைக் கற்றுத் தேர்ந்த பின்,

CO1: அரசுப் பணித்தேர்வை எதிர்கொள்ளும் திறன் பெறுதல்

CO2: மொழிகளின் வகைகளையும், மொழிக்கலப்பின் இயல்புகளையும் அறிதல்

CO3: தமிழ் இலக்கிய வரலாற்றை அறிதல்

CO4: அரசுப் பணியில் வெற்றிபெறும் திறனைப் பெறுதல்

CO5: அடிப்படை இலக்கண அறிவைப் பெறுதல்

## **HINDI**

### **PART – I – HINDI, PAPER – I**

**Code : JS GH1**

### **NON DETAILED TEXTS, GRAMMAR – I & CONVERSATIONAL – HINDI**

#### **Course Objectives:**

1. To develop new vocabulary in speaking, writing.
2. To build language ability through grammar.
3. To develop story writing.
4. To instil a love for literature among students
5. To communicate effectively and appropriately in the real life situation.

#### **Course outcomes:**

1. Students developed vocabulary in speaking and writing.
2. They built their language ability through grammar.
3. They developed creative writing through stories.
4. They knew short stories and different author of stories.
5. They communicated effectively in the real life situation.
6. They understood Hindi in proper way.
7. They learned proper pronunciation.

### **PART – I – HINDI, PAPER – II**

### **DETAILED TEXTS – PROSE, EKANKI**

### **GRAMMAR – II AND TAMIL NADU KE MANDIR**

**Code : JS GH2**

#### **Course Objectives:**

1. To introduce prose to develop language ability of the students and make aware of various authors.
2. To develop creative skill of writing one act play and characters.
3. To build language ability through grammar.
4. To develop the knowledge of temples of Tamil Nadu (Tourist Spots).

#### **Course outcomes:**

1. Students knew various authors and different varieties of prose and develop language ability.
2. They developed creative writing still one act play and know different story characters.
3. They built their language ability through grammar.
4. They knew temples and tourist places of Tamil Nadu.
5. They got practice in writing.
6. They spoke pure Hindi.
7. They improved pronunciation.
8. They learnt about architecture and craftsmanship (sculpture).

**PART – I – HINDI, PAPER – III**  
**POETRY AND POETICS**  
**CODE : JSGH3**

**Course Objectives:**

1. To introduce poems of various ancient and modern poets to appreciate them.
2. To develop poem writing skill among students
3. To introduce poetics to learn and write the poems systematically.
4. To make the students learn and appreciate Chand, Ras and Alankar

**Course Outcomes:**

1. Students developed poem writing skill.
2. They knew different ancient and modern poets.
3. They knew Ras
4. They knew Chand.Poetics
5. They knew Alankar
6. They developed writing skill.
7. They spoke and wrote pure Hindi.

**PART – I – HINDI, PAPER – IV**  
**HISTORY OF HINDI LITERATURE, GENERAL ESSAYS, LETTER WRITING AND**  
**ADMINISTRATIVE HINDI**  
**CODE : JSGH4**

**Course Objectives:**

1. To develop interest in ancient and modern Hindi literature.
2. To develop writing skill of general essays.
3. To develop the art of writing letters.
4. To know the administrative Hindi.

**Course outcomes:**

1. Students knew ancient and modern Hindi literature.
2. They started writing general essays.
3. They knew art of writing letters.
4. They knew administrative Hindi.
5. They knew new information through general essays.
6. They got the knowledge of translating technical terms.
7. They were competent enough to appearing competitive exams.
8. They developed language skill.

## **PART – II ENGLISH FIRST SEMESTER**

### **Course Objectives(CO):**

- To sensitize students to learn Language through Literature
- To develop their skills in comprehension and communication
- To improve their fluency in English language
- To enhance their LSRW skills
- To enable them to appreciate the nuances of Language with the integration of Technology

### **Course Outcome (CO):**

On successful completion of the course, the students should have acquired to:

CO 1 - Appreciate the nuances of language through literature

CO 2 - Develop comprehension skills and vocabulary

CO 3- Identify the various genres and analyse the works of writers in English

CO 4 - Improve the fluency and formation of grammatically correct sentences

CO 5 - Enhance the writing skills for specific purpose

## **SECOND SEMESTER**

### **COURSE OBJECTIVES:**

- To sensitize students to learn Language through Literature
- To develop their skills in comprehension and communication
- To improve their fluency in English language
- To enhance their LSRW skills
- To enable them to appreciate the nuances of Language with the integration of Technology

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO 1 Appreciate the nuances of language through literature

CO 2 Develop comprehension skills and vocabulary

CO 3 Identify the various genres and analyse the works of writers in English

CO 4 Improve the fluency and formation of grammatically correct sentences

CO 5 Enhance speaking and writing skills in practical situations

## **THIRD SEMESTER**

### **COURSE OBJECTIVES:**

- To sensitize students to learn Language through Literature
- To develop their skills in comprehension and communication
- To improve their fluency in English language
- To enhance their LSRW skills
- To enable them to appreciate the nuances of Language with the integration of Technology

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO 1 Appreciate the nuances of language through literature

CO 2 Develop comprehension skills and vocabulary

CO 3 Identify the various genres and analyse the works of writers in English

CO 4 Improve the fluency and formation of grammatically correct sentences

CO 5 Enhance the nuances of writing in specific contexts

**FOURTH SEMESTER****COURSE OBJECTIVES:**

- To describe the process and types of communication
- To explain the types, modes and barriers in listening.
- To inculcate a deep sense of respect for oneself and others for a holistic living
- To build self-confidence with a focus on personal development and self-awareness.
- To learn how English is used in literary writing so as to imbibe the spirit of using the standard language for communication

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 Demonstrate necessary listening skills in order to follow and comprehend discourse such as lectures, conversation and discussions

CO2 Develop ability to comprehend and analyse a speech without bias and partisanship

CO 3 Demonstrate a positive and healthy attitude in critical situations in life

CO 4 Prioritize their needs to achieve their goals

CO5 Improve the fluency and formation of grammatically correct sentences

## M.A TAMIL

### தாள்: 1 இக்கால இலக்கியம் (RSPTLA1)

**நோக்கம்:** 1. இலக்கிய வரலாற்றுப் பின்னணியில் இக்காலத் தமிழ் இலக்கியங்களை அறிந்து கொள்ள வாய்ப்பளித்தல். 2. கவிதை, சிறுகதை, புதினம், நாடகம், கட்டுரை ஆகிய படைப்பியல் வகைகளைப் பற்றிய பரந்துபட்ட புலமையைப் பெருக்குதல். 3. இக்காலத் தமிழ் இலக்கியங்களின் உள்ளடக்கம், வெளியீட்டு நெறி, படைப்பியல் கொள்கை ஆகியவற்றை அறியச் செய்தல். 4. இலக்கியக் கொள்கைகளின் அடிப்படையில் இக்கால இலக்கியங்களைத் திறனாய்வு செய்யப் பயிற்சி அளித்தல். 5. படைப்புத் துறையிலும் ஊடகத்துறையிலும் கல்விப்புலத்திலும் அயல்நாடுகளிலும் வேலைவாய்ப்பினைப் பெறுதற்குத் துணைசெய்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்,**

CO1: காலந்தோறும் மாறிவரும் கவிதைகளின் பொருள், வடிவம், உத்தி ஆகியவற்றை அறிந்திடச் செய்வதுடன் கவிதை இயற்றிட வாய்ப்பு உண்டு

CO2 : சிறுகதைகளின் கலை நுட்பத்தைக் கற்றுத் தேர்வதுடன் படைப்பாளுமையைப் பயன்படுத்திக் காண இயலும்

CO3 : புதின இலக்கியம் வழியாக சமூகச் சிக்கல்களைப் பட்டியலிட்டு சமூகத்துடன் பொருத்தமுற வாழ இயலும்

CO4 : நாடக இலக்கியத்தின் வழியாக நடிப்புத்திறனைத் தீர்மானிக்க வாய்ப்பு உண்டு

CO5: கட்டுரை இலக்கியத்தின் வழியாக தெளிந்த மொழி நடையையும் சிந்தனைப் புலத்தையும் மேம்படுத்திட இயலும்.

### தாள்: 2 இலக்கணம்

#### தொல்காப்பியம் - எழுத்ததிகாரம் - இளம்பூரணர் உரை (RSPTLB1)

(உரையிலிருந்து வினாக்கள் கேட்கப்படுதல் கூடாது)

**நோக்கம்:** 1. தமிழ் மொழியில் முதன்முதலில் முழுவதுமாக கிடைக்கப்பெற்ற இலக்கண நூலான தொல்காப்பியத்தை அறிமுகம் செய்தல். 2. தமிழ் மொழியில் சொற்கள், தொடர்கள் போன்றவற்றை உருவாக்கும்போது எழுத்துக்களின் செயல்பாடுகளை எடுத்துரைத்தல். 3. மொழியைப் பொருள் குழப்பமின்றியும், தொடர் குழப்பமின்றியும் எழுத மாணவர்களுக்குப் பயிற்சியளித்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்,**

CO1: தொல்காப்பிய எழுத்திலக்கணம், மொழியியல் குறித்து அறிந்துகொள்ள வாய்ப்பு உண்டு

CO2: தமிழ் எழுத்துக்களின் வகைப்பாட்டினையும் உச்சரிப்பு முறைகளையும் தேர்ந்து தெளிய இயலும்

CO3: தொல்காப்பியர் காலச் சாரியை, புணர்ச்சி, பண்டையகால அளவை முறைகள் குறித்த சிந்தனைகளை இக்காலச் சான்றுகளோடு பொருத்திக் காணமுடியும்

CO4: காலந்தோறும் தோன்றிய இலக்கண நூல் கருத்துக்களைப் பகுத்தாய வழிவகைகள் உள்ளன

CO5: அறிவியல் நோக்கிலான மொழியியல் சிந்தனைகளையும் இலக்கணக் கருத்துக்களையும் மேம்படுத்திக்காண இயலும்.



### தாள்: 3 இலக்கியத் திறனாய்வு (RSPTLC1)

#### நோக்கம்:

1. மாணவர்கள் இலக்கியத்தைக் கற்பதற்கும், துய்ப்பதற்கும், மதிப்பீடு செய்வதற்குமான அடிப்படைக் கோட்பாடுகளை அறிந்துகொள்ளச் செய்தல். 2. கற்றுக்கொண்ட கோட்பாடுகளின் அடிப்படையில் ஒரு படைப்பைத் திறனாய்வு செய்யும் ஆற்றலைப் பெற ஊக்கப்படுத்துதல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்,**

CO1. தமிழாய்வுப் பரப்பில் திறனாய்வு வரலாற்றை அறிந்து கொள்ள இயலும்

CO2. படைப்பாளிகள் இடையே காணப்படும் கருத்துப்புலப்பாட்டுத் திறனை அறிதல்.

CO3. மேலை இலக்கியக் கொள்கைகளைத் தமிழ் இலக்கியங்களில் பொருத்திப்பார்க்கப் பழகுதல்.

CO4. படைப்பிலக்கிய வகைமைகளின் தனித்தன்மைகள், உள்ளீடுகள், உத்திகள் ஆகியவற்றின் முக்கியத்துவத்தை உணர இயலும்

CO5. திறனாய்வுப் பயன்பாட்டை மேம்படுத்த வழிவகை உண்டு.

### விருப்பப் பாடம் - 1

### தாள்: 1 தகவல் தொடர்பியலும் ஊடகத் தமிழும் (RSPTLEC1)

**நோக்கம்:** மனிதன் தோன்றியதிலிருந்து தகவல் பரிமாற்றம் நடைபெற்று வருகிறது. காலச்சூழலுக்கு ஏற்ப அதன் கருவிகள் மாற்றம் பெற்று வந்துள்ளன. இன்றைய அறிவியல் உலகில் ஏற்பட்ட தகவல் தொழில்நுட்ப வளர்ச்சிகளை மாணவர்கள் நன்கு தெரிந்து அறிந்துகொள்ள வேண்டிய கட்டாயம் ஏற்பட்டுள்ளது. அந்த நோக்கத்தை அடிப்படையாகக் கொண்டு இன்றைய சூழலுக்கேற்ற தகவல் தொழில்நுட்பங்கள் குறித்த செய்திகளை மாணவர்கள் அறிந்து அதனைச் சமுதாய மாற்றத்திற்கும் மொழி வளர்ச்சிக்கும் பயன்படுத்துமாறு செய்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், தகவல் தொடர்பியலும் ஊடகத் தமிழும் கற்றுத் தேர்ந்த பின்,**

CO1. தகவல் தொடர்பின் முக்கியத்துவத்தைக் கற்றலும் பயன்படுத்தலும் மேம்படும்.

CO2. தகவல் தொடர்பு முறையில் ஏற்பட்டுவரும் மாற்றங்களைத் தெரிதல்.

CO3. தகவல் தொடர்பு மனித வாழ்வை எவ்வாறு மேன்மையடையச் செய்கிறது என்பதை மாணவர்கள் கற்றுத் தெளிதல்.

CO4. ஊடகத் துறையில் வேலைவாய்ப்புப் பெறுவர்

CO5. மனிதவாழ்விற்கு ஊடகங்களின் தேவையை அறிவர்

### தாள்: 4 சிற்றிலக்கியம் (RSPTLD2)

#### நோக்கம்:

இலக்கிய வரலாற்றுப் பின்னணியில் தமிழ்ச் சிற்றிலக்கியங்களின் வளர்ச்சிப் போக்குகளில் புலமை பெற வாய்ப்பளித்தல். தமிழ்ச் சிற்றிலக்கியங்களின் அமைப்பையும் உள்ளடக்கத்தையும் பற்றிய புலமைபெற வாய்ப்பளித்தல். 3.தமிழ்ச் சிற்றிலக்கியங்களின் சில பகுதிகளைப் பாடமாகக் கற்பதன் மூலம் உள்ளடக்கம், இலக்கிய வெளிப்பாட்டு நெறி ஆகியவற்றில் அறிவுப் பயிற்சியும், திறனாய்வுத் திறனும் பெற வாய்ப்பளித்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

CO1 : பிள்ளைத் தமிழுக்குரிய பருவங்களை அறிய இயலும்

**CO2 :** மதுரைக்கலம்பகம் வாயிலாக இறைவனின் பெருமைகளைத் தெரிந்து கொண்டு இறை உணர்வை வெளிக் கொணர் முடியும்

**CO3 :** தூது இலக்கியச் சிறப்பினைப் பட்டியலிட்டுக் காண வாய்ப்பு உண்டு.

**CO4 :** சோழர்களின் ஆட்சித் திறனையும் போர் நுட்பங்களையும் பயன்பாட்டு நோக்கில் புரிந்து கொள்ள வாய்ப்பு உள்ளது.

**CO5:** சிற்றிலக்கியங்கள் புலப்படுத்தும் சமுதாயச் சூழலை அறிந்துகொள்ளுதல். சிற்றிலக்கியங்களின் வாயிலாக மக்களின் வாழ்வியலை உணர்ந்து சமூக சமய, மத நல்லிணக்கத்தோடு வாழ்ந்திட இயலும்.

## **தாள்: 5 தொல்காப்பியம், சொல்லதிகாரம் சேனாவரையர் உரை (RSPTLE2)**

### **(உரையிலிருந்து வினாக்கள் கேட்கப்படுதல் கூடாது)**

**நோக்கம்:** 1. தமிழ்ச் சொற்களின் அமைப்பு, அவற்றின் செயல்பாடுகளைத் தொல்காப்பியத்தின் வழியே புரிந்து கொள்ளுதல். 2. வேர்ச்சொற்களின் அமைப்பையும் தமிழ்மொழியில் இடம்பெறும் பெயர்ச்சொற்கள் காரணப்பெயராக அமைவதை அடையாளப்படுத்தி, இன்றைய நவீன உலகிற்கு ஏற்ப கலைச்சொற்களை உருவாக்க ஊக்குவித்தல்

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

**CO1:**தொல்காப்பியம் முன் வைக்கும் சொல் உருவாக்கம், வேற்றுமை குறித்து அறிந்துகொள்ள இயலும்

**CO2:**பழந்தமிழ் இலக்கியப் பணுவல்களில் இடம் பெற்றுள்ள அழைக்கும் மரபு, பெயர், வினைகளைப் புரிந்து கொண்டு பயன்பெற முடியும்

**CO3:**சொல்லிலக்கணக் கூறுகளான இடை, உரி, எச்சச் சொற்களை வகைப்படுத்திட வழிவகை உண்டு

**CO4:**இலக்கண நூல்களுக்கு இடையேயான ஒற்றுமைக் கூறுகளையும் தனித்துவக் கூறுகளையும் மதிப்பிட்டறிய இயலும்

**CO5:**தமிழில் காணப்பெறும் மொழியியல் கூறுகளையும் தொடரிலக்கணச் சிந்தனையையும் பொருத்திக்காண வாய்ப்பு உள்ளது.

## **தாள்: 6 ஒப்பியலக்கியம் (RSPTLF2)**

**நோக்கம்:** 1. உலக இலக்கியங்களின் பொதுத்தன்மைகளை உணர்த்துதல். 2. தமிழ் இலக்கியங்களின் தனித்தன்மைகளை எடுத்துரைத்தல். 3. இந்திய இலக்கிய வகைமைகளை இனங்காணல். 4. பன்முக மொழி அறிவை வளர்த்தல்

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

**CO 1 -** ஒப்பிலக்கியம் பற்றிய கருத்தாக்கங்களை அறிய முடியும்

**CO 2 -** ஒப்பிலக்கியத்தின் வளர்ச்சி நிலைகளை விவாதிக்க இயலும்

**CO 3 -** ஒப்பீட்டியல் குறித்த அறிவியல் முறைகளை வகைப்படுத்த முடியும். ஒப்பீட்டு முறையி் இலக்கிய, இசை, கூத்து பற்றித் தீர்மானிக்க இயலும்

**CO 4 -** தமிழ் பயிலுகின்ற மாணவர்களுக்கு தமிழ்மொழி இலக்கியங்களை மட்டும் கற்றுக் கொடுப்பதோடு பிற மொழி இலக்கியங்களையும் கற்றுக் கொடுத்தல்.

**CO 5 -** ஒப்பிலக்கிய இலக்கிய வடிவங்களை மதிப்பிட வழி உண்டு. அரசு போட்டித் தேர்வுகளுக்கானத் தகுதி அடைதல்

**விருப்பப் பாடம் - 2**

## தாள்: 2 நாட்டுப்புறவியல் (RSPTLEC2)

### நோக்கம்:

1. தமிழர்களின் பண்பாட்டுக் கூறுகளை மாணவர்களுக்குக் கற்பித்தல்
2. பண்பாட்டுக் கூறுகளை அறிந்துகொள்ள உதவும் நாட்டுப்புறவியல் என்ற துறையை மாணவர்களுக்கு அறிமுகப்படுத்துதல்
3. பண்பாட்டுக் கூறுகளைப் பகுத்தறிய உதவும் நாட்டுப்புறவியல் கோட்பாடுகளை மாணவர்களுக்குக் கற்பித்தல்.

### பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்

CO 1 - நாட்டுப்புற இலக்கியங்கள், பண்பாட்டுக் கருத்தாக்கங்களை அறிந்திட வாய்ப்பு உண்டு

CO 2 – நாட்டுப்புறப் பாடல்களை அறிந்து கொள்ள வாய்ப்புண்டு.

CO 3 – நாட்டுப்புறக் கதைப்பாடல்களின் தன்மையினைப் பகுத்தாய முடியும்

CO 4 – நாட்டுப்புறக் கோட்பாடுகள் குறித்தும் நாட்டுப்புறக் கதைகள் குறித்தும் மதிப்பிட இயலும்

CO 5 - மக்களின் வாழும் மரபுகளை அறிந்து கொள்ள இயலும்

### பல்துறைப் பாடம்

## தாள்: 1 கணினியும் இணையமும் (RSPTLED1)

### நோக்கம்:

1. கணினி இன்று அனைத்துத் தரப்பினரிடையேயும் செல்வாக்குப் பெற்று வருகிறது. அதன் வரலாற்றையும் தொழில்நுட்ப ரீதியாக அதனை அணுகும் திறனையும் மாணவர்கள் அறிந்துகொள்ள வேண்டும் என்ற நோக்குடன் இப்பாடத்திட்டம் அமைக்கப்பட்டுள்ளது.

**பயன்கள்:** 1. இலக்கியம் பயிலும் மாணவர்கள் கணினி தொடர்பான தொழில்நுட்ப அறிவைப் பெறுவர். 2. தட்டச்சு செய்தல், உயிரோவியங்களை வரைதல், வெளியீடுகள் அளித்தல் போன்ற அறிவு மாணவர்களிடையே வளர்ச்சி அடையும். 3. தாள்களில் எழுதுவதற்குப் பதிலாகக் கணினித் திரைகளில் எழுதும் மின் ஊடகப் பயன்பாட்டை மாணவர்கள் அறிந்துகொள்வர். 4. கணினியைத் திறம்படக் கையாளும் ஆற்றல் பெறுவர் 5. கணினியின் இயக்கமுறைகளைக் கற்று, வன்பொருள் மென்பொருள் பயன்பாட்டை அறிவர்

## தாள்: 7 பக்தி இலக்கியம் (RSPTL G3)

**நோக்கம்:** 1.தமிழ் இலக்கிய வளர்ச்சியில் சமயங்களின் பங்களிப்பினை அறியச் செய்தல். 2.பக்தி இயக்கத்தின் தோற்றம், சமயங்களின் வளர்ச்சி நிலையினை அறிதல். 3.பக்தித் தமிழின் சிறப்பு, பக்தி இலக்கிய வகைகள், தனித்திறன் போன்றவற்றை அறிதல்.

### பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்

**CO1 :** சமய இலக்கியங்களின் தோற்றம், வளர்ச்சியினை அறிய இயலும்

**CO2 :** அருளாளர்களின் வாழ்க்கையையும், அற்புதங்களையும் அறிந்துகொள்வதன்மூலம் வாழ்வியல் மதிப்புகள் உயரும்.

**CO3 :** சைவ, வைணவ சமய இலக்கியங்களைப் பண்பாட்டு நோக்கில் ஒப்பிட்டு அறிய முடியும்

**CO4 :** கிறித்துவ, இசுலாமிய இலக்கியங்களின் சுவைகளைத் தொகுத்துக் காண வழிவகைகள் உள்ளன.

**CO5 :** பல்வேறு சமயங்களின் கொள்கைகளை அறிந்துகொள்வதன் மூலம் அனைத்துச் சமயங்களும் வலியுறுத்தும் அன்பு நெறியே இறைநெறி என்பதை மாணவர்கள் உணர்வர்.

## தாள்: 8 தொல்காப்பியம், பொருளதிகாரம் - இளம்பூரணர் உரை (RSPTL H3)

### (உரையிலிருந்து வினாக்கள் கேட்கப்படுதல் கூடாது)

**நோக்கம்:** 1. பிற மொழிகளில் எழுத்துக்கும், சொல்லுக்கும் மட்டுமே இலக்கணங்கள் அமையப்பெற்றிருக்க தமிழில் வாழ்வியலுக்கும் இலக்கணத்தை வகுத்துள்ளமையை அறியச்செய்தல். 2. அகம், புற இலக்கணங்களை இலக்கியச் சான்றுகளுடன் கற்றல். 3. களவியல் கற்பியல் பொருளியல் இலக்கணங்களை இலக்கியச் சான்றுகளோடு வாழ்வியலுடன் ஒப்பிட்டுக் கற்றல். 4. காலந்தோறும் தமிழ் இலக்கிய வரலாற்றில் தோன்றிய இலக்கிய வகைமைகளுக்குத் தொல்காப்பியத்தின் கொடையை எடுத்துரைத்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

**CO1 :** தொல்காப்பிய அகத்திணையியல் கோட்பாடுகளை அறிய இயலும்

**CO2 :** தொல்காப்பியப் அக, புறக் கோட்பாடுகளை இலக்கியங்களில் பயன்படுத்த வழிவகைஉண்டு

**CO3 :** செவ்வியல் காலக் களவுக்கோட்பாடுகளை வகைப்படுத்தி அறிய இயலும். செய்யுள் இயற்றும் நுட்பங்களை மதிப்பிட்டு அறிய முடியும்

**CO4 :** பழந்தமிழ் மரபின் இன்றியமையாமையைப் பட்டியலிட வழிவகை உண்டு. தொல் மரபுப் பெயர்களைத் தொகுத்திட வாய்ப்பு உண்டு.

**CO5 :** தமிழர்களுக்கான மரபுகளை அறிந்து கொண்டு தொல் அகக்கோட்பாடுகளின் தனித்துவத்தை இலக்கியத்துடன் பொருத்திக் காண இயலும்.

## தாள்: 9 காப்பிய இலக்கியம் (RSPTL I3)

**நோக்கம் :** 1. தமிழ்க் காப்பியம், புராணங்களை வரலாற்று நோக்கில் அறிமுகப்படுத்துதல். 2. காப்பியங்கள் மற்றும் புராணங்களின் அமைப்பு, உத்தி, மொழி, யாப்பு முதலானவற்றை ஆராய்தல். 3. சமயம், அரசியல், சமூகம் முதலான சூழல் கூறுகளுடன் காப்பியங்களுக்குள்ள உறவைப் புரிந்து கொள்ளுதல். 4. தமிழ்க் காப்பியம் மற்றும் புராணங்கள் பிற இலக்கிய வகைகளில் செலுத்தும் செல்வாக்கு, தொடர்ச்சியை ஆராய்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

**CO1 :** தமிழில் தோன்றிய இரட்டைக் காப்பியங்களின் சிறப்பினை அறிய இயலும்

**CO2 :** சீவகசிந்தாமணி, கம்பராமாயணம் ஆகியவற்றைப் பண்பாட்டு நோக்கில் பயன்படுத்த இயலும்

**CO3 :** சிவனடியார்களின் சிறப்புகளையும், சிவனின் திருவிளையாடல்களையும் பட்டியலிட்டு உணர முடியும்

**CO 4 :** கிறித்துவ, இசுலாமியக் காப்பியங்களின் முக்கியத்துவத்தை அறிய இயலும்

**CO5 :** காப்பியங்களின் வழி மக்களின் வாழ்வியலைக் கண்டறிந்து சமூகநல மனப்பான்மையை மேம்படுத்திட வழிவகை உண்டு.

### தாள்: 10 ஒப்பீட்டு நோக்கில் உலகச் செம்மொழிகள் (RSPTL J3)

நோக்கம்:

1. செவ்வியல் இலக்கியங்களை அறிமுகம் செய்தல்.
2. தமிழ் செம்மொழியாகும் தன்மையை நிறுவுதல்.
3. தமிழ் செம்மொழி என்னும் தகுதி பெற வித்திட்ட சான்றோர்களின் பணிகளை அறியச் செய்தல்.

பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்

CO1 – உலகச் செம்மொழிகளின் வரலாற்றினை அறிதல்

CO2 - உலக மொழி இலக்கியங்களையும் அவற்றின் பாடுபொருள்களையும் அறிந்துணர்வர்.

CO3 - பண்டைத் தமிழர் வாழ்க்கையை செம்மொழி நூல்கள் கொண்டு அறிந்துகொள்வர்.

CO4- உலகச் செம்மொழி இலக்கியங்களை தமிழ் இலக்கியங்களோடு ஒப்பிட்டு அறிந்துணர்வர்.

CO5 - மொழி வளர்ச்சியில் மனித குலத்திற்கான பங்களிப்பை உணர்வர்.

### விருப்பப் பாடம் - 3

### தாள்: 3 சுற்றுலாவியல் (RSPTLE C3)

நோக்கம்:

1. புதிய துறை குறித்த அறிவினை மாணவர்கள் பெறுமாறு செய்தல்.
2. சுற்றுலா குறித்து அறிவதால் நம்நாட்டின் பண்பாடு கலை உள்ளிட்ட செய்திகளை அறிந்து கொண்டு நாட்டின் இறையாண்மைக்குப் பாடுபடுவர்.

பாடம்சார் பயன் (Course Outcomes) மாணவர்கள், சுற்றுலாவியல் கற்றுத் தேர்ந்த பின்,

CO1 : தமிழ் பிற துறைகளுடன் இணைந்து வாழ்க்கைக்கு வழிகாட்டும் தன்மையை மாணவர்கள் அறியுமாறு செய்தல்.

CO2 : சுற்றுலா தொடர்பான செய்திகளை அறிந்து கொள்வர்.

CO3 : சுற்றுலாவினால் பலதரப்பட்ட மக்களின் வாழ்க்கை முறையைத் தெரிந்து கொள்வர்.

CO4 : சுற்றுலா மேற்கொள்வதால் ஒரு நாடு பெறும் வளர்ச்சியைப் புரிந்து கொள்வர்

CO5 : சுற்றுலாவிற்குத் தமிழகம் வழங்கியுள்ள பங்களிப்பை உணர்வர்.

### தாள்: 11 ஆராய்ச்சி நெறிமுறைகள் (RSPTL K4)

நோக்கம்: தமிழின் ஆய்வு நெறிமுறைகளையும் ஆய்வுக் கோட்பாடுகளையும் மாணவர்கள் அறியுமாறு செய்தல்.

பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்

CO1 - ஆய்வு நெறிமுறைகளைக் கற்றுக்கொள்வர்.

CO2 - ஆய்வு நெறிமுறைகளைப் பின்பற்றி ஆய்வேடு எழுதும் திறன் பெறுவர்,

CO3 – ஆய்வுக்குரிய ஆதாரங்களைத் திரட்டிக் கருத்தரங்குகளுக்கு ஆய்வுக் கட்டுரைகள் எழுதும் திறன் பெறுவர்.

CO4 - ஆய்வுக்கருத்தரங்குகளில் பங்கேற்கும் துணைவைப் பெறுவர்.

CO5 – மாணவர்களின் படைப்பாற்றலும் எழுதும் திறனும் மேம்படும்.

### தாள்: 12 நீதி இலக்கியம் (RSPTLL4)

நோக்கம்: அற இலக்கியங்கள் தோன்றிய காலச்சூழல், அற இலக்கியங்கள் காட்டும் நீதிக் கருத்துக்கள், சங்க இலக்கிய யாப்பிலிருந்து மாறுபட்ட யாப்பு

வடிவம், சமண, பௌத்த மதக் கொள்கைகள் ஆகியனவற்றை மாணவர்களுக்குக் கற்பித்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

CO1 - திருக்குறள் மற்றும் நாலடியாரின் கருத்தாக்கங்களை அறிய முடியும்

CO2 - அறநெறிக் கருத்துக்களைப் பயின்று வாழ்வில் பயன்படுத்த இயலும்

CO3 - நாலடியார், நான்மணிக்கடிகை உள்ளிட்ட நூற் கருத்துக்களை ஒப்பிட வாய்ப்பு உண்டு

CO4 - பழமொழி உணர்த்தும் அறநெறியையும் ஆசாரக்கோவை உணர்த்தும் ஒழுக்க நெறியையும் மதிப்பிட்டறிய முடியும்

CO5 – மூதுரை, நறுந்தொகை கற்று வாழ்வில் மேம்பட முடியும்.

**தாள்: 13 சங்க இலக்கியம் (RSPTLM4)**

**நோக்கம்:** 1. தமிழ் மொழியின் தொன்மையான இலக்கியங்களான சங்க இலக்கியங்களை மாணவர்களுக்கு அறிமுகம் செய்தல். 2. அகமும் புறமுமாக அமையும் சங்க இலக்கியங்கள் முன்மொழியும் பழந்தமிழரின் வாழ்க்கையைத் தெரிந்துகொள்ளுதல். 3. சங்க இலக்கியங்களின் தனித் தன்மைகளை மாணவர்களுக்கு எடுத்துரைத்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

CO1: பண்டைத் தமிழரின் வெற்றி, வீரம், கொடைச்சிறப்பு, விருந்தோம்பல் பண்பு முதலானவற்றை அறிய இயலும்

CO2: அகத்திணைகளான குறிஞ்சி, மருதம், பாலை முதலான செய்யுட்களில் காணப்பெறும் பண்பாட்டுச் சிந்தனைகளைப் பயன்படுத்த முடியும்

CO3: அகத்திணைக் கூறுகளான நெய்தல், முல்லை முதலான செய்யுட்களில் காணப்பெறும் பழக்க வழக்கங்களையும், வழிபாட்டு முறைகளையும் வகைப்படுத்த வாய்ப்புகள் உள்ளன

CO4: ஆற்றுப்படை நூல்களின் வாயிலாக இரவலர் - புரவலர் உறவுநிலைகள், விருந்தோம்பல் முதலானவற்றை மதிப்பிட வழிவகை உண்டு

**CO5:** அகப்பாட்டுக்களின் வாயிலாக பண்டைத் தமிழரின் அகத்திணை ஒழுக்கங்களைப் பொருத்திக்காட்ட முடியும்.

**தாள்: 15 திட்டக்கட்டுரை (18 PTL14) பணிநேரம்:12, வளமைகள்:08**

**நோக்கம்:** 1. ஒரு சிறப்பு ஆய்வுக் களத்தில் மாணவர்கள் புலமை பெறும் வகையில் பயிற்சி அளித்தல். 2. மாணவரின் தனித்தியங்கும் ஆய்வுச் செயற்பாட்டிற்கு வாய்ப்பளித்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்**

**CO1:**மாணவர்கள் தரவுகள் திரட்டுவதற்குரிய சிறப்புப் பயிற்சி, தொகுப்புப் பணிகளில் பயிற்சி பெறுதல்.

**CO2:**ஆராய்ச்சி நெறிமுறைகளைஆய்வேட்டு உருவாக்கத்தில் பயன்படுத்திப் பார்த்தல்.

**CO3:**ஆய்வேடு உருவாக்குவதில் பயிற்சி பெறுதல்.

**CO4:**கண்டறிந்த மெய்மைகளை நிரல்பட எடுத்துரைக்கும் ஆற்றல் வளரும்

**CO5:**புதியன தேடும் ஆர்வம் பெருகும்

## M.PHIL TAMIL

**தாள்:1 இலக்கிய ஆராய்ச்சி நெறிமுறைகள் (RSMPTL1)**

**நோக்கம்:**

தமிழின் ஆய்வு நெறிமுறைகளையும் ஆய்வுக் கோட்பாடுகளையும் மாணவர்கள் அறியுமாறு செய்தல்.

**பாடம்சார் பயன் (Course Outcomes) மாணவர்கள், இலக்கிய ஆராய்ச்சி நெறிமுறைகள் கற்றுத் தேர்ந்த பின்,**

**CO1** - ஆய்வு நெறிமுறைகளைக் கற்றுக்கொள்வர்.

**CO2** - ஆய்வு நெறிமுறைகளைப் பின்பற்றி ஆய்வேடு எழுதும் திறன் பெறுவர்,

**CO3** - ஆய்வுக்குரிய ஆதாரங்களைத் திரட்டிக் கருத்தரங்குக்கு ஆய்வுக் கட்டுரைகள் எழுதும் திறன் பெறுவர்.

**CO4** - ஆய்வுக்கருத்தரங்குகளில் பங்கேற்கும் துணியைப் பெறுவர்.

**CO5** - மாணவர்களின் படைப்பாற்றலும் எழுதும் திறனும் மேம்படும்.

**தாள்:2 தமிழ் இலக்கிய ஆய்வு வளர்ச்சியும் திறனாய்வும் (RSMPTL2)**

**நோக்கம்:**

மாணவர்கள் இலக்கியத்தைக் கற்பதற்கும், துய்ப்பதற்கும், மதிப்பீடு செய்வதற்குமான அடிப்படைக் கோட்பாடுகளை அறிந்துகொள்ளச் செய்தல். கற்றுக்கொண்ட கோட்பாடுகளின் அடிப்படையில் ஒரு படைப்பைத் திறனாய்வு செய்யும் ஆற்றலைப் பெற ஊக்கப்படுத்துதல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், தமிழ் இலக்கிய ஆய்வு வளர்ச்சியும் திறனாய்வும் கற்றுத் தேர்ந்த பின்,**

**CO1.** தமிழில் இதுவரை நிகழ்ந்துள்ள ஆய்வுகள் பற்றிய தெளிவினைப் பெறுவர்.

**CO2.** தமிழ் இலக்கிய ஆய்வுகளின் பயன்பாட்டினை உணர்வர்.

**CO3.** நவீன ஆய்வு நோக்கில் ஆய்வு நிகழ்த்தும் திறன் பெறுவர்.

**CO4.** தமிழாய்வு செல்நெறிகளை இனம் காண்பர்.

**CO5.** தமிழ்க்காப்பியங்களில் நிகழ்த்தப்பெற்றுள்ள ஆய்வுகளின் நுட்பங்களைப் பெறுவர்.

**தாள்:3 விருப்பப் பாடம் - வழிபாட்டு மரபுகள் (RSMPTL3)**

**கற்பித்தலின் நோக்கங்கள்** 1. சமயங்கள் குறித்த தகவல்களை உணர்த்துதல். 2. சமயங்களின் தனித்தன்மைகளையும் அதன் கொள்கைகளையும் உய்த்துணரவைத்தல். 3. மதங்களின் வழி மனிதத்தை வளர்க்க மாணவர்களுக்கு அறிவுறுத்தல். 4. சமயப்பொறையை வளர்த்து மக்களிடையே சமய நல்லிணக்கத்தை வளர்க்க வழிகாட்டல். 5. மதங்கள் பலவாக இருந்தாலும் அவை உணர்த்தும் கொள்கைகள் ஒன்றுதான் என்று மாணவர்கள் உணர்ந்து புரிய வைத்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்,**

**CO1.** சமய அறிவைப் பெறுவர்.

**CO2.** பல்சமய அறிவைத் தேர்ந்து தெளிவர்.

**CO3.** மனித நேயத்தை வளர்த்து மாந்தர் நலம் காக்க சமயக்கருத்துக்களைப் பயன்படுத்துவர்.

**CO4.** பரந்துபட்ட சமய அறிவைப் பெறுவர்.

**CO5.** புதிது புதிதாக சமயக்கருத்துக்களை அறிந்து அவற்றைக் கற்று நன்னெறியில் வாழ்வர்.

**தாள்:4 கற்பித்தல் கற்றல் திறன்கள் (RSMPTL4)**

**கற்பித்தலின் நோக்கங்கள்** 1. கணினியின் பாகங்களையும் பணிகளையும் உணர்த்துதல். 2. கணினியின் பயன்பாட்டினையும் பயன்படுத்துதலையும் உய்த்துணரவைத்தல். 3. கணினியுடன் கூடிய துணைக்கருவிகளை உபயோகப்படுத்த அறிவுறுத்தல். 4. கற்றலிலும் கற்பித்தலிலும் தகவல் தொழில்நுட்பத்தைப் பயன்படுத்தும் திறனை வளர்த்துக் கொள்ள வழிகாட்டல். 5. இணையத்தைக் கற்பித்தலுக்குப் பயன்படுத்தப் பழகுதல். பல்வகைப்பட்ட மாணவர்களுக்கேற்ப கற்பிக்கும் திறனை உணர்ந்து புரிய வைத்தல்.

**பாடம்சார் பயன்(Course Outcomes) மாணவர்கள், கற்பித்தல் கற்றல் திறன்கள் கற்றுத் தேர்ந்த பின்,**

CO1.இணைய அறிவைப் பெறுவர்.

CO2. புதிய தகவல் தொழில்நுட்ப அறிவைத் தேர்ந்து தெளிவர்.

CO3. கற்பித்தலில் நவீன உத்திகளைப் பயன்படுத்துவர்.

CO4. பரந்துபட்ட அறிவைப் பெறுவர்.

CO5. இணையம், மின்நூலகம்வழி புதிது புதிதாகக் கற்பர்.



## **B.A ENGLISH**

### **POETRY – I (MAJOR – I)**

#### **COURSE OBJECTIVES:**

- ❖ To motivate students to understand the basics of reading a poem.
- ❖ To explain in-depth the various components that makes a poem.
- ❖ To list out the variations and adaptations of different literary forms down the ages.
- ❖ To make students understand poetry by analyzing the poems in terms of theme, internal structures and tone.
- ❖ To enable the students to comprehend and appreciate literature.

#### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to**

- CO 1 Identify and describe distinct literary characteristics of poetic forms
- CO 2 Analyse poetic works for their structure and meaning, using correct terminology.
- CO 3 Outline the setting, situation and structure in shaping a poem's meaning
- CO 4 Broaden their vocabularies and to develop an appreciation of literature.
- CO 5 Demonstrate their ideas related to the poetic works during class and group activities

### **PROSE – I (MAJOR – II)**

#### **Course Objectives:**

- ❖ To enable the students in enjoying the flair of literature through the classical prose works of great writers
- ❖ To understand and evaluate the literary genre of prose through the literary pieces of the writers.
- ❖ To develop the critical and analytical skills of the main components of prose.
- ❖ To teach students the various sentence structures in English
- ❖ To introduce students to the possibilities of different prose styles in British literature.

#### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to**

- CO1 recognize various types of prose writings of different writers
- CO2 analyze, understand and appreciate prose writings and
- CO3 write creatively and critically in an expository or argumentative way.
- CO4 analyse the themes of the different texts and criticize them
- CO5 defend the different topics using arguments arrived at from intensive and extensive reading

### **SOCIAL HISTORY OF ENGLAND (ALLIED – I)**

#### **Course Objectives:**

- ❖ To enable the students to acquire a fairly basic knowledge of the social history of England.
- ❖ To help the students understand English thought, culture and history reflected in the study of literature.
- ❖ To facilitate the students understand the changing environment in the history of England and English literature.

- ❖ To understand and analyse the expansion of trade during the Victorian Age in England
- ❖ To analyse and appreciate the works of 20th century writers and comprehend their use of modern techniques and themes

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 understand history of England socially and politically down the ages

CO2 know about various movements and revolutions in English History

CO3 know the impact of World Wars

CO4 explain the meaning of Commonwealth

CO5 critically analyze the 20th century works and study how genres and techniques have evolved.

## **II SEMESTER**

### **POETRY – II (MAJOR – II)**

**Course Objectives:**

- ❖ To inculcate a sense of appreciation of enjoyment of English poetry in students.
- ❖ To enable students to assess as part of literature.
- ❖ To understand and evaluate the Romantic period and analyse nature as a subject matter and get inspired through the poems in the writings of the poets thereof.
- ❖ To understand and evaluate the Victorian era and critically evaluate the style of rational and moralistic writing
- ❖ To expose student to a comprehensive knowledge pertaining to the evaluation of English poetry down the ages

**Course Outcome (CO):**

**On successful completion of the course, the students will be trained to:**

CO1 identify various types of poetry and poetic forms

CO2 read, analyze and appreciate poetry critically.

CO3 identify the writings of the poets

CO4 respond critically and creatively to the poetic works

CO5 develop Teaching skills and also enhance Analytical Skills, Communication Skills and Creative Writing Skills

### **HISTORY OF ENGLISH LITERATURE – I (ALLIED – II)**

**Course Objectives:**

- ❖ To enable the student to be familiar with famous writers and background study of the British literature.
- ❖ understand the origin of history of English literature and analyse the works of writers from Old English literature to Renaissance period.
- ❖ appreciate the theatrical performances and contribution of remarkable writers during the Elizabethan period.
- ❖ appreciate the works of John Milton and analyses the Age of Puritanism.
- ❖ analyse the writing style of the dramatists and evaluates their views on the political system of England.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

- CO1 recognize and discuss the origin and growth of English Literature.
- CO2 estimate and demonstrate the theatrical experience of Elizabethan period.
- CO3 construct and examine the Age of Puritanism
- CO4 illustrate and summarize the political changes of the restoration period.
- CO5 describe and appreciate the prescribed writers

**JOURNALISM (ELECTIVE PAPER – I)****Course Objectives**

- ❖ Introduce the creative field of Journalism.
- ❖ To select and evaluate information and understand the characteristics of the work of journalist.
- ❖ To demonstrate and have a hands on experience in the field of journalism.
- ❖ To promote for the public benefit high ethical standards in journalism.
- ❖ To train journalists for publication of useful research.

**Course Outcome (CO):\**

**On successful completion of the course, the students will be skilled enough to:**

- CO 1 Evaluate numerical data and utilize databases for multi-layered story telling
- CO 2 Create and edit clear, graceful, grammatically correct prose
- CO 3 Demonstrate an awareness of journalism as an ethical practice
- CO 4 Demonstrate preparation of an entry-level position in the profession through a portfolio exhibiting their work
- CO 5 Formulate the value of free of expression in a democracy and build their knowledge of the news industry in its many forms

**SOFT SKILL (FOR STUDENTS OF B.A ENGLISH LITERATURE)****1) COMMUNICATION SKILLS – PAPER I****Course Objectives**

- ❖ To inculcate communication skills among the learners
- ❖ To introduce non-verbal communication to the learners
- ❖ To equip the students to converse
- ❖ To expose the learners to basics of oral presentation
- ❖ To initiate listening skill among the learners

**Course outcomes:**

**On successful completion of the course, the students will be able to**

- CO1 to understand the process of communication
- CO2 Know how to use non verbal communication
- CO3 develop oral communicative skills
- CO4 learn the basics of presentation
- CO5 develop listening skills

## **PROSE –II (MAJOR IV)**

### **Course Objectives:**

- ❖ To understand the literary genre - prose and remember features and its types.
- ❖ To develop an ability to recognize the main idea and evaluate the characters, symbols and settings
- ❖ To identify the type of the prose
- ❖ To evaluate and interpret the prose based on the plot
- ❖ To analyze the prose and compare the themes with life-oriented situations

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 recall and relate the stories written by the short story writers

CO2 recognize and re-state the main idea, characters, symbols and settings of the short story

CO3 recognize the types of prose writings.

CO4 critically analyse, understand and appreciate prose writings

CO5 write creatively and critically in an expository or argumentative way.

## **GRAMMAR AND USAGE (MAJOR V)**

### **Course Objectives:**

- ❖ To have a deep insight to the English Parts of Speech
- ❖ To develop the art of questioning
- ❖ To understand the structure of English grammar.
- ❖ To understand the functions of punctuation.
- ❖ To recognize the relationship between grammar and writing.

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 master the basics of English grammar

CO2 use it appropriately in spoken and written form

CO3 identify errors especially in written form and correct them

CO4 learn the essential aspects of English grammar

CO5 write competitive examinations with confidence

## **HISTORY OF ENGLISH LITERATURE – II (ALLIED – III)**

### **Course Objectives:**

- ❖ To enable the students to appreciate the relevance of the study of history of English Literature to ensure a better understanding of the writers of different ages and their works.
- ❖ To develop an analytical and critical approach to select literary texts from the sixteenth to the twenty first centuries
- ❖ To develop an understanding of writers within the socio-cultural and political background of the age
- ❖ To analyse and appreciate the works of 20th century writers and comprehend their use

- ❖ of modern techniques and themes
- ❖ to help a student to develop a broad understanding of the ages, their characteristics, major literary movements with reference to the major writers.

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

- CO1 Know about important trends, various critical shifts and formal experimentation in literature down through the centuries
- CO2 Get more exposure about famous writers and their works
- CO3 classify the works of the different Victorian writers.
- CO4 enhance their knowledge on various literary genres
- CO5 enhance Employability skills by helping in the preparation for Competitive Exams and develop Teaching skills.

## **EFFECTIVE SKILLS FOR SPOKEN COMMUNICATION**

### **Course Objectives:**

The students would be trained to

- ❖ understand and develop techniques and skills involved in speaking English
- ❖ remember and apply the nuance of communicative language and to develop the L.S.R.W skills and integrate them.
- ❖ understand and employ the idiomatic expressions learnt while speaking English
- ❖ understand and apply grammar involved while speaking effective English
- ❖ recall and use English for writing dialogues, E- mail and Bio- Data

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

- CO1 recognise and relate idioms and grammar and employ for Speaking and Writing English.
- CO2 apply the vocabulary and grammar learnt while speaking and writing.
- CO3 analyse and interpret the meaning from the context given
- CO4 analyse South Asian perspectives, experiences and histories and compare and contrast them with Western writings.
- CO-5 develop Employability Skills and help in preparation for Competitive Examinations.

## **Drama – I (MAJOR VI)**

### **Course Objectives:**

- ❖ To enable the students to create an interest in Drama by training them to differentiate the dramatists according to their treatment of theme, character and plot.
- ❖ To make students to realize how life and drama are closely linked.
- ❖ To expose students to the social criticism contained in the texts prescribed for them
- ❖ To understand and analyse the Background to the world of drama and apply dramatic devices for the interpretation and evaluation of dramatic texts.
- ❖ To identify the current trends in the genre Drama

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 identifying the various genres of drama

CO2 understand the nuances of drama and can

CO3 write critically and engage actively in producing / performing drama

CO4 appreciate the aesthetics of various dramas

CO5 trace, detect and creatively interpret the current trends in Drama

**FICTION – I (MAJOR VII)****Course Objectives:**

- ❖ To appreciate and enjoy the intensity of British Literature and Culture.
- ❖ To negotiate the text and its sensibilities.
- ❖ To familiarize the students with the various genres of fiction with select authors.
- ❖ To encourage them to understand and appreciate short stories of well-known writers.
- ❖ To prepare them to write precise and meaningful stories for a variety of purpose.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO 1 Understand and appreciate fiction and its essential elements

CO 2 Identify the plot, structure and setting of the stories

CO 3 Formulate the character and narration technique

CO 4 Predict the theme, symbols and language of the fiction

CO 5 Analyse their vocabularies and introduce the different types of novels

**LITERARY FORMS (ALLIED IV)****Course Objectives:**

- ❖ To enable the students to understand and appreciate the most important literary forms and learn to differentiate between the genres.
- ❖ understand the creative process and theatrical crafts.
- ❖ understand and apply the culture, traditions and characters of different ages.
- ❖ evaluate the structures of biography, autobiography and criticism as distinct forms of literature.
- ❖ remember and analyze the different kinds of narrative experiments and the common literary technique

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 explain and summarise the creative process and theatrical crafts

CO2 identify and analyze the culture, traditions and characters of different ages.

CO3 appraise the structures of biography, autobiography and criticism as distinct forms of literature.

CO4 examine the different kinds of narrative experiments and the common literary technique.

CO5 develop Employability skills, aid in the preparation for Competitive Exams, and enhance teaching, research and creative writing Skills.

## **2.COMMUNICATION SKILLS – PAPER II**

### **Course Objectives**

- ❖ To inculcate communication skills among the learners
- ❖ To introduce meetings and its purpose to the learners
- ❖ To equip the students to attend seminars
- ❖ To expose the learners to types of GD
- ❖ To initiate reading skill among the learners

### **Course outcomes:**

#### **On successful completion of the course, the students will be able to**

- CO1 understand the purpose and arrangements of meetings
- CO2 Know how to organize and participate in seminars
- CO3 gain confidence to discuss in a group
- CO4 use audio visual aids in communication
- CO5 develop reading skills

## **DRAMA - II**

### **Course Objectives:**

- ❖ To familiarize students with the evolution of British Drama from Marlowe to the present time
- ❖ To enthuse students to appreciate drama as a literary genre and as a performing art
- ❖ To enable students to gain an existential understanding of drama's connection to social reality in terms of themes and characters
- ❖ To give an insight into the modern drama
- ❖ To appreciate and create a drama of their own

### **Course Outcome (CO):**

#### **On successful completion of the course, the students will be able to:**

- CO1 Understand the subtleties in theme and structure of drama.
- CO2 Study the representative plays and analyse themes and techniques
- CO3 Introduce to students the techniques and subtleties of the genre, drama
- CO4 Enable students to know the different kinds of drama
- CO5 write critically and engage actively in producing / performing drama

## **CLASSICS IN TRANSLATION (MAJOR IX)**

### **Course Objectives:**

- ❖ To introduce the students to the Literatures of the world and sensitize them to the cultural diversity across nations.
- ❖ To help them get insights into relationships between man and self, man and society, and man and Nature.
- ❖ To acquaint the students with the Great writings by Legendary Writers World-wide To teach them to appreciate the art of Translation
- ❖ To familiarize students with the various translated classics
- ❖ To provide the students with a perspective of world classics

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 acquire an overall view of the magnum opus of world literature

CO2 recognize various translated works

CO3 analyse and appreciate famous works from other languages

CO4 know more about the society and culture presented in the original work of art

CO5 the difficulties of translating one work of art to another.

**FICTION – II (MAJOR X)****Course Objectives**

- ❖ To make students aware of the social problems from the themes of the novels in English.
- ❖ To train students in the simple literary discipline of sustained reading of prose writing of considerable length
- ❖ To familiarize the students with the various genres of fiction with select authors
- ❖ To analyse and evaluate the pessimistic thoughts in the works of the writers
- ❖ To critically evaluate the Stream of Consciousness technique.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 expose to classics in fiction

CO2 understand differences between various types of novels

CO3 distinguish different fictional forms

CO4 examine and appreciate fictional writings.

CO5 write imaginatively.

**LANGUAGE AND LINGUISTICS (ELECTIVE PAPER – II)****Course Objectives:**

- ❖ To introduce the students to the basics of linguistics and English language Teaching.
- ❖ To remember and understand the general concepts of language and analyse the types and varieties of learning a language.
- ❖ To understand and apply the tenets of phonetics of English Language in transcription and speech.
- ❖ To understand the functions of morphology and semantics in language and analyse the morphological patterns of sentence structures.
- ❖ To analyse and apply the various methods and approaches of teaching and learning English.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 discuss the basic concepts of language and explain the varieties of learning a language.

CO2 recognize and identify the correct pronunciation of English sounds.

CO3 illustrate the functions of morphology and semantics.

CO4 compare and contrast the various methods and approaches of teaching and learning English.

CO5 design the lesson plan and prepare the critical analysis of tests and techniques



## **INTRODUCTION TO COMPUTERS AND IT**

### **Course Objectives**

- ❖ To familiarise the student with the emerging trends in the field of computing
- ❖ To update and expand computer knowledge
- ❖ To inculcate basic details relevant to IT
- ❖ To equip students to utilize the digital knowledge resources effectively for their chosen fields of study
- ❖ To enhance the Generation Y in the field of Electronic Technologies

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 update and expand their knowledge in the field of Computers

CO2 understand the nature of the emerging digital knowledge

CO3 should be proficient in MS Word, MS Excel, MS Power Point etc

CO4 familiarize themselves with basic softwares

CO5 use digital knowledge resources effectively in studies and for their life

## **COMMUNICATIVE SKILLS – PAPER III**

### **Course Objectives**

- ❖ To inculcate habit of writing among the learners
- ❖ To introduce business correspondence to the learners
- ❖ To equip the students to memo and its types
- ❖ To expose the learners to write notice, agenda and minutes
- ❖ To use graphic aids for presentation

### **Course outcomes:**

**On successful completion of the course, the students will be able to**

CO1 understand the importance of writing

CO2 Know business correspondence

CO3 write memos

CO4 prepare notice, agenda and minutes

CO5 develop communication skill with graphic aids

## **INDIAN WRITING IN ENGLISH (MAJOR XI)**

### **Course Objectives:**

- ❖ To initiate the students to learn the history of Indian Writing in English and the famous IndoAnglican writers.
- ❖ To remember the origin and History of the Indian Writing in English and appreciate the literary devices used in Indian poetry.
- ❖ To understand the literary genre –drama and its techniques.
- ❖ To comprehend the lucid style in Indian prose.
- ❖ To evaluate the short stories in terms of its themes.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

- CO1 recall how Indian writing in English originated and study its history.
- CO2 identify the different genres and literary devices used in the prescribed texts.
- CO3 analyse the style of the Indian writers
- CO4 evaluate how the different themes are used in all the works.
- CO5 appraise the plots, images and characters in the prescribed Indian fiction.

**SHAKESPEARE (MAJOR XII)****Course Objectives:**

- ❖ To create in students an interest in the works of Shakespeare.
- ❖ To enable students to interpret the linguistic and poetic variety of Shakespearean expressions
- ❖ To equip students to analyze the plays to classify the complex web of human relationships, political intrigues and social dynamics.
- ❖ To encourage students to study the plays along with the artistic representations and recreations of these on stage and in films.
- ❖ To train students to critically analyse the text using relevant forms and techniques.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to :**

- CO 1 Analyse critically the works of Shakespeare
- CO 2 Illustrate the linguistic richness and figurative language of the plays
- CO 3 Relate art and reality
- CO 4 Draw comparisons between literature, theatre and films
- CO 5 Critically apply relevant forms and techniques

**AMERICAN LITERATURE – MAJOR XIII****Course Objectives**

- ❖ To enable the students to appreciate and critically evaluate the historical and cultural contexts of American Literature.
- ❖ To remember, understand and evaluate the poetry of American writers.
- ❖ To understand about the absurdity of war in the prose.
- ❖ To analyse the class difference in the Drama and its impact on the society.
- ❖ To comprehend and evaluate the Short Stories in terms of plot, character, themes, symbols and settings.

**Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

- CO1 recall and relate the various themes in the American poems.
- CO2 describe the impact and consequences of war.
- CO3 compare and contrast the social variations portrayed by the Playwrights.
- CO4 critically appraise the story focusing on the symbolic and thematic representation.
- CO5 analyze the survival issues in the fiction

## COMMONWEALTH LITERATURE (MAJOR XIV)

### Course Objectives:

- ❖ To introduce the students to new authors in English of different countries.
- ❖ To provide a wholesome understanding of literature all over the world.
- ❖ To introduce the students to the literature of the former colonial world – Africa, · Canada, Australia, New Zealand South Asian and Caribbean
- ❖ To critically read the literature and to explore post-colonialism as a historical, cultural phenomenon.
- ❖ To discuss and analyze how the textual forms emerged as "resistance" to imperial domination

### Course Outcome (CO):

**On successful completion of the course, the students will be able to:**

CO1 understand the post colonial writing in English prevailing all over the world

CO2 A wide understanding of the various personalities and their writings

CO3 to dissect the themes and styles of Commonwealth writers of Literature

CO4 to discuss social, cultural, psychological problems in the works of Commonwealth writers

CO5 to appreciate the wide range of texts in Commonwealth Literature

## ENGLISH LANGUAGE TEACHING (ELECTIVE PAPER-III)

### Course Objectives:

- ❖ To remember and understand the general concepts of language and analyse the types and varieties of learning a language.
- ❖ To understand and apply the tenets of phonetics of English Language in transcription and speech.
- ❖ To understand the functions of morphology and semantics in language and analyse the morphological patterns of sentence structures.
- ❖ To analyse and apply the various methods and approaches of teaching and learning English.
- ❖ To understand the various techniques of teaching, the modules of testing techniques and analyse the usage of audio-visual aids in learning on a regular basis.

### Course Outcome (CO):

**On successful completion of the course, the students will be able to:**

CO1 discuss the basic concepts of language and explain the varieties of learning a language.

CO2 recognize and identify the correct pronunciation of English sounds.

CO3 illustrate the functions of morphology and semantics.

CO4 compare and contrast the various methods and approaches of teaching and learning English.

CO5 design the lesson plan and prepare the critical analysis of tests and techniques.

## **M.A ENGLISH**

### **ENGLISH LITERATURE –I**

#### **Course Objectives:**

- ❖ To sensitize students to British writers and their select works to get a basic knowledge of the important literary works of the period.
- ❖ To help the students appreciate the richness in British Literature
- ❖ To acquaint the students with the eminent British writers
- ❖ To initiate students towards Poetry, Prose and Drama
- ❖ To initiate further reading to obtain a fuller understanding of other works.

#### **Course Outcomes:**

##### **At the end, the students will be able to**

- know the glimpse of British writers and their uniqueness
- understand salient features of epic poetry
- appreciate the British Prose
- appreciate the nuances of comedy
- Imbibe the features of tragedy

### **ENGLISH LITERATURE-II**

#### **Objectives:**

- ❖ to introduce students to Key British writers and their select works.
- ❖ to expose students to various genres of literature
- ❖ know the traditional and cultural background
- ❖ to initiate further reading of British authors
- ❖ to obtain a fuller understanding of other works.

#### **Outcomes:**

##### **At the end, the students will**

- able to understand and appreciate satirical writings
- be able to distinguish the nature and features of Blake's songs
- be able to understand Dr.Johnson's critical estimate of Milton
- be able to appreciate Tragedy
- appreciate the significance of the prose works of Steele and Addison

### **WORLD CLASSICS IN TRANSLATION**

#### **Course Objectives:**

- ❖ To introduce the students with Greek Classics and great Russian works
- ❖ To expose students to Masterpieces in German and French
- ❖ To arouse students' interest for Indian Classics
- ❖ To initiate them to read select classics in translation.
- ❖ To motivate the students to learn the themes, characterization and various literary techniques

**Course Outcomes:**

- ❖ **At the end, the students will be able to**
- ❖ identify and discuss seminal classics across the globe.
- ❖ evaluate classical texts.
- ❖ appreciate characterization and themes of the literary works
- ❖ distinguish various literary techniques employed
- ❖ understand literary traditions around the world.

**INDIAN WRITING IN ENGLISH****Course Objectives**

- ❖ To help the students appreciate the richness in Indian writing in English.
- ❖ To acquaint the students with the eminent Indian writers in English.
- ❖ To motivate the students to learn Indian Poetry in English
- ❖ To introduce prose writings of Indians to students
- ❖ To expose the students to Indian novels and plays in English

**Course Outcomes****On the successful completion of the course, students will be able to:**

- know the complete picture of Indian writers and their uniqueness
- come to know the traditional and cultural background
- acquire the idea about the customs and superstitious belief of Indians
- realize the importance of spirituality in Indian writing and know the
  - sufferings and submissive conditions of people
- learn the myths and ethics of India

**ENGLISH LITERATURE-III****Course Objectives**

- ❖ To introduce the students to Romantic school of poetry
- ❖ To acquaint students with the prose of Macaulay and Carlyle.
- ❖ To expose the students to “Comedy of Manners”
- ❖ To make students understand the Victorian Realism of George Eliot and Hardy.
- ❖ To make the students learn of the thematic and stylistic features of the novels

**Course Outcomes****On the successful completion of the course, students will be able to:**

- understand and assess the unique features of romantic poetry
- analyse salient features of the prose works of Macaulay and Carlyle
- appreciate Comedy of Manners
- imbibe the characterization and themes of the novels prescribed
- to obtain a fuller understanding of various writers’ style.

## **ENGLISH LITERATURE-IV**

### **Course Objectives**

- ❖ To introduce students to modern British writers and their select works.
- ❖ To acquaint students with the features of the modernist poetry of T.S.Eliot
- ❖ To expose the students to modern British Prose and to Dystopian fiction
- ❖ To initiate the students towards the modern plays of Shaw and Beckett
- ❖ To promote further reading to obtain a fuller understanding of other works.

### **Course Outcomes**

#### **At the end, the students will be able to:**

- appreciate and analyse the writings of modern British writers
- understand the theatre of the absurd and the political drama
- explore various aspects of poetry
- imbibe the style and concerns of the prose pieces
- identify the dystopian features in modern literature

## **LANGUAGE AND LINGUISTICS**

### **Objectives**

- ❖ To enrich learners with the knowledge of the scientific study of language and to provide insights into the nature of language.
- ❖ To familiarize learners with the discourse of linguistics and to provide exposure to the variety of theoretical and practical manifestations of linguistics.
- ❖ To enable students to gain an informed approach on how language interfaces with literatures as well as with societal concerns and also to show how it fits into the discipline of cognitive sciences.
- ❖ To make the students learn of various theories of language, growth of vocabulary, the evolution of Standard English and various English dialects
- ❖ To teach about vowels, consonants, phonology, morphology, intonation and semantics

### **Course Outcomes**

#### **On the successful completion of the course, students will be able to:**

- understand the importance of language
- learn how the language has emerged
- understand the systematic approach to language
- gain knowledge on English vocabulary and on the evolution of Standard English
  - English
- cultivate knowledge on vowels, consonants, intonation and semantics

## **AMERICAN LITERATURE**

### **Course Objectives**

- ❖ To enable the students to have an overview of major authors and their contributions for the development of American literature.
- ❖ To analyse the social and political events that have influenced the literary movements and their impacts on the representative writers.
- ❖ To expose the students to modern American poetry
- ❖ To initiate the students towards Modern American Theatre
- ❖ To make the students to learn of 'American War-Novel'

### **Course Outcomes**

**On the successful completion of the course, students will be able to:**

- distinguish the variegated- thinking of American scholars
- understand transcendentalists and naturalists
- analyse the seclusion temper of patriarchal society
- understand significant aspects in various genres of American literature
- explore the impact of American society and culture on literature

## **SUBALTERN LITERATURE**

### **Objectives:**

- ❖ To introduce the students to a different form of literary works.
- ❖ To make students acquire a sound knowledge in Subaltern literature
- ❖ To introduce students to that literature that has been sidelined down the ages.
- ❖ To familiarize the students with the theme of the Subaltern.
- ❖ To picturise the painful feelings of the oppressed.

### **Outcomes:**

**At the end, the students will be able to**

- familiarize themselves with writers of new vista of literatures
- initiate further reading to obtain a fuller understanding of Subaltern literature.
- Understand the experience of the Socially, Politically, economically neglected people
- Analyse Modern Subaltern issues
- Identify Gender discrimination in the given works.

## **SHAKESPEARE**

### **Course Objectives**

- ❖ To introduce the students to the dramatic world of Shakespeare
- ❖ To initiate the students read and appreciate Shakespeare's comedies and tragedies.
- ❖ To make the students understand Shakespeare's skill in characterization
- ❖ To expose them into various critical perspectives on Shakespeare.
- ❖ To sensitize students to Shakespeare's dramatic and poetic techniques

## **Course Outcomes**

**On the successful completion of the course, students will be able to:**

- Realize the greatness and uniqueness of Shakespeare's dramatic world
- Know the features of Shakespearean comedies and tragedies
- Analyse Shakespeare's skill in characterization
- Know the trends in Shakespearean criticism.
- develop linguistic, social, psychological perspectives by reading the plays of Shakespeare

## **LITERARY THEORY AND CRITICISM-I**

### **Objectives:**

- ❖ To give the students an overview of the critical practices during classical period
- ❖ To introduce the students to ancient Indian perspectives in criticism
- ❖ To familiarize the students with important writers and their criticism
- ❖ to help the students understand literary theory as a system to critically interpret literary texts.
- ❖ To enable the students to understand the broad spectrum of thought that is covered by literary theory and also to enhance their literary research.

### **Outcomes:**

**At the end, the students will be able to**

- Have a comprehensive view of various critical practices over the period, right from the classical period.
- Understand the basics of the ancient Indian perspectives in criticism.
- Identify major critics and their perspectives in interpreting texts.
- Examine texts critically, from different perspectives
- Use various tools, techniques and strategies of interpretation..

## **NEW LITERATURES IN ENGLISH**

### **Objectives**

- ❖ To introduce students to the area of new literatures in English
- ❖ To introduce the students to Key writers of Africa and Canada
- ❖ To make the students understand the perspectives in New Literature by reading different genres.
- ❖ To enable students to appreciate various cultures

### **Outcomes:**

**At the end, the students will be able to**

- familiarize themselves with writers of new literatures
- have a general idea about the major writers of Africa and Canada
- understand the perspectives in New Literature
- know about a variety of cultures



## **TRANSLATION AND COMPARATIVE LITERATURE**

### **Objectives:**

- ❖ To make the students learn about the history of translation.
- ❖ To familiarize students with the concepts and theories of translation.
- ❖ To introduce them the art of translation.
- ❖ To help them pursue translation as a profession.
- ❖ To introduce the students to the discipline of comparative study of more than one literature.

### **Outcomes:**

#### **At the end, the students will be able to**

- explain the concepts and theories of translation.
- Trace the history and development of the translation practice.
- undertake various translation works.
- find employment as translators.
- Understand theories related to comparative literature.

## **WOMEN'S WRITINGS**

### **Objectives:**

- ❖ To introduce students to the development of women's writing in various countries.
- ❖ To familiarize them with the diverse concerns addressed by feminism.
- ❖ To expose them to various genres of Women's Writings.
- ❖ To sensitise them to key feminist theories.
- ❖ To motivate them to critically analyse literary works from a feminist perspective.

### **Outcomes:**

#### **At the end, the students will be able to**

- have an awareness of class, race and gender as social constructs and about how they influence women's lives.
- acquire the skill to understand feminism as a social movement and a critical tool.
- Understand major feminist theories.
- Have a glimpse of a various genres of Women's Writings
- be equipped with analytical, critical and creative skills to interrogate the biases in the construction of gender and patriarchal norms.

## **LITERARY THEORY AND CRITICISM-II**

### **Objectives:**

- ❖ To enable students have a wide range of critical perspectives on literature
- ❖ To acquaint the students with contemporary critical theories.
- ❖ To enable students to apply theories to interpret texts.
- ❖ Enhances the students to develop critical skills
- ❖ To equip students with various tools, techniques and strategies of interpretation.

**Outcomes:****At the end, the students will be able to**

- Understand a wide range of critical perspectives on literature.
- Have a wide knowledge of the contemporary critical theories
- Apply theories for interpreting literary texts.
- The students will develop an independent critical persona.
- use various tools, techniques and strategies of interpretation

**ENGLISH LITERATURE FOR UGC/TRB/UPSC EXAMINATIONS****Objectives:**

- ❖ To introduce the students various competitive exams.
- ❖ To make students acquire a sound knowledge in English literature
- ❖ To motivate the students to appear for various competitive examinations.
- ❖ To understand the proper methods to crack various exams.
- ❖ To help learners prepare for UGC Eligibility tests for JRF and Assistant Professorship

**Outcomes:****At the end, the students will be able to**

- Have a good working knowledge of the competitive examinations.
- Have a comprehensive outlook about English Literature.
- Motivate themselves to appear for and pass the eligibility tests
- Acquire clear idea about the exams
- Prepare thoroughly for various competitive exams like UGC - NET

**RESEARCH METHODOLOGY****Objectives:**

- ❖ To introduce the students to the nature and scope of research.
- ❖ To make the students understand the basics and types of research.
- ❖ To make them learn to write research hypothesis and developing it into a working paper.
- ❖ To enable learners to use different research methods and tools
- ❖ To help the learners use a range of sources and document them

**Outcomes:****At the end, the students will be able to**

- expose themselves to nature and scope of research
- understand the basics and types of research.
- write research hypothesis and develop it into a working paper.
- use different research methods and tools
- use a range of sources and document them

## **M.PHIL ENGLISH**

### **PAPER I – RESEARCH METHODOLOGY AND THEORY OF LITERATURE**

#### **Course Objectives**

- To make the students learn the basics of research
- To make the students learn working bibliography, note-making, methods and tools of analysis, research resources, documentation and format of the thesis
- To make the students learn various aspects of scholarship and criticism
- To make the students learn the Extrinsic and Intrinsic approaches to Literature and the theory of Comparative Literature
- To make the students learn the various stages/requirements of the Project

#### **Course Outcomes**

**On the successful completion of the course, students will be able to:**

CO1 understand the basics of research

CO2 prepare working bibliography, to make note, methods and tools of analysis, research resources, documentation and format of the thesis

CO3 interpret various aspects of scholarship and criticism

CO4 discuss the Extrinsic and Intrinsic approaches to Literature and the theory of Comparative Literature

CO5 analyse various stages/requirements of the Project

### **Paper II – LITERARY THEORY AND AREA STUDY**

#### **Course Objectives**

- To make the students learn the prescribed essays on structuralism, Post-Structuralism and Deconstruction
- To make the students learn the prescribed essays on Marxism, Feminism, Cultural Identity and Discourse Representation.
- To make the students learn the prescribed essays on Hermeneutics, Existentialism and Reader Response.
- To make the students learn to read and interpret the prescribed literary texts with the help of literary theory and criticism.
- To introduce recent trends in the field of literary theory

#### **Course Outcomes**

**On the successful completion of the course, students will be able to:**

CO1 appreciate theories related to structuralism, Post-Structuralism and deconstruction

CO2 understand essays on Marxism, Feminism, Cultural Identity and Discourse representation.

CO3 analyse and apply Hermeneutics, Existentialism and Reader Response theories in research topics

CO4 interpret literary texts with the help of literary theory and criticism.

CO5 Identify various genres for their area of research.

## **ENGLISH PAPER – III**

### **Course Objectives:**

- ❖ To remember the origin and History of the Indian Writing in English
- ❖ To initiate the students to learn the history of Indian Writing in English and the famous IndoAnglican writers.
- ❖ To understand the literary genre –Fiction and its techniques.
- ❖ To comprehend the lucid style in Indian fiction
- ❖ To evaluate the works of famous authors in terms of its themes.

### **Course Outcome (CO):**

**On successful completion of the course, the students will be able to:**

CO1 recall how Indian writing in English originated and study its history.

CO2 identify literary devices used in the prescribed texts.

CO3 analyse the style of the Indian writers

CO4 evaluate how the different themes are used in all the works.

CO5 appraise the plots, images and characters in the prescribed Indian fiction.

## **PAPER IV: RHETORIC AND INTERPRETATIVE SKILLS.**

### **Course Objectives**

- To make the students learn the types of discourse
- To learn thesis writing
- To make the students learn various aspects of novel
- To make the students learn the anatomy of drama
- To equip with effective writing and presentation skills

### **Course Outcomes**

**On the successful completion of the course, students will be able to:**

CO1 understand the basics of discourse

CO2 write thesis

CO3 interpret various aspects of novel and its techniques

CO4 discuss the anatomy of drama

CO5 develop research writing and presentation skills

## B.A HISTORY

SEMESTER : I  
CORE COURSE : CC1

Sub Code :  
Credits : 4

### Objectives

- To understand the impact of geography on Indian History.
- To understand the political history of Ancient India.
- To learn the achievements made by the Mauryas and the Guptas.
- To understand the advent of Muslims.

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Remember the early history of India
2	Study the background for the emergence of new religions and impact on secularism
3	Analyse the administration of the early great rulers
4	Incorporate the cultural development of the past period in the present context
5	Logically reason out the present customs, habits and living conditions from the past.

SEMESTER : I  
CORE COURSE : CC6

Sub Code :  
Credits : 4

## HISTORY OF TAMIL NADU SANGAM EPOCH TO 1565 AD

### Objectives

- To analyse the physical boundary of Ancient Tamilagam
- To know the political, social & cultural achievements of the Sangam period.
- To study the origin of Kalabhras and Pallavas
- To study the different stages of development under the Pallavas and Cholas
- To familiarize with the nature of the Madurai Nayak's rule.

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Remember the social and economic development of people from the Sangam Age. .
2	Understand and recognize the administration of the Pallavas and art of making sculpture during that period
3	Apply the ideas and culture of Tamils in their life
4	Analyse the impact of Malik Kafur's invasion
5	Evaluate the development of art and architecture in ancient Tamil Nadu

SEMESTER : I Sub Code :  
CORE COURSE : CCA1 Credits: 5

### **MODERN GOVERNMENTS (THEORY)**

#### **Objectives**

- To learn the importance of modern governments in day to day life
- To understand the necessity of separation of Powers.
- To know the principles relating to politics
- To realize the importance of rights and duties of citizens
- To study the value of democracy
- To study the principles relating to constitutions.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Understand the meaning and different types of constitution.
<b>2</b>	Gain knowledge about the working of legislature.
<b>3</b>	Know the Judicial System.
<b>4</b>	Analyze the theory of origin and functions of the states
<b>5</b>	Evaluate the powers and function of states. .

SEMESTER : II  
CORE COURSE : CC2

Sub Code :  
Credits : 4

### **POLITICAL AND CULTURAL HISTORY OF INDIA FROM 1206 to 1707 AD**

#### **Objectives**

- To understand the fusion of Hindu and Muslim culture.
- To learn the society, administration, art and architecture of Muslims.
- To know the significance of the social reform movements.
- To know the reasons for the rise and decline of the Delhi Sultans and Mughals.
- To understand the rise and fall of Vijayanagar rule and the Marathas.
- To study the background for the establishment of the British rule in India.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Provide knowledge on the rich cultural contribution of Muslim rulers
2	Teach the values of secularism
3	Encourage students to undertake research in the unexplored areas of medieval history.
4	Instruct the moral values given by Bhakti Saints.
5	Understand the impact of Mughal Rule in India.

SEMESTER : II  
SOFT SKILL : CCA2

Sub Code :  
Credits : 5

### **SELECT CONSTITUTIONS**

(CONSTITUTIONS OF U.K., U.S.A., FRANCE, SWITZERLAND & CHINA)

#### **Objective**

- To analyze the salient features of constitution of England.
- To study the value of monarchy.
- To analyze the salient features of constitution of the U.S.A.
- To study the federal nature of the Swiss constitution.
- To understand the nature of government in People's Republic of China

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Understand the fundamentals of Public Administration
2	Understand the principles and Structure of Organizations
3	Explain the functions of corporations, commissions and boards
4	Realize the importance of field administration in present scenario
5	Evaluate the evolutions of Public Administration

SEMESTER : II  
SOFT SKILL : CCE1

Sub Code :  
Credits: 5

## **WORKING OF INDIAN CONSTITUTION**

### **Objectives**

- To understand the achievement of India. i.e. the framing of a new constitution based on the  
Ideals of democracy, justice, liberty, equality, and fraternity.
- To know about the uniqueness of Indian constitution.
- To familiarize with the fundamental rights and duties of the Indian citizens.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Understand the evolution of Indian Constitution.
2	Highlight the powers of state executive.
3	Learn the Centre-States relation in all field
4	Realize the powers and functions of Executive, Legislative and Judiciary
5	Acquire knowledge about the functions of Election Commission.

SEMESTER : II  
CORE COURSE : Soft Skill - SBEC1

Sub Code :  
Credits: 4

## **TOURISM AND TRAVEL MANAGEMENT**

### **Objectives**

- To know the types and importance of tourism.
- To study the development of Tourism in India
- To develop practical skill in travel formalities.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Understand the component and types of Tourism
2	Understand the rules and regulation in tourism management.
3	Apply the Travel documents like Visa, Passport to travel abroad.
4	Explain the transportation and accommodation facilities in India.
5	Evaluate the functions of Tourist organizations, Travel Agencies and Tourist Guide



SEMESTER : III

Sub Code :

CORE COURSE : CC3

Credits: 4

**POLITICAL AND CULTURAL HISTORY OF INDIA 1707 – 1857 AD**

**Objectives**

- To understand the struggle for supremacy among the Europeans.
- To analyse the causes for the success of the British and failure of the French.
- To examine the causes of the various wars and to understand the various diplomacies of the British to win over the Indian rulers.
- To analyse the factors and the circumstances that led to the outbreak of the Revolt of 1857 and to admire the role of the heroes of the revolt.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Understand the downfall of Mughals and rise of autonomous states
2	Understand the congenial condition for the coming of the Europeans and the establishment of their settlements.
3	Evaluate the role of Christian missionaries in spread of education
4	Appreciate reforms of the various Governors Generals and to recognize the administrative developments during the British period
5	Understand the growth of the constitution of India and learn to connect that with the present system.

SEMESTER : III  
CORE COURSE : CC7

Sub Code :  
Credits : 4

**HISTORY OF TAMIL NADU 1565 A.D TO PRESENT DAY**

**Objectives**

- To understand the changes after the British Acquisition of Tamil Nadu.
- To analyse the relevance of socio-religious movements of the 19th century.
- To study the Dravidian Movement.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Study the different stages by which Tamil Nadu came under the British rule
2	Evaluate the works of Congress Party in Tamil Nadu
3	Synthesis the growth of Tamil literature
4	Analyse the rise of Dravida movement and its impact in Tamil Nadu politics
5	Evaluate the socio economic development of Tamil Nadu after Independence

SEMESTER : III Sub Code :  
ALLIED COURSE : CCA3 Credits: 5

## **PUBLIC ADMINISTRATION**

### **Objectives**

- To learn nature and scope of public administration.
- To study the evolution of public administration as a discipline.
- To understand the necessity of adoption of new techniques in public administration.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Understand the fundamentals of Public Administration
<b>2</b>	Understand the principles and Structure of Organizations
<b>3</b>	Explain the functions of corporations, commissions and boards
<b>4</b>	Realize the importance of field administration in present scenario
<b>5</b>	Evaluate the evolutions of Public Administration

SEMESTER : III  
NON MAJOR ELECTIVE COURSE : NMEC1

Sub Code :  
Credits : 4

## **PANCHAYAT RAJ IN INDIA**

### **Objective**

- To understand the evolution of the local bodies.
- To know the reasons for the decline of the glory of the Panchayats.
- To understand various women empowerment programmes

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Remember the facts, terms and history of Panchayat Raj system in Tamilnadu.
<b>2</b>	Understand the origin of Panchayat Raj System in India
<b>3</b>	Analyse the functioning of Panchayat Raj system in Independent India.
<b>4</b>	Evaluate the contributions of self governing institutions for upliftment of the rural masses.
<b>5</b>	Judge the working of Panchayat Raj system in India at its grass root level and the benefit of welfare schemes

SEMESTER : IV  
CORE COURSE : CC4

Sub Code :  
Credits : 4

### **POLITICAL AND CULTURAL HISTORY OF INDIA 1858 to 1947 A.D.**

#### **Objectives**

- To know historical developments from 1858 to 1947.
- To study the nature of the British rule in India
- To enhance the nationalistic feeling among the students.
- To understand the socio-religious movements.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Learn the administrative and social reforms carried out in India
2	Distinguish between the British Legislations and the Indian Law
3	Develop the national spirit and patriotism among the student community
4	Apply the principles of Ahimsa and Satyagraha
5	Analyze the impact of Colonialism.

SEMESTER : IV  
CORE COURSE : CC8

Sub Code :  
Credits : 4

### **HISTORY OF EUROPE FROM 1453 TO 1789 A.D**

#### **Objectives**

- To know the importance of new geographical discoveries.
- To learn the significance of Renaissance.
- To understand the split in the Universal Church
- To know the rise of Monarchy and Despotism

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Enlighten how Renaissance was a time of rebirth and the changes it brought in Arts, Science, Literature, Politics and Religion in Europe.
2	Tell about the difference between the Reformation and Counter-Reformation and how they affected Christian Church in Europe
3	Explain the causes, course and results of the Dutch War of Independence and the Thirty Years War.
4	Analyze the role of the enlightened despots - Louis XIV of France, Peter the Great and Catherine II of Russia who led their country to the modern world.
5	Evaluate the regime of Frederick the Great of Prussia and Joseph II of Austria.

SEMESTER : IV  
CORE COURSE : CCA4

Sub Code :  
Credits : 5

## **HUMAN RESOURCE MANAGEMENT**

### **Objectives**

- To provide the students with knowledge on concepts, theories, scope and development of Human Resource Management practice at both National and global level.
- To understand human relation skills of drafting a Job Description, Job Specification, Job Design.
- To produce information regarding the effectiveness of recruiting methods, selection procedures and make appropriate staffing decisions.
- To develop a training program using a useful framework for evaluating training needs, designing a training program, and evaluating training results To gain knowledge HRM and its significance in business.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Analyze the process of Job analysis and its importance as a foundation of human resource management practice
<b>2</b>	Understand the Human resource planning
<b>3</b>	Apply the policies and practice of the primary areas of human resource management, including staffing, training and compensation
<b>4</b>	Understand the importance of career planning and succession planning
<b>5</b>	Apply the policies and practice of the primary areas of human resource management, including staffing, training and compensation

SEMESTER : IV  
SOFT SKILL : SBEC4

Sub Code :  
Credits: 4

## **JOURNALISM**

### **Objectives**

- To know the importance of journalism in day to day life.
- To study the history of journalism.
- To know the role of press in the Indian freedom struggle.
- To understand the duties and responsibilities of a reporter.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Remember the historical significance of journalism in Indian freedom struggle.
<b>2</b>	Understand the press laws
<b>3</b>	Apply their knowledge in News writing; News editing and choose careers in Journalism
<b>4</b>	Analyze more about newspapers, editing pages.
<b>5</b>	Create more interest on various national and international news agencies.

SEMESTER : V  
CORE COURSE : CC11

Sub Code :  
Credits : 5

## **HISTORY OF EUROPE 1789 TO 1945 A.D**

### **Objectives**

- To understand the rise and fall of Napoleon.
- To study the significance of the Congress of Vienna
- To understand the world setting during the world war I, World War II and the political developments made after

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Recall the historical events of the period
<b>2</b>	Understand about the expansion of imperial powers, the process of colonization, and democratic.
<b>3</b>	Analyze how the spirit of nationalism played a vital role in the unification of Italy and the unification of Germany
<b>4</b>	Analyze the causes for outbreak of the two world wars.
<b>5</b>	Evaluate the efforts of UNO in promoting world peace.

SEMESTER : V Sub Code :  
CORE COURSE : CC5 Credits: 4

### **CONTEMPORARY INDIA SINCE 1947 A.D.TO PRESENT DAY**

#### **Objectives**

- To understand the difficulties faced by the makers of today's India to integrate the princely states.
- To analyse Nehru's efforts to shape the country's future.
- To know the India's foreign diplomacy
- To know the merits and demerits of the New Economic Policy.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	List out the important events after the post Independence period of India.
2	Understand the foreign policy of India.
3	Apply the ideals of national leader towards a better society.
4	Analyze the economic developments during the congress ministries
5	Evaluate the condition of Education, Science and Technology in India since 1950.

SEMESTER : V  
CORE COURSE : CC10

Sub Code :  
Credits : 4

### **HISTORY OF ENGLAND FROM 1485-1820 A.D**

#### **Objectives:**

- To study about the Development of constitutional monarchy
- To learn the growth of Parliamentary system
- To assess the Revolution and Movements

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Learn the democratic principles and concepts
2	Understand the prime minister ship and council of minister functions
3	Study the implementation of rule of Law
4	Understand the growth of constitution and cabinet system
5	Create the knowledge about the foreign dynasties

SEMESTER : V  
CORE COURSE : CCE2

Sub Code :  
Credits : 5

## **ARCHAEOLOGY AND EPIGRAPHY**

### **Objectives**

- To know the importance of archaeology
- To understand the evolution of archaeological excavations in India and other countries
- To acquire knowledge about the various types of artifacts excavated through archaeological explorations

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Remember and Integrate the knowledge of archaeology in studying history.
2	Understand the importance of Archaeology.
3	Apply the method of Exploration and Excavation in their Research.
4	Analyze the Archaeological Artefacts. .
5	Create more Interest on Archaeological sites of Tamil Nadu.

SEMESTER : V Sub Code :  
NON MAJOR ELECTIVE COURSE : NMEC2 Credits: 2

## **INDIAN ECONOMIC DEVELOPMENT**

### **Objectives**

- To know the difference between development and growth
- To understand the demographical policy and its impact
- To Learn role of agricultural in Indian Economic development

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Understand the India economic growth in different fields
2	Know the role of transport, industries and employment
3	Learn the agricultural importance which help to development of Indian Economic growth
4	Analyse the growth of industries in India
5	Create knowledge about the transport system in India

SEMESTER : V  
SOFT SKILL : SBEC3

Sub Code :  
Credits : 4

**MUSEOLOGY**

**Objectives**

- To understand History of Museum in India and abroad
- To study the functions and administration setup of museum
- To know about the preservation and conservation of museum objects

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Recall the beginning and evolution of Museology.
2	Understand the importance of museum in human society
3	Apply the museum as education resources especially educational activities.
4	Know the values of museum and artifacts
5	Evaluate the functions and administrative setup of museum

SEMESTER : VI  
ALLIED COURSE : CC9

Sub Code :  
Credits : 4

**HISTORY OF EAST & SOUTH EAST ASIA 1800 – 1945 A.D.**

**Objectives:**

- To understand about the political condition of China and Japan.
- To highlight the Reform Movement in China.
- To assess the Communist rule in china
- To study the Rise of Imperialism and Militarism in Japan

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Remember the historical events of China and Japan from 1840 to 1970 C.E
2	Understand about the political condition of China and Japan.
3	Explain the rise of imperialism and militarism in Japan
4	Analyse the development of communist ideology in Asian Region
5	Evaluate the communist rule in China



SEMESTER : VI Sub Code :  
CORE COURSE : CC12 Credits: 5

**HISTORY OF USA UPTO 1865 A.D**

**Objectives**

- To understand the nature of colonization and struggle between the British and the French in the new world.
- To study the making of the federal and republic constitution in America.
- To study the nature of the civil war and reconstruction process.

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Understand about the effects of the colonization of USA.
2	Analyze the causes and significance of American War of Independence.
3	Infer the making of American Constitution.
4	Perceive various democratic practices.
5	Dissent the system of slavery and racism.

SEMESTER : VI  
ALLIED COURSE : CC14

Sub Code :  
Credits : 5

**CONTEMPORARY WORLD SINCE 1945 A.D.**

**Objectives**

- To study the nature and achievements of the United Nations Organisation(UNO)
- To know the way in which the U.S.A. and the U.S.S.R. engaged into the process of cold war in the world
- To acquire knowledge on the role of Soviet Union in the world politics
- To learn the developments of China after the Chinese Revolution
- To study the position of Japan after the World War II

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Know the role of UNO in establishing World Peace.
2	Understand the nature of the balance of power, regional alliances, the UNO and its achievements.
3	Explain the world setting during the World War II and the consequent political developments
4	Understand the Cold War between capitalist and communist blocks.
5	Evaluate the need for disarmament to world peace.

SEMESTER : VI  
ALLIED COURSE : CC13

Sub Code :  
Credits: 4

### **FUNDAMENTALS OF HISTORICAL WRITING**

#### **Objectives**

- To acquaint the learners about the history of historiography.
- To enable the students to learn the major research methods of the discipline.
- To acquire proficiency in the art of history writing.
- To make students to formulate judgments in terms understanding, analyzing, and evaluating evidence.
- 

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Remember the various definitions and terminologies of History
2	Understand the meaning of history and acquire the knowledge of history of historiography
3	Apply the concepts of history in future historical research and will offer explanations about analytical historical writings
4	Able to extract the evidence from primary and secondary sources to evaluate them in historical context
5	Create an idea of recent trends in historiography

SEMESTER : VI  
ALLIED COURSE : CCE3

Sub Code :  
Credits : 4

### **HUMAN RIGHTS**

#### **Objectives**

- To understand the concept of Human Rights..
- To compare and contrast the universal declaration of Human Rights with the Indian Constitution.
- To understand the provision of various international convention.
- To know about the National Human Rights Commission and State Human Rights Commissions.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Recall the history of Human rights in global and India
2	It provides in-depth knowledge on Human rights and various organizations available inside the country and abroad.
3	By creating awareness the students are better placed to fight and stand for the cause of personnel liberty
4	With the awareness of rights of minority, women and children the students can create an egalitarian society.
5	Evaluate certain issues on Human Rights

## M.A HISTORY

**SEMESTER : I**  
**CORE COURSE : CC1**

**SUB CODE :**  
**CREDIT : 5**

### HISTORY OF INDIA PRE-HISTORY TO 1206 A.D

#### Objectives

- To inculcate historical consciousness in the minds of students
- To impart knowledge on the Indian Heritage
- To train the students to face the competitive examinations

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Understand the importance of geography for history.
2	Develop the skill of presenting the historical events in a chronological order
3	Acquire the skill of critical outlook on Indian society and historical events
4	Analysis the contribution of Mauriyas and Guptas to Art and Architecture
5	Create knowledge about the ancient society

**SEMESTER : I**  
**CORE COURSE : CC2**

**SUB CODE :**  
**CREDIT : 5**

### HISTORY OF MEDIEVAL INDIA 1206 - 1707 A.D

#### Objectives

- To provide knowledge on the cultural contribution of Muslim rulers
- To impart an quest to know deeply the unexplored areas of medieval history
- To imbibe the moral values given by different religions and the Bhakti Saints
- To understand the transition of Hindu society to Muslim society

Course Outcome	
On the successful completion of the course, student will be able to:	
1	Continue to enhance their knowledge through independent work and practice
2	Understand the socio economic life of medieval period.
3	Develop the skill of presenting historical events in a chronological order so as to appear in competitive examinations
4	Develop the skill of situating past historical events in today's context
5	Develop the skill of understanding the pluralistic past in India

**SEMESTER : I**  
**CORE COURSE : CC3**

**SUB CODE :**  
**CREDIT : 5**

### **HSITORY OF INDIA 1707 - 1947 A.D**

#### **Objectives**

- To understand the colonial hegemony in India
- To Inculcate the knowledge of solidarity shown by Indians against British government
- To know about the social reform sense through the historical process.
- To know the effect of the British rule in India.
- To know the educational developments and introduction of Press in India.
- To understand the industrial and agricultural bases set by the British for further developments

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Encourage students to do research on national issues
<b>2</b>	Study the developments made by the British in India
<b>3</b>	Understand the economic policies carried out in India.
<b>4</b>	Develop the skill of viewing the national movement from the Subaltern perspective.
<b>5</b>	Evaluate the constitutional development from 1773 to 1947

**SEMESTER : I**  
**CORE COURSE : EC1**

**SUB CODE :**  
**CREDIT : 5**

### **PRINCIPLES AND METHODS OF ARCHAEOLOGY**

#### **Objectives**

- To study the fundamentals of archaeology
- To assess the different scientific techniques associated with archaeology
- To update the information on recent archaeological excavation

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Develop the skill of methods in archaeological excavations
<b>2</b>	Identify and understand key themes and concepts in Archaeology and its development.
<b>3</b>	Apply his knowledge to find out archaeological sites and artifacts
<b>4</b>	Analyze the origin and nature of National and State Department of Archaeology in India.
<b>5</b>	Evaluate excavation, dating methods and other techniques used in Archaeology

**SEMESTER : II**  
**CORE COURSE : CC4**

**SUB CODE :**  
**CREDIT : 5**

**CONTEMPORARY INDIA SINCE 1947 A.D**

**Objectives**

- To understand the achievements of the independent India in different fields.
- To learn about the role of makers of modern India.
- To know about the political trends in India.
- To get knowledge on the challenges faced by India.
- To study about the development process and national growth.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Recall the political events since Independence.
<b>2</b>	Understand the Centre - State Relations and rise of regional parties.
<b>3</b>	Assess the significance of popular movements after Independence.
<b>4</b>	Analyse the reservation policy, New Economic policy and the impact of Science & Technology
<b>5</b>	Evaluate the major issues that challenge Indian democracy.

**SEMESTER : II**  
**CORE COURSE : CC5**

**SUB CODE :**  
**CREDIT : 5**

**FREEDOM MOVEMENT IN INDIA FROM 1858 TO 1947**

**Objectives**

- To know the nature of Indian National Movement.
- To understand the process of national struggle for Indian Independence.
- To learn the process of mobilization of the people to fight for freedom.
- To study the services rendered by martyrs for Indian freedom.

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Acquire in depth knowledge of freedom struggle in India. .
<b>2</b>	Understand the factors leading to the rise of nationalism and trace the emergence of Indian National Congress
<b>3</b>	Contribute to the society by learning principles of non-violence, sathyagraha, service, sacrifice and patriotism
<b>4</b>	Analyse the implications of Colonialism and Communalism
<b>5</b>	Evaluate the importance of communal harmony.

**SEMESTER : II**  
**CORE COURSE : CC6**

**SUB CODE :**  
**CREDIT : 5**

### **HSITORY OF WORLD CIVILIZATION UPTO 476 A.D**

#### **Objectives**

- To provide well balanced coverage of the all key factors comprising the world civilization
- To help the students with broad based knowledge and understanding of the concept of evolution of Mankind and Culture
- To provide impact on human lives today through the ancient civilization

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Acquire the knowledge of the early History of the World.
<b>2</b>	Get knowledge and understanding of the concept of evolution of mankind and culture through the ages and their impact on human lives today.
<b>3</b>	Identify and construct and idea about the tools used by the Stone Age men.
<b>4</b>	Compare and contrast the society and culture of different civilization
<b>5</b>	Recognise the contribution of different civilizations

**SEMESTER : II**  
**CORE COURSE : CC7**

**SUB CODE :**  
**CREDIT : 5**

### **HISTORY OF PUDUKKOTTAI**

#### **Objectives**

- To understand the local history and historical importance of the locality
- To impart knowledge of the administration and social life of the native state
- To study the rise and fall of Pudukkottai princely State

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Remember the historical events that happened in Pudukkottai region.
<b>2</b>	Understand the local history and historical importance of the locality
<b>3</b>	Develop the skill of comparing the local historical events in a fruitful way
<b>4</b>	Impart the knowledge of ancient monuments and culture
<b>5</b>	Evaluate and recognize economic development of Pudukkottai presidency

**SEMESTER : II**  
**CORE COURSE : EC2**

**SUB CODE :**  
**CREDIT : 5**

### **ARCHIVES KEEPING**

#### **Objectives**

- To realize the importance of Archives
- To know the practice of archives keeping
- To study different types of preservation techniques

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Recall the origin and development of Archives
2	understand the documentation of the early periods.
3	Know the preventive measures and precautionary methods.
4	Realize the materials and equipments used in Archives.
5	Evaluate the functions of Archives

**SEMESTER : III**  
**CORE COURSE : CC8**

**SUB CODE :**  
**CREDIT : 5**

### **SOCIO – CULTURAL HISTORY OF TAMIL NADU FROM 1565 TO THE PRESENT DAY**

#### **Objectives**

- To understand the contribution of Marthas to Tamilagam
- To learn the values for which the Socio- Religious Reform Movements emerged in Tamil country
- To understand the rise and fall of Vijayanagar rule.
- To know the significance of Poligari system.
- To learn the social set up during the Nayak rule in Tamil Nadu
- To study the advent of Europeans and the establishment of British rule.
- To know about the role of Christian Missionaries in education

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Develop the skill of comparing the historical events in a fruitful way
2	Learn the relevance of socio-religious movements of 19th century in the present context.
3	Study the Dravidian Movement and growth of Tamil Literature.
4	Understand the growth of Tamil consciousness.
5	Evaluate the social welfare measure after the Independence

**SEMESTER : III**  
**CORE COURSE : CC9**

**SUB CODE :**  
**CREDIT : 5**

### **HISTORIOGRAPHY: THEORY AND METHOD**

#### **Objectives**

- To understand the meaning of History and Historiography
- To compare and contrast the different trends in historical writing
- To analyze the importance of philosophy of history
- To develop proper skills in research methodology

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Remember the various definitions and terminologies of History.
<b>2</b>	Understand the meaning of history and acquire the knowledge of history of historiography
<b>3</b>	Apply the concepts of history in future historical research and will offer explanations about analytical historical writings.
<b>4</b>	Able to extract the evidence from primary and secondary sources to evaluate them in historical context.
<b>5</b>	Create an idea of recent trends in historiography. .

**SEMESTER : III**  
**CORE COURSE : CC10**

**SUB CODE :**  
**CREDIT : 5**

### **INDIA AND HER NEIGHBOURS**

#### **Objectives**

- To Study Indian diplomacy towards neighbor hood
- To understand the role of India in the regional organizations
- To learn the role of India to keeping world peace

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Recall the history of foreign policy in India
<b>2</b>	Understand the features of India's foreign policy.
<b>3</b>	Identify the problems and challenges of India with neighbouring countries
<b>4</b>	Get the knowledge of the role of Indira Gandhi in the liberation of Bangladesh
<b>5</b>	Evaluate the ethnic issues of Sri Lanka



**SEMESTER : III**  
**CORE COURSE : CC11**

**SUB CODE :**  
**CREDIT : 5**

## **HISTORY OF SCIENCE AND TECHNOLOGY**

### **Objectives**

- To study the scientific and technical inventions of ancient civilizations
- To illustrate the technological growth in nineteenth century
- To estimate the services of scientists in developing India

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Recall the discoveries and inventions made in the 18th and 19th centuries in Physics, Chemistry, Natural Science and Medicine.
2	Trace the growth of Science and Technology in the 17th and 18th centuries;
3	Explain the history of Aviation and Space Exploration with important milestone events
4	Analyze the condition of Science in Modern India and Portray the life of important Indian scientists along with their contribution to modern science.
5	Explore the history of Communication, Computer, Nuclear Science and Robotics and tell about the advances made in Medical Science

**SEMESTER : III**  
**CORE COURSE : EDC1**  
**HUMAN RIGHTS**

**SUB CODE :**  
**CREDIT : 5**

### **Objectives**

- To inculcate the spirit of human rights consciousness and awareness
- To know various human rights violations in the present society
- To assess the human rights issues in the context of globalization
- To know the various International and National human rights documents

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Remember the concept of natural rights.
2	Understand the historical growth of the idea of human rights.
3	Assess the importance of Human Rights and respect the rights of others.
4	Analyze the issues and challenges of Human Rights.
5	Evaluate the role of various organization in protection of Human Rights

**SEMESTER : IV**  
**CORE COURSE : CC12**

**SUB CODE :**  
**CREDIT : 5**

### **INTERNATIONAL RELATIONS FROM 1919 TO THE PRESENT DAY**

#### **Objectives**

- To prepare the students for the competitive examinations.
- To realize the impact of colonialism and imperialism.
- To make them understand the ideas of Liberalism, Nationalism and Communism
- To know about the different diplomacy and different peace keeping organizations

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Recall the political events and their effects on international relations.
<b>2</b>	Understand the concept of balance of power.
<b>3</b>	Explain the rise of dictatorship and its evil effects on world politics.
<b>4</b>	Analyze the historical background of international relations between two World Wars.
<b>5</b>	Evaluate the importance of world peace.

**SEMESTER : IV**  
**CORE COURSE : CC13**

**SUB CODE :**  
**CREDIT : 5**

### **HISTORY OF USA 1865 TO PRESENT DAY**

#### **Objectives**

- To know about the works and efforts of American Presidents and officials.
- To understand the problems faced by the American natives at the hands of white Americans.
- To learn the Civil Rights Movements of black people and efforts of anti-slavery societies.
- To impart the knowledge of growth of Imperialism in America

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
<b>1</b>	Recall the events of Civil War, Reconstruction, Rise of Big Business, Cold War
<b>2</b>	Understand the impact of Civil War, World War I & II and the Cold War in world history.
<b>3</b>	Explain the American Imperialism and its emergence as a super power.
<b>4</b>	Analyze the policies of the various presidents of USA and its impacts
<b>5</b>	Evaluate the role of USA in world politics.

**SEMESTER : IV**  
**CORE COURSE : EC3**

**SUB CODE :**  
**CREDIT : 5**

**POLITICAL THOUGHT**

**Objectives**

- To understand the political ideas of Plato and Aristotle
- To learn the ideas of Indian political thinkers
- To impart the knowledge about the socialist ideology

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Recall the basic concepts and distinguish the different sources for the study of Indian History.
2	Understand the broad streams of Indian thought
3	Know the impact of western political ideology in Indian democracy
4	Realize the transcendental unity of all religions of the world to keep world in peace.
5	Analyse the theory of ethics and spiritual transformation

**M.PHIL HISTORY****PAPER – I**

**SEMESTER : I**  
**CORE COURSE : CCI**

**SUB CODE : 18MHS1**  
**CREDIT : 4**

**RESEARCH METHODOLOGY AND THESIS WRITING****Objectives:**

- To know the meaning of research in general and research in History in particular
- To impart knowledge of various approaches in Historical Writings
- To acquire skill in methodology of research

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Apply computer knowledge in historical research
2	Apply various techniques and tools in research methodology
3	Create knowledge about the various types and method of research
4	Prepare chart on documentation procedure
5	Draft a thesis scientifically on a particular historical theme

**PAPER – II**

**SEMESTER : I**  
**CORE COURSE : CCII**

**SUB CODE : 18MHS2**  
**CREDIT : 4**

**SOCIO ECONOMIC AND ADMINISTRATIVE HISTORY OF INDIA  
FROM 1757 C.E. – 1947 C.E.****Objectives**

- To understand the colonial hegemony in India
- To Inculcate the knowledge of solidarity shown by Indians against British government
- To know about the social reform sense through the historical process.
- To know the effect of the British rule in India.
- To know the educational developments and introduction of Press in India.
- To understand the industrial and agricultural bases set by the British for further developments

<b>Course Outcome</b>	
On the successful completion of the course, student will be able to:	
1	Encourage students to do research on national issues
2	Study the developments made by the British in India.
3	Understand the economic policies carried out in India.
4	Develop the skill of viewing the national movement from the Subaltern perspective
5	Create knowledge about the transport and currency system in modern India

## **B.A ECONOMICS**

### **MICRO ECONOMICS - I**

**Semester I**

**JSECA1**

**5 Hrs**

**4 Credits**

#### **Course Objective**

This paper is designed to expose first-year students, who may be new to economics, the basic principles of micro economic theory. The emphasis will be on thinking like an economist and the course will illustrate how micro economic concepts can be applied to analyse real-life situations.

#### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the basic concepts of micro economics.

**CO2:** Familiar with the theory of consumer behaviour.

**CO3:** Aware of elasticity of demand and consumer's surplus.

**CO4:** Gain deep knowledge about theory of production.

**CO5:** Get adequate knowledge on cost and revenue.

### **MONEY AND BANKING**

**Semester I**

**JSECB1**

**5 Hrs**

**4 Credits**

#### **Course Objective**

This paper exposes students to the nature and functions of money, demand for and supply of money, theories of money, inflation and monetary policy.

#### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the role of money in different economic system.

**CO2:** Know the monetary standards and theories of money.

**CO3:** Familiar with the demand for and supply of money.

**CO4:** Recognizable the features and functions of banking.

**CO5:** Know the monetary policy.

### **ECONOMIC STATISTICS - I**

**Semester I**

**JSECYA1**

**4 Hrs**

**5 Credits**

#### **Course Objective**

To know some basic concepts and terminology those are fundamental to statistical analysis and inference. To develop the notion of sampling, measures of central tendency and to have a discussion on dispersion.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with collection of data.

**CO2:** Well known about sampling.

**CO3:** Adequate knowledge with the measures of central tendency.

**CO4:** Familiar with measures of dispersion.

**CO5:** Be aware of elements of vital statistics.

## **MICRO ECONOMICS - II**

**Semester II**

**JSECC2**

**5 Hrs**

**4 Credits**

### **Course Objective**

To study the concept of micro economics in advanced manner and to impart an understanding about the determination of price and output under various market and also the theories of rent, interest and profit.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the concept of equilibrium of the firm and industry.

**CO2:** Acquire knowledge about perfect competition and monopoly market.

**CO3:** Gain deep knowledge about monopolistic competition and oligopoly market.

**CO4:** Know about the theory of distribution.

**CO5:** Familiar with the theory of interest and profit.

## **ECONOMIC STATISTICS - II**

**Semester II**

**JSECYB2**

**4 Hrs**

**5 Credits**

### **Course Objective**

To begin with a discussion on correlation and regression analysis, association of attributes, index numbers and time series. It concludes with a discussion on vital statistics.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with the concept of correlation and regression.

**CO2:** Know about the association of attributes.

**CO3:** Gain knowledge on index numbers.

**CO4:** Understand the method of measuring trend.

**CO5:** Know about the concepts of probability.

## **ECONOMIC ISSUES OF TAMILNADU**

**Semester II**

**JSECEC1**

**5 Hrs**

**5 Credits**

### **Course Objective**

This paper exposes the students of economics about the basics of Tamil Nadu economy.  
To study the trend and performance of various sectors in Tamil Nadu

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Clear understand about the profile of Tamil Nadu.

**CO2:** Familiar with the importance of agriculture and its allied activities.

**CO3:** Understand the role of industrial sector in the state economic development.

**CO4:** Know the infrastructure performance of the State.

**CO5:** Understand the structure of State Planning Commission.

## **TOURISM**

**Semester I and II**

**JSBECEC1**

**2 Hrs**

**4 Credits**

### **Objective**

*Tourism courses can give access to a career as a tourist guide, tour manager, adventure sports activity manager, travel consultant, event and conference manager, air cabin crew or airport ground staff, holiday rep – the list is endless!*

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Clear understand about the basic concepts of tourism.

**CO2:** Familiar with the types of tourism.

**CO3:** Understand the significance and obstacles of tourism.

**CO4:** Know the tourism marketing and travel agents in India.

**CO5:** Understand the performance of tourism in India.

## **BASIC MATHEMATICS FOR ECONOMICS**

**Semester III**

**JSECD3**

**5 Hrs**

**4 Credits**

### **Course Objective**

The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus.

**Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Familiar with the basic concepts of mathematics.
- CO2:** Identify the importance of linear programming.
- CO3:** Understand the concept of derivatives and differentiation.
- CO4:** Know the significance of partial differentiation.
- CO5:** Understand the basic concepts of matrices and determinants.

**INDIAN ECONOMIC DEVELOPMENT – I**

**Semester III**  
**JSECE3**

**5 Hrs**  
**4 Credits**

**Course Objective**

This paper is highly useful for students to know contemporary Indian economic development policy issues and challenges.

**Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Familiar with the features of the Indian Economy.
- CO2:** Identify the importance of natural resources in economic development.
- CO3:** Understand the concept of national income.
- CO4:** Know the significance of agriculture and causes for low productivity.
- CO5:** Understand the role and performance of infrastructure sector in the Indian Economy.

**MARKETING - I**

**Semester III**  
**JSECYC3**

**4 Hrs**  
**5 Credits**

**Course Objective**

*Enable the students to understand the basic aspects of marketing.*

**Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the nature and scope of marketing.
- CO2:** Know the types of pricing.
- CO3:** Know the role of channels of distribution.
- CO4:** Gain knowledge on sales promotion and advertisement.
- CO5:** Acquire knowledge on marketing finance and information.



## **HUMAN RESOURCE MANAGEMENT**

**Semester III**  
**JSNMECEC1**

**4 Hrs**  
**2 Credits**

### **Objective**

The paper is to impart to the students to understanding the role of HRM, the selection process and various test of interviews. It is also very to learn more knowledge about the various bargaining system and human resource agencies.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1: Understand about human resources and its functions.
- CO2: Familiar with concept of recruitment and selection.
- CO3: Gain knowledge on training and employees welfare.
- CO4: Understanding industrial relation.
- CO5: Know about bargaining system and human resource agencies.

## **FISCAL ECONOMICS**

**Semester IV**  
**JSECF4**

**5 Hrs**  
**4 Credits**

### **Course Objective**

To make the students to understand the recent development of public expenditure, budgeting and public debt. This paper helps to understand the public expenditure and centre and state relationship.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1: Understand the nature and scope of fiscal economics.
- CO2: Exposure to the concept of public revenue.
- CO3: Know the measures to control public expenditure.
- CO4: Gain knowledge on principles of federal finance.
- CO5: Understand the techniques of fiscal policy.

## **INDIAN ECONOMIC DEVELOPMENT – II**

**Semester IV**  
**JSECG4**

**5 Hrs**  
**4 Credits**

### **Course Objective**

Make the students to understand some important components of Indian economy and the socio economic problems.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1: Understand the theory of demographic transition.
- CO2: Know the role of planning commission.

**CO3:** Know the role of public and private sector in India.

**CO4:** Gain knowledge about the role, contribution and performance of industrial sector.

**CO5:** Acquire knowledge on social sector.

## **MARKETING - II**

**Semester IV**

**JSECYD4**

**4 Hrs**

**5 Credits**

### **Course Objective**

*Enable the students to understand the basic aspects of marketing.*

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the nature and scope of marketing.

**CO2:** Know the types of pricing.

**CO3:** Know the role of channels of distribution.

**CO4:** Gain knowledge on sales promotion and advertisement.

**CO5:** Acquire knowledge on marketing finance and information.

## **MACRO ECONOMICS – I**

**Semester V**

**JSECH5**

**6 Hrs**

**4 Credits**

### **Course Objective**

This paper aims to introduce the basic concepts of macro economics. It discusses the preliminary concepts associated with national income, theories of income, output and employment, consumption function and theories of consumption.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Know the difference between micro and macro economics.

**CO2:** Understand the concept of national income.

**CO3:** Get familiar with the theories of income, output and employment.

**CO4:** Gain knowledge about consumption function.

**CO5:** Understand the theories of consumption.

## **INTERNATIONAL ECONOMICS**

**Semester V**

**JSECI5**

**6 Hrs**

**4 Credits**

### **Course Objective**

This paper develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Interpret different theories of international trade.
- CO2:** Understand the concept of free trade and protection.
- CO3:** Know differentiate between balance of payment and terms of trade.
- CO4:** Understand foreign exchange market and exchange rate system.
- CO5:** Know international monetary system and its importance.

## **HISTORY OF ECONOMIC THOUGHT**

**Semester V**

**JSECJ5**

**5 Hrs**

**4 Credits**

### **Course Objective**

To trace the historical development of economic theories so that the students would be able to appreciate the richness of economic discipline.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the ancient and medieval economic thoughts, such as mercantilism and physiocracy.
- CO2:** Know the contributions of the classical writers.
- CO3:** Gain knowledge about the thoughts of neo-classical economists.
- CO4:** Get familiar with Keynesian revolution and modern thought.
- CO5:** Understand the thought of Indian economists.

## **LABOUR ECONOMICS**

**Semester V**

**JSECEC2**

**5 Hrs**

**5 Credits**

### **Course Objective**

To study the concepts and issues relating to labour economics and industrial relations in the contemporary economic issues.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Gain knowledge on characteristic features of Indian labour.
- CO2:** Get familiar with collective bargaining power.
- CO3:** Know the causes and prevention methods of industrial disputes.
- CO4:** Exposure to welfare of labour in India.
- CO5:** Gain insight into National Commission on Labour.

## **JOURNALISM**

**Semester V**

**JSBECEC3**

**4 Hrs**

**4 Credits**

### **Course Objective**

To enable the students to have a thorough knowledge about the concepts of savings and investment, multiplier, acceleration, trade cycle and macroeconomic policy.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the nature, scope and importance of journalism.

**CO2:** Acquire knowledge on the origin and development of journalism.

**CO3:** Gain deep knowledge on the concept of press and management.

**CO4:** Get familiar with the function and responsibility of reporter.

**CO5:** Know about the importance of letters to editor, proof reading, and responsibilities of proof readers.

## **MACRO ECONOMICS – II**

**Semester VI**

**JSECK6**

**6 Hrs**

**5 Credits**

### **Course Objective**

To enable the students to have a thorough knowledge about the concepts of savings and investment, multiplier, acceleration, trade cycle and macroeconomic policy.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the relationship between savings and investment.

**CO2:** Acquire knowledge on the concept of multiplier.

**CO3:** Gain deep knowledge on the concept of acceleration.

**CO4:** Get familiar with IS-LM curve model.

**CO5:** Know about the macroeconomic policy and trade cycle.

## **ECONOMICS OF GROWTH AND DEVELOPMENT**

**Semester VI**

**JSECL6**

**6 Hrs**

**5 Credits**

### **Course Objective**

To develop the skills and equip the students to study the economics of growth and development in the developing countries like India.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the basic issues of economic development.

**CO2:** Familiar with the theories of economic development.

**CO3:** Understand the relation between capital formation and economic growth.

- CO4:** Familiar with the factors in development process.  
**CO5:** Understand human capital formation and manpower planning.

## **INDUSTRIAL ECONOMICS**

**Semester VI**  
**JSECM6**

**6 Hrs**  
**5 Credits**

### **Objective**

The objective of this paper intends to provide knowledge to the students on the basic issues as productivity, efficiency, capacity utilization and debate involved in industrial development.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the role of industrialization in economic growth.  
**CO2:** Exposure to the theories of industrial location.  
**CO3:** Familiar with industrial organization and ownership pattern.  
**CO4:** Aware of industrial labour.  
**CO5:** Understand the concept of industrial finance and policy.

## **ENTREPRENEURIAL DEVELOPMENT**

**Semester VI**  
**JSECN6**

**6 Hrs**  
**5 Credits**

### **Course Objective**

To enable the students to have a thorough knowledge about the concept of entrepreneurial development programme and women entrepreneurs.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the basic concept of entrepreneurship development.  
**CO2:** Ready to prepare project report.  
**CO3:** Understand the concept, objectives, phases and functions of EDP.  
**CO4:** Familiar with the institutions assisting entrepreneurship.  
**CO5:** Know about rural and women entrepreneurs and their problems.

## **ENVIRONMENTAL ECONOMICS**

**Semester VI**  
**JSECEC3**

**5 Hrs**  
**4 Credits**

### **Course Objective**

This paper provides the basic instruments to analyses environmental problems from the economic perspective. The students realize the optimal extraction of renewable and non-renewable resources.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Know the concepts and role of environmental economics.
- CO2:** Gain knowledge on environmental problems.
- CO3:** Understand the concept of market failures and externalities.
- CO4:** Get familiar with environmental protection and policy measures.
- CO5:** Deep knowledge on environmental education.

## **INDIAN ECONOMIC DEVELOPMENT**

**Semester V**  
**JSNMECEC2**

**4 Hrs**  
**4 Credits**

### **Course Objective**

This subject is highly useful for students to know contemporary Indian economic development policy issues and challenges.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the characteristics of Indian economy and the concept of national income.
- CO2:** Exposure to the concept of natural resources.
- CO3:** Know the role of agriculture in Indian economic.
- CO4:** Gain knowledge on the factors responsible for industrial sickness.
- CO5:** Understand the relationship between infrastructure and economic

## **M.A ECONOMICS**

### **ADVANCED ECONOMIC THEORY - I**

**Semester I**  
**JSPECA1**

**7 Hrs**  
**5 Credits**

### **Objective**

Advanced Economic Theory - I provides an in-depth knowledge on microeconomic, because it is the basis for applied economic research. Under this subject, student will study how the economic forces are operating in the economy.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Deep knowledge on demand analysis.
- CO2:** Familiar with production analysis.
- CO3:** Gain analytical skill on cost and revenue concepts.
- CO4:** Exposure to analysis of market structure.
- CO5:** Understand the concept of oligopoly.

## **MACRO ECONOMIC THEORY - I**

**Semester I**

**JSPECB1**

**7 Hrs**

**5 Credits**

### **Objective**

Macro Economics Theory - I founds the functional relationship and essential for the proper comprehension of the different policies and issues at aggregate level.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the basic concepts of macro economics.

**CO2:** Gain knowledge on circular flow and national income.

**CO3:** Exposure to theories of income and employment.

**CO4:** Familiar with consumption function.

**CO5:** Be aware of consumption theories.

## **ADVANCED STATISTICS - I**

**Semester I**

**JSPECC1**

**7 Hrs**

**5 Credits**

### **Objective**

This subject provides some knowledge in statistical methods to the students and the scholars involved in social science research activities.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with central tendency and dispersion.

**CO2:** Gain knowledge in correlation and regression analysis.

**CO3:** Exposure to measure changes in the standard of living as well as the price level.

**CO4:** Deep knowledge in time series.

**CO5:** Understand the basic concepts of probability.

## **INDIAN ECONOMY AND REFORMS**

**Semester I**

**JSPECEC1**

**7 Hrs**

**5 Credits**

### **Objective**

This subject is highly useful for students to know the contemporary Indian economic development policy issues, challenges and reforms.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Acquainted with the features of Indian economy.

**CO2:** Understand the performance of agricultural sector before and after reforms.

**CO3:** Understand the planning and new economic policy reform.

**CO4:** Understand the reforms underwent in Industrial Policy.

## **ADVANCED ECONOMIC THEORY - II**

**Semester II**

**JSPECD2**

**6 Hrs**

**5 Credits**

### **Objective**

Advanced Economic Theory - II provides an in-depth knowledge on microeconomic, because it is the basis for applied economic research. Under this subject, student will study how the economic forces are operating in the economy.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Deep knowledge on factor pricing under different market conditions.

**CO2:** Familiar with theories of distribution.

**CO3:** Gain analytical skill on general equilibrium theory.

**CO4:** Deep knowledge on welfare economics.

**CO5:** Understand the concept of market failure.

## **MACRO ECONOMIC THEORY - II**

**Semester II**

**JSPECE2**

**6 Hrs**

**5 Credits**

Macro Economic Theory – II founds the functional relationship and essential for the proper comprehension of the different policies and issues at aggregate level. It is more scientific and blends itself with same empirical economic knowledge.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Gain insight into investment function.

**CO2:** Exposure to demand and supply of money.

**CO3:** Understand the concept of multiplier and accelerator.

**CO4:** Familiar with trade cycle and IS-LM curve model.

**CO5:** Deep knowledge in monetary and fiscal policy.

## **ADVANCED STATISTICS - II**

**Semester II**

**JSPECF2**

**6 Hrs**

**5 Credits**

### **Objective**

This paper provides advance knowledge in statistical methods to the students and the scholars involved in social science research activities.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Exposure to probability distribution.



- CO2:** Familiarity with testing of hypothesis.  
**CO3:** Deep knowledge in Chi-square test and analysis of variance.  
**CO4:** Familiarity with statistical quality control.  
**CO5:** Understand the various sources of Indian statistics.

## **ENTREPRENEURIAL DEVELOPMENT**

**Semester II**  
**JSPECEC2**

**6 Hrs**  
**5 Credits**

### **Objective**

To improve student's life management, promote citizenship and provide resources for the future. To provide students with diverse opportunities for participation and improving students social and economic skills.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Understand the functions and types of entrepreneurs.  
**CO2:** Able to understand the essential of a project report and constraints.  
**CO3:** Gain knowledge on the concept of EDP.  
**CO4:** Know the institutions assisting entrepreneurship.  
**CO5:** Familiarity with concepts of rural women entrepreneurs.

## **COMPUTER APPLICATIONS IN ECONOMICS**

**Semester II**  
**JSPECED1**

**5 Hrs**  
**5 Credits**

### **Objective**

To make the students to know the basic concepts of computer, usage of internet and its applications in economic analysis which will be useful to the social science research scholars in general and economic research scholars in particular.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

- CO1:** Familiarity with history and components of computers.  
**CO2:** Gain knowledge on MS Word and PowerPoint.  
**CO3:** Understand the basic concepts of MS Access.  
**CO4:** Develop skill to analysis data using MS Excel and SPSS.  
**CO5:** Deep knowledge in World Wide Web.

## **MATHEMATICAL ECONOMICS**

**Semester III**

**JSPECG3**

**6 Hrs**

**5 Credits**

### **Objective**

The objective of this paper is to introduce the basic techniques of mathematics relating to economics and to get an insight into economic problems with the help of mathematical tools.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with the concept of differential calculus and integration.

**CO2:** Understand the concept of consumer behavior.

**CO3:** Aware of the theory of the firm.

**CO4:** Gain knowledge about market structure.

**CO5:** Become familiar in solving linear programming problems.

## **RESEARCH METHODOLOGY**

**Semester III**

**JSPECH3**

**6 Hrs**

**5 Credits**

### **Objective**

This paper would make the students to know the basic concepts and methods in research methodology. This paper helps the students to pursue further research such as M.Phil. and Ph.D. in economics.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with various concepts of research methodology.

**CO2:** Know about research problem and design.

**CO3:** Understand the sampling techniques and test of hypothesis

**CO4:** Be aware of collection and analysis of data.

**CO5:** Gain knowledge on report writing.

## **INDUSTRIAL ECONOMICS**

**Semester III**

**JSPECI3**

**6 Hrs**

**5 Credits**

### **Objective**

The objective of this paper intends to provide knowledge to the students on the basic issues as productivity, efficiency, capacity utilization and debate involved in industrial development.

**Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the role of industrialization in economic growth.

**CO2:** Exposure to the theories of industrial location.

**CO3:** Familiar with industrial organization and ownership pattern.

**CO4:** Aware of industrial labour.

**CO5:** Understand the concept of industrial finance and policy.

**INTERNATIONAL ECONOMICS**

**Semester III**

**JSPECJ3**

**6 Hrs**

**5 Credits**

**Objective**

This paper is mainly concerned with the theories of international trade. It provides some basic knowledge of international economics to the students in a rigorous and comprehensive manner.

**Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Familiar with various theories of international trade.

**CO2:** Familiar with trade policy and its analysis.

**CO3:** Have an elementary understanding of state trading and exchange control.

**CO4:** Understanding international monetary system and its importance

**CO5:** Gain knowledge on globalization and foreign aid.

**FISCAL ECONOMICS**

**Semester IV**

**JSPECK4**

**6 Hrs**

**5 Credits**

**Objective**

The learning objective of this paper is to impart to the students to get through understanding of the role and functions of the Government in a modern economy. To introduce to the students the nature and theories of public goods. To make the students aware of the recent trends in taxations and budgetary policy.

**Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Under the nature and scope of public finance.

**CO2:** Know the causes for the growth of public expenditure and sources of public revenue.

**CO3:** Deep knowledge on public debt and budget.

**CO4:** Exposure to fiscal and monetary policy.

**CO5:** Familiarity with principles of federal finance.

## **ECONOMICS OF DEVELOPMENT AND PLANNING**

**Semester IV**

**JSPECCL4**

**6 Hrs**

**5 Credits**

### **Objective**

The objective of this paper is to understand the relevance of economics in growth and development perspectives. This will enable the students to study functional growth models relevant to economic development.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Understand the difference between economic growth and development.

**CO2:** Gain knowledge on various theories of economic development.

**CO3:** Aware of capital formation and economic development.

**CO4:** Understand the regional development disparities and social justice.

**CO5:** Gain knowledge on economic planning.

## **ENVIRONMENTAL ECONOMICS**

**Semester IV**

**JSPECM4**

**6 Hrs**

**5 Credits**

### **Course Objective**

This paper provides the basic instruments to analyse environmental problems from the economic perspective. The students realize the optimal extraction of renewable and non-renewable resources.

### **Course Outcomes**

*On completion of this course, the students will be able to:*

**CO1:** Know the concepts and role of environmental economics.

**CO2:** Gain knowledge on environmental problems.

**CO3:** Understand the concept of market failures and externalities.

**CO4:** Get familiar with environmental protection and policy measures.

**CO5:** Deep knowledge on environmental education.

## **M.PHIL ECONOMICS**

### **Core Course I: RESEARCH METHODOLOGY AND STATISTICAL TECHNIQUES**

**Semester I**

**6 Hrs**

**4 Credits**

#### **Objective**

*To infuse basic knowledge on research methodology. To understand the research problems and identify the research design. To develop the skill of writing research report.*

#### **Course Outcomes**

*On completion of the course, the learners will be able to:*

**CO1:** Acquire basic knowledge on research methodology.

**CO2:** Develop research attitude.

**CO3:** Understand the basic concepts of research.

**CO4:** Attain the ability to identify the research problems.

**CO5:** Understand how to construct the research design.

**CO6:** Gain inference drawing skill.

**CO7:** Become a good research report writer

### **Core Course II: CONTEMPORARY ISSUES IN INDIAN DEVELOPMENT**

**Semester I**

**6 Hrs**

**4 Credits**

#### **Objective**

*To cater a comprehensive knowledge on the emerging issues in Indian Economy. To understand India's global linkage and to bring out the relevance of gender issues in India's development. To focus on social and environmental issues and to trace the recent economic changes. To learn about Human Development in India.*

#### **Course Outcomes:**

*On completion of the course, the learners will be able to:*

**CO1:** Acquire comprehensive knowledge on the emerging issues in Indian Economy.

**CO2:** Understand India's global linkage.

**CO3:** Bring out the relevance of gender issues in India's development.

**CO4:** Focus on social and environmental issues.

**CO5:** Trace the recent economic changes.

**CO6:** Understand Human Development in India.

**CO7:** Be aware of Globalization and its impact on Indian Economy.

**Core Course III: DEVELOPMENT ECONOMICS**  
**Semester I**

**6 Hrs**  
**4 Credits**

**Objective**

*Acquaint different parts of computer system and their functions. To understand the operations and use of computers and common accessories. To develop skills of ICT and apply them in teaching learning context and research. To appreciate the role of ICT in teaching, learning and research. Acquire the knowledge of communication skill with special reference to its elements, types, development and styles.*

**Course Outcomes**

*After completing the course, the students will be able to:*

- CO1:** Acquire basic knowledge on economic growth and development.
- CO2:** Able to understand social and Institutional aspects of development.
- CO3:** Understand the theories of development.
- CO4:** Knowledge about sectoral aspects of development.
- CO5:** Get familiar with trade and economic development.
- CO6:** Gain knowledge about WTO.
- CO7:** Knowledge about economic models.

**Elective Course I: TEACHING AND LEARNING SKILLS**  
**Semester I**

**6 Hrs**  
**4 Credits**

**Objective**

*Acquaint different parts of computer system and their functions. To understand the operations and use of computers and common accessories. To develop skills of ICT and apply them in teaching learning context and research. To appreciate the role of ICT in teaching, learning and research. Acquire the knowledge of communication skill with special reference to its elements, types, development and styles.*

**Course Outcomes**

*After completing the course, the students will be able to:*

- CO1:** Develop skills of ICT and apply them in teaching learning context and research.
- CO2:** Be able to use ICT for their professional development.
- CO3:** Leverage OERs for their teaching and research.
- CO4:** Appreciate the role of ICT in teaching, learning and research.
- CO5:** Develop communication skills with special reference to listening, speaking, reading and writing.
- CO6:** Learn how to use instructional technology effectively in a classroom.
- CO7:** Master the preparation and implementation of teaching techniques.

## **B.SC PHYSICS**

### **CC01 : – PROPERTIES OF MATTER AND SOUND**

**SUB.CODE:**

#### **JSPHA1**

#### **Course Objectives:**

**The main objectives of this course are to,**

1. to study the basic principles of gravitation.
2. to understand the elastic properties and modulus of the materials.
3. to learn the basic concepts of viscosity.
4. to gain knowledge about surface tension and Osmosis.
5. to analyze the properties of Sound and ultrasonics.

#### **Expected Course outcomes:**

**After completion of this course students will be able to**

1. analyze the principles behind the gravitational forces and its variation at different places.
2. explore the basic concepts of elastic properties of materials and importance of elasticity in beams.
3. the viscous properties of fluids provides knowledge in industrial product development.
4. explain the different molecular forces existing in liquids.
5. acquire the idea of applications of ultrasonic waves in diverse fields.

**SUB.CODE: JSPHB2P**

#### **Course Objectives:**

**The main objectives of this course are to**

1. develop the experimental skills in Mechanics and Properties of matter
2. gain knowledge about the experiments based on Electricity and Magnetism
3. motivate the students to apply the experimental techniques in Optics
4. develop the experimental techniques in Sound
5. motivate the students to apply the experimental techniques in Transmission of heat.

#### **Expected Course outcomes:**

**After completion of this course students will be able to,**

1. analyze the concepts of Viscosity, Surface tension, Young's modulus of different substances
2. realize principles and applications of spectrometer and other optical instruments
3. realize principles and applications of Potentiometer, Sonometer, Magnetometer
4. acquire the knowledge of the characteristics of a PN junction diode and Zener diode
5. realize principles and applications of Transmission of heat

### **CC03 : MECHANICS AND RELATIVITY**

**SUB.CODE: JSPHC2**

#### **Course Objectives:**

**The main objectives of this course are:**

1. To have a knowledge in the field of statics.
2. To improve the knowledge about impulsive force and impact of interacting bodies.
3. To learn the basics of moment of inertia and centre of mass.
4. To understand the concepts of hydrostatics and hydrodynamics.
5. To learn the basic principles of classical mechanics.

**Course outcomes:**

**After completion of this course students will be able to,**

- 1.know the concepts of gravity, friction and its applications.
- 2.apply the knowledge of impulse and collisions in day to day life.
- 3.find out the usage of rigid body dynamics in terms of moment of inertia, momentum and energy in several of types of bodies.
- 4.understand the concept of hydrostatics and hydrodynamics in day to day applications such as pumps and hydraulic press.
- 5.explore the understanding of mechanics and theory of relativity in various fields.

**CC04:THERMAL AND STATISTICAL PHYSICS****SUB.CODE: JSPHD3****Course Objectives:**

**The main objectives of this course are to,**

1. explain basic thermodynamic properties and units.
2. explain various types of transmission of heat and the measurement of various constants related to it tools for the arrangement of microscopic particles.
3. teaches first and second laws of thermodynamics, perfect gas law, properties of real gases, and the energy equation for closed and open systems.
- 4.know the concept of entropy and Maxwell's thermodynamic equations.
5. know the different forms of distribution of sub atomic particles in the system using statistical methods.

**Course Outcomes:**

**After successful completion of the course, the student is expected to**

- 1.become familiar with various thermodynamic process and work done in the process.
- 2.derive expressions and find experimental verifications for the laws studied.
3. have a clear understanding about the working of a carnot engine, and knowledge of calculating change in entropy for various process.
- 4 realize the importance of Thermo dynamical functions and applications of Maxwell's relations.
- 5.familiarize about statistical distribution and have basic Ideas about Maxwell Boltzman, Bose- Einstein and Fermi Dirac Statistics and their applications.

**CC05 : OPTICS AND SPECTROSCOPY****SUB.CODE: JSPHE4****Course Objectives:**

**The main objectives of this course are to,**

- 1.To familiarize the fundamental laws concerning aberrations.
- 2.provide basic concepts and applications of phenomena like interference and their related optical techniques.
- 3.give a hands-on experience to study diffraction of different optical phenomena by performing experiments.
- 4.To understand the phenomena of polarization.
- 5.To perceive the basic concept of spectroscopy.



**Course Outcomes:**

**Upon completion of this course, student must be able to**

- 1.distinguish the different types of aberrations.
- 2.discuss the nature of light, its propagation and interaction with matter.
- 3.explain fundamental limits in imaging and resolution of optical system due to diffraction.
- 4.explain the phenomena of light ,polarization and their applications.
- 5.become familiar with molecular spectroscopy and have gained basic ideas regarding UV,infrared and Raman Spectroscopy.

**CC06: PRACTICAL – II****SUB.CODE: JSPHF4P****Course Objectives:**

**The main objectives of this course are to:**

- 1.develop the experimental skills in Mechanics and Properties of matter
- 2.gain knowledge about the experiments based on Electricity and Magnetism
- 3.motivate the students to apply the experimental techniques in Spectrometer
- 4.develop the experimental techniques in Potentiometer and Magnetometer
- 5.motivate the students to apply the experimental techniques

**Expected Course outcomes:**

**After completion of this course students will be able to,**

- 1.analyze the concepts of Viscosity, Surface tension, Young's modulus of different substances
- 2.realize principles and applications of spectrometer and other optical instruments
- 3..realize principles and applications of Potentiometer, and Magnetometer
- 4.realize principles and applications of Full wave rectifier with filter
- 5.realize principles and applications of Transmission of heat

**CC07 : ELECTRICITY, MAGNETISM AND ELECTROMAGNETISM****SUB.CODE: JSPHG5****Course Objectives:**

**The main objectives of this course are to.**

- 1 understand the laws of electrostatics and their applications.
- 2.make the students familiar with the physical quantities of magnetism and the properties of magnetic materials.
- 3.acquire the skills to know about the current electricity mechanism
4. understand the basis of AC and DC Circuits and also about their sensitiveness.
5. understand the laws of eddy current principle based on the electromagnetic inductions

**Course Outcomes:**

**After completion of this course students will be able to,**

1. define and derive the laws of electrostatics.
- 2 .relate the properties of magnetic materials and intended applications.
3. expertise the skills to develop the magnetic effects of current.

4. know the derivatives of growth and decayed components of LCR series based on AC & DC Circuits
5. understand the concepts of electromagnetic induction and ideas about induced emf.

## **CC08: ATOMIC PHYSICS**

**SUB.CODE:**

### **JSPHH5**

#### **Course Objectives:**

**The main objectives of this course are to**

1. To learn the properties of positive rays and its determination.
2. To understand the concept of photo electric cells.
3. To learn the atom models.
4. To learn the impact of electric and magnetic field on spectra.
5. To understand the concept of origin of X-rays.

#### **Course Outcomes**

**After completion of this course students will be able to,**

1. know about the experimental determination of positive rays.
2. learned the experiments related to photo electricity.
3. know about the various atom models and coupling schemes.
4. understand the concept of Zeeman effect and Stark effect.
5. explain the phenomena of the origin of x-ray and its experimental verification.

## **CC09 : BASIC ELECTRONICS**

**SUB.CODE: JSPHI5**

#### **Course Objectives:**

**The main objectives of this course are to,**

1. To study the basics of semiconductors.
2. To study the components like transistor, FET, MOSFET and UJT.
3. To study the classification of amplifiers.
4. To empower students to understand the design and working of oscillators.
5. To develop the students in designing realistic circuits to perform specified operations using op-amp

#### **Course Outcomes:**

**After completion of this course students will be able to**

1. apply the basics of semiconductor and its applications in different areas.
2. acquire knowledge about transistor, FET and UJT and its application. Learn how to construct a
3. transistor amplifier and how its gain varies with frequency. Observe the effect of positive feedback
4. able to design working of different Oscillators using Transistor.
5. prepare the students for getting the knowledge about Operational Amplifier working as adder, subtractor, differentiators, integrator etc.,

## **CC10 : SOLID STATE PHYSICS**

**SUB.CODE: JSPHJ6**

### **Course Objectives:**

#### **The main objectives of this course are**

1. learn about the crystal structure and their packing parameters.
2. know about carrier concentration in metals and semiconductors.
3. gain the knowledge of magnetic and superconducting materials and their applications.
4. understand the dielectric material and their properties.
5. acquire the skill to fabricate new materials and nano phase materials.

### **Course Outcomes:**

#### **On the successful completion of the course Student will be able to;**

1. have a clear picture of crystal structures and a clear understanding about their packing parameters.
2. know the application of conducting and semiconducting materials.
3. expected to gain knowledge of superconductivity, its underlying principles and its applications in modern world.
4. update the knowledge of various types of dielectric materials and its applications.
- 5 design the structure of new materials and their applications of Nano phase materials

## **CC11 : DIGITAL ELECTRONICS & MICROPROCESSOR**

**SUB.CODE: JSPHK6**

### **Course Objectives:**

#### **The main objectives of this course are**

1. To acquire the basic knowledge of digital logic levels.
2. To learn the functions of an encoder and decoder.
3. To learn a sequential circuits such as Flip - Flop, Register, Counter.
4. To equip about the A/ D and D/A conversion and semiconductor memories.
5. Understand the basic concept of microprocessor, its architecture, addressing modes and its instruction set.

### **Course Outcomes:**

#### **On the successful completion of the course Student will be able to;**

1. understand the concepts of Binary codes.
2. understand the operation of basic digital electronic devices
3. have foundation in the techniques and designing of flipflops, counters and registers
4. apply the gained knowledge of semiconductor memories in their day-to-day life.
5. apply the functions of microprocessor for practical purposes.

## **CC12 : WAVE MECHANICS AND NUCLEAR PHYSICS**

**SUB.CODE: JSPHL6**

### **Course Objectives;**

#### **The main objectives of this course are**

1. understand the dual nature of light and matter.
2. acquire the knowledge of wave mechanics and its applications.
3. acquire the knowledge to understand about nucleus and nuclear structure.

- 4.familiarize with radiation detectors and particle accelerators
- 5.basic knowledge on fundamental particles.

### **CC13 : PRACTICAL III**

**SUB.CODE: JSPHM6P**

#### **Course Objectives:**

##### **The main objectives of this course are to:**

- 1.develop the experimental skills in working with different laboratory instruments.
- 2.gain knowledge about the experiments based on Electricity and Magnetism.
- 3.motivate the students to apply the experimental techniques in Spectrometer.
- 4.develop the experimental techniques in Potentiometer and Magnetometer.
- 5.understand how C Programming language improves with object oriented features

#### **Expected Course outcomes:**

##### **After completion of this course students will be able to,**

- 1.analyze the concepts of Viscosity, Surface tension, Young's modulus of different substances
- 2.realize principles and applications of spectrometer and other optical instruments
- 3.realize principles and applications of Potentiometer, and Magnetometer
- 4.analyze the programming concept for physics problem
- 5.write and execute programme in C and evaluate the solution for different Mathematical problem

### **CC14 : PRACTICAL IV**

**SUB.CODE: JSPHN6P**

#### **Course Objectives:**

##### **The main objectives of this course are to:**

- 1.develop the experimental skills in working with different laboratory instruments
- 2.gain knowledge about the experiments based on Electricity and Magnetism
- 3.motivate the students to apply the principle of electronics in their day-to-day life
- 4.develop transforms the electronics into experimental techniques
- 5.gain knowledge about different intel 8085 microprocessor

#### **Expected Course outcomes:**

##### **After completion of this course students will be able to,**

- 1.design different types of power supplies, Amplifiers and Oscillators
- 2.to analyze the characteristics of various electronic devices like BJT and FET
- 3.realize principles and applications of Universal gates.
- 4.acquire the knowledge of the characteristics of an operational amplifier
- 5.write and execute the manipulating 8085 microprocessor programme

## **ELECTIVE I(CCE-1): LASER PHYSICS & FIBRE OPTICS**

**SUB.CODE: JSPHEC1**

### **Course Objectives;**

#### **The main objectives of this course are to**

- 1.To learn and understand about the basic concepts of LASER and their types.
- 2.To learn and understand the different types of LASER and their experimental verification.
- 3.To know about the applications of LASER and the principle of holography.
- 4.To know the clear idea about the optical fiber communication system.
- 5.To understand the fundamental idea about the optical fiber and their postulates

### **Course Outcomes**

#### **On the successful completion of the course, the student will be able to,**

1. understand the concepts of LASER and to enhance their knowledge.
2. learn about the types of LASER and their applications.
3. learn and clear knowledge about the applications of LASER.
4. know about the concepts of theoretical part of optical fiber communication system.
5. learn and understand the postulates of optical fiber communication and their applications

## **ELECTIVE II (CCE-II): COMPUTATIONAL PHYSICS**

**SUB.CODE: JSPHEC2**

### **Course Objectives:**

#### **The main objectives of this course are to,**

1. To get basic knowledge on the fundamental concepts of C Program
2. To exploit the appropriate decision making statements for the given program
3. To inscribe C programs by applying the concepts of functions and strings
4. To implement user defined data types like unions in C program
5. To gain basic knowledge on pointers and file operation in C

### **Course Outcomes:**

#### **Upon completion of the course, students will have,**

1. basic knowledge on the fundamental concepts of C Program
2. an ability to exploit the appropriate decision making statements for the given program
3. an ability to inscribe C programs by applying the concepts of functions and strings
4. an ability to implement user defined data types like unions in C program
5. basic knowledge on pointers and file operation in C

## **ELECTIVE III (CCE-III)– MOBILE COMMUNICATION**

**SUB.CODE: JSPHEC3**

### **Course Objectives:**

#### **The main objectives of this course are to,**

1. To impart knowledge on modulation and Demodulation
2. To understand the concepts of television and antenna parameters
3. To acquire knowledge on radar communication
4. To understand the basic concepts of satellite communication system
5. To gain knowledge on GSM, GPRS, and VSAT

**Course Outcomes:**

**On the successful completion of the course, the student should be able to**

1. impart knowledge on modulation and Demodulation
2. understand the concepts of television and antenna parameters
3. acquire knowledge on radar communication
4. understand the basic concepts of satellite communication system
5. gain knowledge on GSM, GPRS, and VSAT

**PAPER I –ALLIED PHYSICS**

(For B.Sc Maths and Chemistry)

**SUB.CODE: JSPHYC4**

**Course Objectives:**

**The main objectives of this course are to,**

- 1.To learn and understand about the basic idea of dynamics and properties of matter and their theory.
- 2.To know about the fundamentals of sound and heat principles and their postulates.
- 3.To understand and clear idea of electrostatics and current electricity and their applications.
- 4.To learn about the postulates of atomic theory and nuclear atom model and their characteristics.
- 5.To know about the basic concepts of analog and digital electronics and their characterization.

**Course Outcomes:**

**On the successful completion of the course, the student will be able to,**

1. enhance their knowledge about properties of matter.
2. learn and understand the fundamentals of production of sound and heat postulates.
3. understand the clear idea of current electricity and it may improve their knowledge.
4. learn about the atomic and nuclear physics and may able to know their applications.
5. know the fundamentals of analog and digital electronics and their applications.

**ALLIED PHYSICS COURSE-II: PRACTICAL**

(For B.sc Mathematics and Chemistry)

**SUB.CODE: JSPHYD4P**

**Course Objectives:**

**The main objectives of this course are to**

- 1.develop the experimental skills in Mechanics and Properties of matter
- 2.gain knowledge about the experiments based on Electricity and Magnetism
- 3.motivate the students to apply the experimental techniques in Optics
- 4.develop the experimental techniques in Sound
- 5.motivate the students to apply the experimental techniques in Transmission

**Expected Course outcomes:**

**After completion of this course students will be able to,**

- 1.analyze the concepts of Viscosity, Surface tension, Young's modulus of different substances.
- 2.realize principles and applications of spectrometer and other optical instruments
- 3.realize principles and applications of Potentiometer, Sonometer, Magnetometer

4. acquire the knowledge of the characteristics of an PN junction diode and Zener diode
5. realize principles and applications of Transmission of heat

### **ALLIED PAPER 1: APPLIED PHYSICS**

(For B.Sc Computer Science)

**SUB.CODE:**

**JSPHCYC4**

#### **Course Objectives:**

**The main objectives of this course are to**

1. To impart knowledge on the concepts of electric and magnetic materials
2. To develop knowledge on the fundamental laws of electromagnetism
3. To explain the theory of semiconductors and diodes
4. To understand the basic lasing action and types of lasers
5. To study the applications of operational amplifier and optoelectronic devices

#### **Course Outcomes:**

**Upon completion of the course, the student will be able to**

1. impart knowledge on the concepts of electric and magnetic materials
2. develop knowledge on the fundamental laws of electromagnetism
3. explain the theory of semiconductors and diodes
4. understand the basic lasing action and types of lasers
5. study the applications of operational amplifier and optoelectronic devices

### **ALLIED PHYSICS COURSE –II : APPLIED PHYSICS PRACTICAL**

(For B.sc computer science)

**SUB.CODE: JSPHCYD4P**

#### **Course Objectives:**

**The main objectives of this course are to**

1. develop the experimental skills in Mechanics and Properties of matter
2. gain knowledge about the experiments based on Electricity and Magnetism
3. motivate the students to apply the experimental techniques in Optics
4. develop the experimental techniques in Sound
5. motivate the students to apply the experimental techniques in Transmission

#### **Expected Course outcomes:**

**After completion of this course students will be able to,**

1. analyze the concepts of Viscosity, Surface tension, Young's modulus of different substances
2. realize principles and applications of spectrometer and other optical instruments
3. realize principles and applications of Potentiometer, Sonometer, Magnetometer
4. acquire the knowledge of the characteristics of an PN junction diode and Zener diode
5. realize principles and applications of Transmission of heat

## **SOFT SKILL I(SBE-I) : ELECTRICAL APPLIANCES**

**SUB.CODE: JSBPHEC1**

### **Course Objectives:**

**The main objectives of this course are to,**

1. To know the fundamentals parts of electric iron, mixer and grinder
2. To create the ability to arrange the parts of fan and fluorescent lamp
3. To educate and train to know the parts of Air Conditioner and Refrigerator
4. To understand the concepts and types of washing machines
5. To impart skills in the House wiring

### **Course Outcomes:**

**On the successful completion of the course, the student should be able to**

1. know the fundamentals parts of electric iron, mixer and grinder
2. create the ability to arrange the parts of fan and fluorescent lamp
3. educate and train to know the parts of Air Conditioner and Refrigerator
4. understand the concepts and types of washing machines
5. impart skills in the House wiring

## **SOFT SKILL II(SBE-II): ELECTRIC GENERATORS AND ELECTRIC MOTORS**

**SUB.CODE: JSBPHEC2**

### **Course Objectives:**

**The main objectives of this course are to,**

1. To acquire knowledge on working principle of DC generators
2. To give the basic ideas on various types of generators and their significance
3. To understand the fundamental principles of poly phase system
4. To analyze the characteristics of DC motors
5. To develop knowledge on starters and their types

### **Course Outcomes:**

**On the successful completion of the course, the student should be able to,**

1. acquire knowledge on working principle of DC generators
2. give the basic ideas on various types of generators and their significance
3. understand the fundamental principles of poly phase system
4. analyze the characteristics of DC motors
5. develop knowledge on starters and their types

## **SOFT SKILL III(SBE-III)- MULTIMEDIA AND ANIMATION**

**SUB.CODE: JSBPHEC3**

### **Course Objectives:**

**The main objectives of this course are to,**

1. To learn the basic concepts of multimedia& projects, 3D softwares
2. To know the theoretical concepts of View ports, 2D & 3D Maps, UVW mapping
3. To apply the concepts of video posting, Audio editor, channel mixer, noise gate.
4. To gain knowledge about fundamentals of Motion panel, Visual effects presentation
5. To acquire a thorough knowledge of Poser, 2D animation convert to 3D animation.



**Course Outcomes:**

**At the end of the course, the student should be able to**

1. learn the basic concepts of Multimedia & projects, 3D softwares
2. know the theoretical concepts of materials 2D & 3D Maps, UVW mapping
3. apply the concepts of Video post and poster processing
4. gain knowledge about fundamentals of Rendering & Character studio
5. acquire a thorough knowledge of applications of poser & Story board or Script.

**VALUE EDUCATION****SUB.CODE: JSCVE****Course objectives:**

**The main objectives of this course are**

To know the fundamentals of meaning and concepts of value education

1. To enable them to develop an awareness human values and understanding ethical and social values.
2. To role of education school, family, college and basic NCERT approach to value Education
3. To make them aware and understand secularism, democracy, Research and resources in value education
4. To make the students to understand the present day crisis of need methods of teaching, Problems and documents of value education.

**Course outcomes:**

**On the successful completion of the course students will be able to**

1. learned the nature and need for value education.
2. Understand the basic ideas on awareness human values and understanding ethical and social values.
3. Gained knowledge about the strategies and approaches to value education
4. acquire skills in sources of values.
5. Enhance their knowledge about of teaching and documents on human value education

**NON MAJOR ELECTIVE COURSE: COMMUNICATION ELECTRONICS**

(For Mathematics and Chemistry Students)

**SUB.CODE: JSPHNMEC1****Course Objectives:**

1. To impart knowledge on the basic concepts of AM and FM
2. To enrich knowledge on color television
3. To analyze the performance of antenna parameters
4. To get thorough knowledge on optical fiber communication
5. To know the various types of telephone

**Course Outcomes:**

**At the end of the course, the student will be able to**

1. impart knowledge on the basic concepts of AM and FM
2. enrich knowledge on color television
3. analyze the performance of antenna parameters
4. get thorough knowledge on optical fiber communication
5. know the various types of telephone

## **M.SC PHYSICS**

### **CC01 : MATHEMATICAL PHYSICS**

#### **Course Objectives:**

**The main objectives of this course are,**

1. to understand the need of mathematics to gain knowledge vector analysis in physics.
2. to acquire knowledge about linear vector spaces, matrices and their application in physics
3. to enhance the physically relevant problem solving techniques skills using tensors.
4. to study the connection between differential equations and their contribution in the study of dynamics.
5. to distinguish between the dynamics obtained by ordinary differential equations and partial differential equations.

#### **Course Outcomes:**

**On the completion of this course the students will be able to,**

1. understand the contribution of mathematics for gaining knowledge of vector analysis in physics.
2. acquire knowledge about linear vector spaces and matrices and their application in physics.
3. enhance the physically relevant problem solving techniques skills using tensors.
4. establish the connection between differential equations and their contribution in the study of dynamics.
5. classify the differential equations and choose right method to solve problems.

### **CC02 : CLASSICAL DYNAMICS**

**SUB.CODE: JSPPHB1**

#### **Course Objectives:**

**The main objectives of this course are,**

1. To understand the Lagrangian formulation of mechanics.
2. To acquire knowledge about the dynamics many body problems.
3. To analysis of the classical scattering theory.
4. To study the dynamics associated with the rigid bodies including symmetric top.
5. To understand the Hamilton Jacobi theory and Poisson bracket formalism.

#### **Course Outcomes:**

**On successful completion the student will able to,**

1. understand the Lagrangian formulation of mechanics.
2. acquire knowledge about the dynamics many body problems.
3. analyze the classical scattering theory of many body systems in different coordinate systems.
4. know the dynamics associated with the rigid bodies including symmetric top.
5. reckon the Hamilton Jacobi theory and Poisson bracket formalism.

### **C03 : GENERAL PHYSICS PRACTICAL**

**SUB.CODE: JSPPHC2P**

#### **Course Objectives:**

**The main objectives of this course are**

- 1..to give hands on training to do advanced physics experiment.
2. to make the students understand the concepts behind various physical experiments such as polarizability of liquids, dispersive power of prism, refractive index of glass.
3. to motivate the students to apply the experimental techniques in young's modulus of material.
- 4.to give exposure to measure some of the physical parameters with maximum accuracy.
- 5.to motivate the students to apply the experimental techniques in Transmission of heat.

#### **Expected Course outcomes:**

**After Passing the course the students should be able to**

- 1.understand the concepts behind various physics experiments.
- 2.measure different physical parameters with maximum accuracy.
- 3.determine various physical constants through different physical experiments.
- 4.understand the practical knowledge of usage of various optical components in modern and devices and instruments.
- 5.establish practical knowledge and an extensive understanding of laser and non-linear optics.

### **CC04 : ELECTRONICS PRACTICAL**

**SUB.CODE: JSPPHD2P**

#### **Course Objectives:**

**The main objectives of this course are**

- 1..to give hands on training in the construction of simple electronics circuits.
2. to make the students understand the students understand practically the characteristics of transistors, amplifiers.
3. to motivate the students to apply the practically the characteristics of oscillators and filters.
- 4.to give exposure in understanding digital to analog conversion use of binary weighted and R-2R ladder.
5. to make the students understand the students understand practically the characteristics of frequency divider.

#### **Expected Course outcomes:**

**After Passing the course the students should be able to**

- 1.construct simple electronics circuits
- 2.understand the theoretical concepts by doing experiments
- 3.understand the characteristics of transistors, operational amplifiers, oscillators and filters.
- 4.understand the conceptual difference between analog and digital electronics.
- 5.apply Boolean algebra and the karnaugh map as tools in designing and to simplifying digital logic circuits.

## **EC01 : ELECTRONICS AND COMMUNICATION**

**SUB.CODE: JSPPEC1**

### **Course Objectives:**

#### **The main objectives of this course are**

- 1.To study the basic principles of certain electronic components which have application in the field of communication.
- 2.To understand the basic concepts of communication and optical communication system.
- 3.To gain knowledge about different antennas and waves used for communication.
- 4.To identify different types of modulation and multiplexing formats.
- 5.To enable the learners to acquire the fundamental knowledge on the colour television and various colour television displays.

### **Course outcomes:**

#### **At the end of course,the student should be able to**

- 1.have sufficient understanding on the basic principles of certain electronic components which have application in the field of communication.
- 2 Be familiar with the basic concepts of communication for optical communication system.
- 3.Gain of knowledge about different antennas and waves used for communication.
- 4.Differentiate between different types of modulation and multiplexing formats.
- 5.Acquire the fundamental knowledge on the colour television and various colour television displays.

## **CC05 : MATHEMATICAL PHYSICS - II**

**SUB.CODE: JSPPEC2**

### **Course Objectives:**

#### **The main objectives of this course are**

1. To understand the mathematical methods which are applied in physics
2. To develop knowledge in mathematical physics and its application.
- 3.To enable students to formulate, interpret and draw interfaces from mathematical solutions.
- 4 .To solving the problems that occur in various branches of physics discipline.
- 5.To enhance problems solving skills of group theory.

### **Course outcomes:**

#### **On the successful completion of the course,students will be able to:**

- 1.Apply green's functions and Integral equations to physical problems on Complex analysis
- 2.Solve problems of Fourier series and Fourier Transforms, Laplace transform and inverse transforms
- 3.Green's functions and Integral equations functions, properties various related .and few applications.
- 4..Analyze gamma and beta functions and their application
- 5.Acquire knowledge about group its theorem with character table.

## **CC06: QUANTUM MECHANICS**

**SUB.CODE: JSPPHF2**

### **Course objectives:**

#### **The main objectives of this course are**

- 1.To understand the dual nature of light and matter.
- 2.To gain knowledge on the application of mathematical operators to understand microscopic physics.
- 3.To solve problems of fundamental importance and obtain exact solutions.
- 4.To apply perturbation techniques for analytically unsolvable problems.
- 5.To differentiate between quantum theory of scattering from the classical counterpart and perceive the relativistic concepts on the wave mechanics.

### **Course outcomes**

#### **Upon completion of the course the student will able to,**

- 1.have adequate knowledge on the application of mathematical operators to understand microscopic physics
- 2.Ability to solve problems of fundamental importance and obtain exact solutions
- 3.Find approximate solutions by using perturbation techniques for analytically unsolvable problems
- 4.Able to differentiate between quantum theory of scattering from the classical counterpart
- 5.reckon the relativistic concepts on the wave mechanics

## **EC02: CRYSTAL GROWTH, THIN FILMS AND NANO PHYSICS**

**SUB.CODE: JSPPHEC2**

### **Course objectives:**

#### **The main objectives of this course are**

- 1.To understand the theoretical concepts involved in crystal growth, synthesizing new materials
2. To acquire knowledge about the synthesis of thin film using different techniques.
3. To understand the basic concept of nano science and techniques.
- 4.To gain the knowledge of different basic characterits techniques involved in nano materials.
5. To acquire knowledge of application nano materials in various fields..

### **Course outcomes:**

#### **After learning the course the students should be able to**

1. To have knowledge about the synthesis of crystal growth using basic concepts.
2. To noting learner about the various techniques of thin films and nano materials.
3. To have knowledge about how to characterize the nano materials using various methods.
- 4 .Can acquire the knowledge that where the nano materials are applied in various fields.
- 5..Can acquire the knowledge that where the carbon nano tubes.

## **EDC : NUMERICAL METHODS AND C ++ PROGRAMMING**

**SUB.CODE: JSPPHED1**

### **Course objectives:**

**The main objectives of this course are**

- 1.This advanced course on scientific computing using numerical problem will focus on
- 2.Facilitating comprehension of object-oriented programming through C and C++ programming languages for simulating scientific problems.
- 3.Understanding fundamentals of programming such as variables, conditional and iterative execution, methods, etc.
- 4.Enabling the handling of arrays and related operations for advanced problems and Improving scientific data plotting and analysis
- 5.Providing a working knowledge of practical numerical methods.

### **Course Outcome:**

**Upon successful completion of this course, the student will be able to:**

- 1..Apply fundamental programming concepts in numerical problem to solve substantial scientific problems
- 2..Create, implement, debug, and evaluate algorithms for solving scientific problems
- 3.Utilize the various features of the C and C++ libraries for advanced data analysis
- 4.Use high-performance tools to load, clean, transform, merge, and reshape data  
Create data visualizations with argument and math library function.
- 5.and use appropriate algorithmic approaches to solve numerical analyses problems

## **CC07 : STATISTICAL MECHANICS**

**SUB.CODE: JSPPHG3**

### **Course objectives:**

**The main objectives of this course are**

1. To acquire knowledge about law of thermodynamics.
2. To acquire knowledge about kinetic theory of gases.
3. To link thermodynamics to the micro descriptions used in classical statistics.
4. To link thermodynamics to the micro descriptions used in quantum statistics.
5. To acquire knowledge of about Einstein's & Debye's theory.

### **Course outcomes:**

**Upon successful completion of this course, the student will be able to:**

1. Student identifies the relationships of thermodynamic quantities.
2. Student uses some empirical equations of state to compute the final state of thermodynamical systems.
3. Student uses the partition function for calculations about ensembles.
4. Student uses Bose-Einstein and Fermi-Dirac statistics according spin of the particles.

## **CC08 : ELECTROMAGNETIC THEORY**

**SUB.CODE: JSPPHH3**

### **Course objective:**

#### **The main objectives of this course are**

- 1.To know the associated effects of stationary and moving charges.
- 2.To impart knowledge on the concept of magneto statics.
- 3.To impart knowledge on the concept of Faraday's laws, induced emf and Maxwell's equations.
- 4.To impart knowledge on the concept of electromagnetic waves.
5. objective is to introduce then about wave guides and their applications.

### **Course outcomes;**

#### **Upon successful completion of this course, the student will be able to:**

- 1.Understand the basic mathematical concepts related to electromagnetic vector fields.
2. Understand the concept related to faraday's law, induced emf and Maxwell's equations.
3. Apply Maxwell's equations to solution of problem relating to transmission lines and uniform plane wave propagation.
- 4.The have learnt about wave guides and transmission lines.
- 5.Understand propagation of waves through them.

## **CC09 : ATOMIC AND MOLECULAR PHYSICS**

**SUB.CODE: JSPPHI3**

### **Course objectives:**

#### **The main objectives of this course are**

- 1.To acquire knowledge about the basic concept of atomic and molecular physics of the system.
2. To describe the origin of ray and emission& absorption spectra.
3. To explain the microwave and IR Spectroscopy determining of molecules.
4. To study Raman spectroscopy,principle,instrumentation and their applications.
5. To impart knowledge about the lasers,masers in real world environment.

### **Course Outcomes:**

#### **Upon successful completion of this course, the student will be able to:**

1. Analyze different atomic structure and will be able to understand fine structure and hyper fine structure.
2. Explain the behavior of atoms in external electric and magnetic fields.
- 3..Explain rotational and IR Spectroscopy and apply the techniques of micro waves and IR Spectroscopy.
4. Apply the principle to Raman spectroscopy and its applications in various disciplines of science and technology.
- 5 .Design various types of lasers and masers system.

## **EC03 : MICROPROCESSOR AND MICROCONTROLLER**

**SUB.CODE: JSPPEC3**

### **Course objective:**

#### **The main objectives of this course are**

1. To know the internal organization ,addressing modes and instruction set of 8085 microprocessor
- 2.To know the various functional units of 8051 microcontroller interfacing of various peripheral devices
- 3.To know the various functional units of 8051 microcontroller interfacing memory.
- 4.To design the architecture of 8051 microcontroller.
5. To write the simple programs for manipulating the numbers using 8051 microcontroller

### **Course Out comes**

#### **Successful completion of this course ,student will be able to**

Understand the architecture of microprocessor and microcontroller  
Understand the programming model of microprocessors and microcontrollers  
Interface different external peripheral devices with microprocessors and microcontrollers  
Develop an assembly language programme for specified applications.  
Understand the simple programs for manipulated the numbers using 8051 microcontroller

## **CC10 : NONLINEAR DYNAMICS AND RELATIVITY**

**SUB.CODE: JSPPHJ4**

### **Course objectives:**

#### **The main objectives of this course are**

1. To understand the integrable and nonintegrable physical systems interesting behaviours in addition to the theory of relativity.
- 2...To understand nonlinear phenomena occur in autonomous and non autonomous systems.
3. Students will be able to make Bifurcation diagram of logistic map and henon map.
4. Introduction to nonlinear dynamics and chaos, recent application of chaos, computer and chaos, dynamical view of the world.
5. Basics of nonlinear sciences; Dynamics, types of dynamical systems and Nonlinearity.

### **Course outcomes:**

#### **Successful completion of this course ,student will be able to**

1. The students is expected to acquire basic knowledge of non linear differential equation.
2. The students is capable of finding Linear stability and invariant curves.
3. The students is can analyze Inverse Scattering transform method for KdV equation.
4. Understanding the basic of non linearity in physical systems.
5. Can acquire the knowledge that of relativity.

## **CC11: CONDENSED MATTER PHYSICS**

**SUB.CODE: JSPPHK4**

### **Course objectives:**

#### **The main objectives of this course are**

- 1.Enable the students to understand about the crystals structure interaction with X-ray.
- 2.Helps the students to understand the interaction with lattice vibrations.



- 3.To understand the thermal and electrical properties in the free electron model.
- 4.To study the basic concepts of thermal and electrical conductivity.
- 5.To study the superconductivity using BCS theory

**Course outcomes:**

**Successful completion of this course, student will be able to**

1. Understand the physics behind structural properties of the solids.
2. Understand and explain concentration of lattice in solids through different theories.
3. Tailor the properties of solids with proper understanding.
4. Able to elaborate thermal and electrical conductivity of metals, conductors and semiconductors.
5. Able to understand super conductors, types with their properties and applications.

**CC12 : NUCLEAR AND PARTICLE PHYSICS**

**SUB.CODE: JSPPHL4**

**Course objectives:**

**The main objectives of this course are**

1. To understand the classification of subatomic particles and their properties along with their influences.
2. To learn about the decay phenomenon and the process how the will occur.
3. Knowledge of various models compare to nucleus.
4. Nuclear models: Liquid drop and shell models.
5. To find out properties of strong and weak interactions.

**Course outcomes:**

**Successful completion of this course, student will be able to**

1. Significance of various decays tells the students about the nuclear process.
2. About the scattering process how it will occur.
3. It will about the spin parity concepts.
4. Use the liquid drop model and the law of radioactive decay to describe alpha- decay.
5. Determine nuclear properties such as binding energy, spin and parity in the frame work of the liquid drop model of the nucleus

**CC13 : COMPUTER , MICROPROCESSOR, MICROCONTROLLER PRACTICALS**

**SUB.CODE: JSPPHM4P**

**Course objective:**

**The main objectives of this course are**

1. to provide the student hands-on experiences in numerical rules adopted in C++ through laboratory experiments
2. to provide a working knowledge of practical numerical methods.
3. to a series of computer programs in C++ programming language on basic numerical methods will be provided.
4. Students will be asked to write programs involving various mathematical and physics problems
5. test them in the computer of numerical problem in the rules of microprosser and micro controller

**Course Outcome:****Successful completion of this course, student will be able to**

1. Students will acquire hands-on knowledge of programming practices in C++.
2. Students will learn some of the mathematical and physics problems of numerical integration and differentiation, numerical solution
3. Work independently and function as a team.
4. Develop communication skills (oral, microprocessor and micro controller program and written).
5. Apply a methodology for materials selection to scientific problems for locate or estimate materials data and information relevant to a successful design analysis.

**CC14: PROJECT WORK****SUB.CODE: JSPPHN4****Course Objectives:****The main objectives of this course are**

1. To develop abilities and skills that encourage research and development activities and are useful in everyday life and understanding and competencies required by practicing teachers for effective teaching-learning process at the secondary stage.
2. sustained in depth study on a specific topic to enable the students to critically examine the background literature relevant to their the background literature relevant to their specific research area.
3. an environment that encourages the students originally and creativity in their research and opportunity to develop skills in making and testing hypotheses in developing new theories and in planning and conducting experiments, developing practical research skills and learn new stage of the art techniques.
4. an environment in which to develop skills in written work, oral presentation and publishing the results of their research in scientific journals for future development and the students in acquiring basic knowledge in the specialized thrust areas such as condensed matter physics and nanoscience, theoretical physics, Crystal growth, Thin films in various fields of branch of physics.

**PROJECT DISSERTATION****Course Outcomes:****Successful completion of this course**

1. have some research experience with in a specific field of physics, through a supervised project (Master dissertation)
2. have a thorough knowledge of literature and a understanding of scientific methods and techniques applicable in their field of research.
3. be able to summarize major themes and current research problems in their area of specialization and be able to explain and identify open problems and areas needing development in their fields.
4. be able to demonstrate originality in the application of knowledge, together with a practical understanding of how research and enquiry are a used to create and interpret knowledge in their field.
5. be able to act independently in the planning and implementation of research and have carried out and presented an original work of research in their discipline.

## **B.SC CHEMISTRY**

### **CCMI – INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY-I**

#### **SUBJECT CODE: JSCHA1**

#### **COURSE OBJECTIVES:**

1. To learn about the nature of chemical bonding in chemical compounds.
2. To study on advanced theories of chemical bonding.
3. To learn about on organic compounds, their nomenclature, structure, fission and fission products.
4. To understand the structure, aromaticity and reactivity of aromatic compounds and their derivatives
5. To learn about the behavoiur of ideal and real gases and derivation of equation of state for ideal and real gases

#### **COURSE OUTCOME**

The student understood and acquired the knowledge on the following:

1. Chemical bonding among the constituent atoms in molecules.
  2. VSEPR Theory and structure of simple inorganic molecules.
  3. Advances in bonding theories and the atomic orbitals and molecular orbitals in chemical molecules.
- Nomenclature of organic compounds, structure, reaction intermediates, fission and fission products and their stability.
4. Electron displacements in organic molecules and their in impact in the physical properties of compounds and chemical reaction rates. Aromaticity, and substitution reactions in aryl and aralkyl compounds.
  5. Learnt the kinetic theory of gases and derived the equations of states and their application in viscosity and heat capacities. The behaviour of real gases under different Pressure and temperature conditions and derivation of gas laws and their application in gasses.

### **SBECI –Agricultural Chemistry**

#### **SUBJECT CODE: JSBCHC1**

#### **COURSE OBJECTIVES**

1. To study the soil properties, fertility
2. To understand the nature of different kind of fertilizers and their use to increase cropproduction
3. To learn about the organic manures for increased crop production
4. To learn about the types of pesticides and their use in agriculture
5. To study about the fungicides and herbicides and their use in pest cont

#### **COURSE OUTCOME:**

The student understood and acquired the knowledge on the following:

1. Properties of Soils
2. Types of Fertilizers
3. Organic manures and their classification
4. Types of pesticides and fungicides
5. Action of pesticides and fungicides

## **NMCI – ENVIRONMENTAL STUDIES**

### **SUBJECT CODE: JSCES**

#### **COURSE OBJECTIVES**

1. To know the environment and the need for public awareness.
2. To study the resources of forest, water, mineral, food and energy.
3. To understand the renewable and non-renewable resources and their management,
4. To learn about the ecosystems and food chains.
5. To understand the Bio-diversity and its conservation
6. To evaluate the environment pollution and social issues.

#### **COURSE OUTCOMESS:**

1. The students learnt about the environment, need for public awareness, and resources.
2. The students learnt about the concept of an ecosystem, structure of an ecosystem, energyflow in the ecosystem, food chains, food webs and ecological pyramids.
3. The students learnt about the bio-diversity, Biogeographical classification of India, values of biodiversity, consumptive use, productive use, social, ethical, aesthetic and option values.
4. The students learnt about the threats to biodiversity, habitats loss, poaching of wildlife, man-wildlife conflicts, endangered and endemic species of India, and conservation of biodiversity.
5. The students learnt about the Definition, causes, effects and control measures of air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal and nuclear pollution.
6. The students learnt about the solid waste management, causes, effects and control measures of urban and industrial wastes.
7. The students learnt about the social issues and problems of pollution
8. The students learnt about the Environmental Acts, explosion in family welfare program, environment and human health, human rights, value education, HIV/AIDS, women and child welfare.

## **CCM2 – INORGANIC QUALITATIVE ANALYSIS PRACTICAL**

### **SUBJECT CODE: JSCHB2P**

#### **COURSE OBJECTIVES**

- 1.To train the students in qualitative analysis of chemicals
- 2.To identify the anions by systematic experiments
- 3.To remove the interfering acid radicals and prepare the original solution
- 4.To analyze the cation by group analysis and confirmatory tests

#### **COURSE OUTCOME:**

The students acquired the practical knowledge and skills on the following:

1. Analysis of interfering and non-interfering acid radicals
2. Preparation of original solution
3. Step wise analysis of basic radicals
4. Confirmatory and spot tests

### **CCM3 – INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY – II**

**SUBJECT CODE: JSCHC2**

#### **COURSE OBJECTIVES**

1. To study about the chemistry of metals and non-metals.
2. To learn the reaction involves cations and anions.
3. To learn about the preparation and properties of alkanes and alkenes.
4. To understand the principle of organic synthesis.
5. To learn about the atomic structure and quantum theory.

#### **COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Chemistry of metals and non-metals.
2. Interfering ions and type of titrations.
3. Preparation methods of alkanes and alkene compounds.
4. Chemistry of insecticide and pesticide.
5. Atomic structure and particle principles.

### **CCM4 – INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY – III**

**SUBJECT CODE: JSCHD3**

#### **COURSE OBJECTIVES**

1. To study on comparative aspects of properties of p-block elements
2. To learn the chemistry of noble gas elements
3. To study the preparation and properties of alcohols and ethers
4. To understand the classifications and chemistry of nitro compounds.
5. To learn the principle and structure of solids.

#### **COURSE OUTCOME**

The student understood and acquired the knowledge on the following:

1. Comparative aspects of p-block elements
2. The chemistry of noble gas elements
3. Chemistry of alcohols, phenols and ethers
4. Physical and chemical properties of nitro compounds and amines
5. Characteristics aspects of solid state

### **CCM5 – Volumetric Analysis Practical**

**SUBJECT CODE: JSCHF4P**

#### **COURSE OBJECTIVES**

1. To train the students in quantitative analysis of chemicals.
2. To estimate the metal ions by permanganometric titrations
3. To estimate the metal ions by iodimetric titrations
4. To estimate the metal ions by complexometric titrations

#### **COURSE OUTCOME:**

1. The students are trained to estimate chemicals by volumetric analytical methods.
2. The students learned to estimate metal ions by permanganometric titrations.
3. The students learned to estimate metal ions by iodometric titrations.
4. The students learned to estimate metal ions by complexometric titrations.

## **SBEC2 – POLYMER CHEMISTRY**

**SUBJECT CODE: JSBCHC2**

### **COURSE OBJECTIVES**

1. To learn about the preparation of polymers.
2. To understand the properties of polymers.
3. To acquire knowledge on the co polymer & synthesis of adipic acid, vinyl acetate.
4. To learn about the preparation & uses of polyethylene.
5. To learn about the thermoplastics of textile fibres.

### **COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Preparation of polymers.
2. Properties of polymers.
3. Co polymers.
4. Polyethylene.
5. Thermoplastics & textile fibres.

## **NME I - WATER TREATMENT AND ANALYSIS**

**SUBJECT CODE: JSNMCHEC1**

### **COURSE OBJECTIVES**

1. To learn about the physical and chemical characteristics of water
2. To analyse the water sample by titration method using Clark's process
3. To understand the principle of electrodiagnosis and water treatment.
4. To learn about the techniques for the water analysis.
5. To understand the principle and adverse effect of the water pollution,

### **COURSE OUTCOME**

1. To learn about the physical and chemical characteristics of water
2. To analyse the water sample by titration method using Clark's process
3. To understand the principle of electrodiagnosis and water treatment.
4. To learn about the techniques for the water analysis.
5. To understand the principle and adverse effect of the water pollution,

## **CCM6 – INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY – IV**

**SUBJECT CODE: JSCHE4**

### **COURSE OBJECTIVES:**

1. To study about lanthanides and actinides.
2. To understand the redox reaction and non-aqueous solvents.
3. To learn about the types of photo chemical reaction and synthesis of dyes.
4. To understand the physical properties of liquids and adsorption.
5. To learn the basic concepts of thermodynamics and thermochemistry.

### **COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Complete knowledge of lanthanides and actinides.
2. More knowledge of redox reaction and non-aqueous solvents.

3. Clear knowledge of photochemical reaction and dyes.
4. Various types of liquid states and type of adsorption.
5. More knowledge of thermodynamics and thermochemistry.

### **CE1 – ANALYTICAL CHEMISTRY**

**SUBJECT CODE: JSCHC1**

#### **COURSE OBJECTIVES:**

1. To learn about the laboratory hygiene and safety.
2. To study on the error analysis and statistical methods.
3. To learn about the different types of quantitative analysis.
4. To study on the separation and purification methods.
5. To understand principle of the thermogravimetric analysis.

#### **COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Laboratory hygiene and safety.
2. Data analysis.
3. Quantitative analysis
4. Separation and purification techniques.
5. Thermo analytical methods.

### **CCM7 – INORGANIC CHEMISTRY – I**

**SUBJECT CODE: JSCHG5**

#### **COURSE OBJECTIVES:**

1. To understand the basic principle and theories of coordination compounds.
2. To learn about stability and applications of coordination compounds..
3. To study on classification and preparation of metal carbonyls
4. To understand the biological role of metals and their compounds
5. To learn about the principle of group theory in chemistry.

#### **COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. IUPAC nomenclature to complexes.
2. Checking of hardness of water.
3. Drawing a MO diagram of carbonyls.
4. Biological role of metals and their compounds.
5. Calculating in molecule point group.

### **CCM8 – ORGANIC CHEMISTRY – I**

**SUBJECT CODE: JSCHH5**

#### **COURSE OBJECTIVES**

1. To learn about types of isomerism exhibited by organic compounds
2. Understand the optical activity and conformational analysis of isomeric compounds
3. To study about the reactions of carbonyl compounds.
4. To learn about the preparation and properties of acid and acid derivatives.

5. To learn about the preparation and properties of heterocyclic compounds.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Arrangements of atoms in space and isomers.
2. Compound containing no asymmetric carbon atom and conformation analysis.
3. The reaction of carbonyl compounds.
4. The preparation and properties of acids and its derivatives.
5. The preparation and properties of heterocyclic compounds.

**CCM9 – PHYSICAL CHEMISTRY – I**

**SUBJECT CODE: JSCHH5**

**COURSE OBJECTIVES:**

1. To learn about the colligative properties and their applications
2. To study the characteristics of phase diagrams.
3. To study about the rate of the reactions and their determinations.
4. To understand the principle of the various photo physical processes.
5. To learn about the second law of thermodynamics.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Colligative properties.
2. Phase equilibria.
3. Rate of the reactions.
4. Photo physical processes.
5. Second law of thermodynamics.

**CCM10 – ORGANIC AND GRAVIMETRIC ANALYSIS PRACTICAL**

**SUBJECT CODE: JSCHM6P**

**COURSE OBJECTIVES:**

1. To prepare organic compounds using various reaction path ways.
2. To analyse the organic compounds to confirm the functional groups.
3. To determine the melting and boiling points.
4. To estimate the metal ions by gravimetric analysis

**COURSE OUTCOME:**

1. Understood the preparation methods of organic compounds
2. Analysed the parent organic compound by functional group analysis.
3. Learned the techniques to determine the melting and boiling of organic compounds.
4. Learned the estimation methods of inorganic compounds and metal ions present.

**CCM11 – PHYSICAL CHEMISTRY PRACTICAL**

**SUBJECT CODE: JSCHN6P**

**COURSE OBJECTIVES:**

1. To learn about the distribution law and its application to determine partition coefficient.



2. To study about the kinetics of ester hydrolysis
3. To determine the molecular weight of solute by Rast method
4. To understand the CST in phenol water system
5. To perform the titration by electrochemical techniques

**COURSE OUTCOME:**

1. Learned about the distribution law and its application to determine partition coefficient.
2. Understood the kinetics of ester hydrolysis
3. Learned to determine the molecular weight of solute by Rast method
4. Understood the CST in phenol water system
5. Learned the titration methods by electrochemical techniques

**SBEC3 – COMPUTER PROGRAMMING (soft skill I)**

**SUBJECT CODE: JSBCHC3**

**COURSE OBJECTIVES:**

1. To learn about the basic components of the computer.
2. To understand different languages used in computer programming
3. To write the computer programme using C language.
4. To learn the applications of C language
5. To understand the basics of the chem informatics.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Basic components of computer
2. Computer languages
3. Importance of C language
4. Applications of C language
5. Principle of Chem informatics

**NME 2 - CHEMISTRY IN EVERY DAY LIFE**

**SUBJECT CODE: JSNMCHEC2**

**COURSE OBJECTIVES:**

1. To instruct on the food safety and adulteration.
2. To acquire knowledge on house hold chemicals
3. To instruct on fibers resins and plastics.
4. To instruct on the manufacture of cement.
5. To understand the basics of fuels..

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Everyday life use food and safety measures.
2. Applications of cosmetics and detergents.
3. Plastics and resins preparation and uses.
4. Cement manufacture and applications.
5. Types of fuels and pros and cons..

**CCM12 – INORGANIC CHEMISTRY – II**  
**SUBJECT CODE: JSCHJ6**

**COURSE OBJECTIVES:**

1. To learn about the principle of nuclear chemistry and stability of the nucleus.
2. To learn about the applications of radioactive elements in various fields.
3. To learn about the methods of mineral refining.
4. To understand the principle and applications of nanoparticles..
5. To study the metallic bonding, crystal defects and types of conductors.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Calculation of (n/p) ratio
2. Awareness of atom bomb.
3. Gain of knowledge in reducing agent.
4. Drawing the structure of SMILY notation.
5. Manufacture of solar cell.

**CCM13 – ORGANIC CHEMISTRY – II**  
**SUBJECT CODE: JSCHK6**

**COURSE OBJECTIVES:**

1. To learn about the preparation, properties of phenol and its derivatives & dyes.
2. To study the chemistry of carbohydrates.
3. To learn about the chemistry of terpenes, steroids & proteins.
4. To understand various rearrangements reactions in organic chemistry
5. To learn about the principle and applications of UV, Visible, IR & NMR.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Preparation, properties of phenol and its derivative & dyes.
2. Chemistry of carbohydrates.
3. Chemistry of terpenes, steroids & proteins.
4. The types of rearrangements.
5. Various types of spectroscopic techniques such as UV, Visible, IR & NMR.

**CCM14 – PHYSICAL CHEMISTRY II**  
**SUBJECT CODE: JSCHL6**

**COURSE OBJECTIVES:**

1. To understand the principle and applications of conductometric titrations.
2. To learn about the electrochemical devices and electrode potentials.
3. To understand the principle and applications of fuel cells.
4. To learn about principles of spectroscopy and electronic transitions.
5. To study the chemistry of colloids and their applications.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Preparing buffer solution.
2. By using reference electrode.
3. Manufacturing storage cells.
4. Awareness of chromosphere.
5. Applications of colloids in medicine.

**CCE2 – MEDICINAL CHEMISTRY (Elective paper II)**

**SUBJECT CODE: JSCHEC2**

**COURSE OBJECTIVES:**

1. To study about indian medicinal plants and therapeutic uses.
2. To learn about the principle of drug administration.
3. To study about the mechanism of sulpha drugs.
4. To understand the different principles and chloramphenicol.
5. To learn about the various diseases and their prevention and control.

**COURSE OUTCOME:**

**The student understood and acquired the knowledge on the following:**

1. Uses of medicinal plants.
2. Advantages of LD50, ED50.
3. Synthesis of sulpha drugs.
4. Structure of penicilins.
5. Preparing to vitamin B12.

**CCE3 – INDUSTRIAL CHEMISTRY (Elective paper III)**

**SUBJECT CODE: JSCHEC3**

**COURSE OBJECTIVES:**

1. To learn about the cane sugar manufacture, recovery of sugar from molasses and know about points of vanishes.
2. To learn about the manufacture of cement and fertilizers.
3. To know the applications of petroleum & fuel gases.
4. To study about the electrochemical industries and their production
5. To understand the principle of chemical explosives and pollution of water.

**COURSE OUTCOME:**

1. Learned about the cane sugar manufacture, recovery of sugar from molasses and know about points of vanishes.
2. Learned about the manufacture of cement and fertilizers.
3. Studied the applications of petroleum & fuel gases.
4. Learned the electrochemical industries and their production
5. Understood the principle of chemical explosives and pollution of water.

**ALLIED CHEMISTRY****SUBJECT CODE: JSCHYC4****COURSE OBJECTIVES:**

1. To learn about the atomic orbitals and its hybridization.
2. To understand the electron displacement effects and aromatic electrophilic substitution reactions.
3. To study the heterocyclic compounds, nucleic acid and proteins.
4. To learn about the thermodynamics and phase rule.
5. To understand the principle of electrodes and conductometric titration.

**COURSE OUTCOME:**

1. Learned about the atomic orbitals and its hybridization.
2. Understood the electron displacement effects and aromatic electrophilic substitution reactions.
3. Studied the heterocyclic compounds, nucleic acid and proteins.
4. Learned about the thermodynamics and phase rule.
5. Understood the principle of electrodes and conductometric titration.

**ALLIED CHEMISTRY PRACTICALS****SUBJECT CODE: JSCHYD4P****COURSE OBJECTIVES:**

1. To learn the principle of strong acid base titrations
2. To perform the redox titrations to estimate ferrous ions
3. To estimate the potassium permanganate using standard potassium dichromate
4. To estimate the amount of copper using standard potassium dichromate
5. To analyse organic compound to confirm the functional groups.

**COURSE OUTCOME:**

1. Learned the principle of strong acid base titrations
2. Performed the redox titrations to estimate ferrous ions
3. Estimated the potassium permanganate using standard potassium dichromate
4. Estimated the amount of copper using standard potassium dichromate
5. Analysed organic compound to confirm the functional groups.

**M.SC CHEMISTRY****I – ORGANIC CHEMISTRY-I****SUBJECT CODE: JSPCHA1****COURSE OBJECTIVES:**

1. To understand the Nomenclature, Reaction intermediates and Electronic effect
2. To know the determination of reaction mechanism
3. To learn the aromaticity and chemistry of heterocyclic compounds
4. To learn stereochemistry of organic compounds
5. To study the optical isomerism, Conformation of Acyclic compounds and Dynamic stereochemistry

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The Nomenclature, Reaction intermediates and Electronic effect
2. The determination of reaction mechanism
3. The Hammett, Taft, Swain-Scott equations
4. The aromaticity and chemistry of heterocyclic compounds
5. The stereochemistry of organic compounds
6. The stereochemistry of optical isomerism, conformation of acyclic compounds and Dynamic stereochemistry
7. The stereo-specific and stereo-selective reactions
8. The configuration of cyclic and bicyclic system

**II – INORGANIC CHEMISTRY – I**

**SUBJECT CODE: JSPCHB1**

**COURSE OBJECTIVES:**

1. To understand the weak and strong fields
2. To study the labile and inert complexes
3. To learn the organometallic compounds
4. To understand the chemistry of metal carbonyls and clusters
5. To study the silicates, silicones and cage compounds

**COURSE OUTCOME:**

Student understood the knowledge about:

1. Crystal field splitting energy and molecular orbital theory
2. The stability and kinetics of coordination compounds
3. Electron transfer reactions, complementary and non complementary reactions
4. Photochemical reactions of coordination and organometallic compounds
5. Application of IR to identify the terminal and bridging carbonyls
6. Vibrational spectra of metal carbonyls for bonding and structural elucidation
7. Nomenclature of Boranes and carboranes
8. Structures of silicates, silicones and polyacids

**III – INORGANIC CHEMISTRY PRACTICAL-I**

**SUBJECT CODE: JSPCHE2P**

**COURSE OBJECTIVES:**

1. To learn the qualitative analysis by semimicro method
2. To know the usage of photoelectric colorimeter for quantitative estimation
3. To study the volumetric analysis by iodimetric titration method
4. To learn the gravimetric estimations by using sintered crucibles
5. To know about the complex preparations

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The qualitative analysis by semimicro method
2. The usage of photoelectric colorimeter for quantitative estimation
3. The volumetric analysis by iodimetric titration method
4. The gravimetric estimations by using sintered crucibles
5. The complex preparations

**IV – ORGANIC CHEMISTRY PRACTICAL-II****SUBJECT CODE: JSPCHF2P****COURSE OBJECTIVES:**

1. To study the separation of organic compounds and qualitative analysis
2. To know the synthesis of organic compounds by single stage
3. To learn the estimation of organic compounds by quantitative analysis
4. To study the synthesis of organic compounds by two stage

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The separation of organic compounds and qualitative analysis
  2. The synthesis of organic compounds by single stage
  3. The estimation of organic compounds by quantitative analysis
  4. The synthesis of organic compounds by two stage
- .....

**ECI –PHOTOCHEMISTRY AND PERICYCLIC REACTION (Elective I)****SUBJECT CODE: JSPCHEC1****COURSE OBJECTIVES:**

1. To study the photo-physical processes and experimental techniques in photochemistry
2. To learn the various types of photochemical reactions
3. To know the photochemistry of alkenes and carbonyl compounds
4. To study the molecular orbital symmetry, molecular orbital approaches
5. To learn the cyclo-addition and various photochemical rearrangements

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The photo-physical processes and experimental techniques in photochemistry
2. The various types of photochemical reactions
3. The photochemistry of alkenes and carbonyl compounds
4. The molecular orbital symmetry, molecular orbital approaches
5. The cyclo-addition and various photochemical rearrangements

## **V – PHYSICAL CHEMISTRY – I**

**SUBJECT CODE: JSPCHC2**

### **COURSE OBJECTIVES:**

1. To know the unimolecular and bimolecular processes
2. To learn thermal and photochemical reactions
3. To study the first, second and third law of thermodynamics and their applications
4. To understand the various partition functions
5. To know the thermodynamic quantities

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. Applications of ARRT Theory to unimolecular and bimolecular reactions
2. Linear free energy relations, Hammett and Taft equations
3. The first, second and third law of thermodynamics and their applications
4. Experimental determination of fugacity of real gases
5. Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein statistics
6. Thermodynamic functions in terms of the partition function
7. conservation of mass and energy
8. Irreversible thermodynamics and biological systems

## **VI– INORGANIC CHEMISTRY – II**

**SUBJECT CODE: JSPCHD2**

### **COURSE OBJECTIVES:**

1. To learn the concept of Acids and bases
2. To know the crystal structures and radius ratio
3. To study about the Nuclear chemistry
4. To learn the detail artificial radioactivity
5. To know the organometallics and various catalysts

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. The uses of pH scale
2. The structures drawing of the complexes
3. The awareness of power plants
4. The atomic energy resources
5. The preparation of man made isotopes
6. The applications of nuclear science in agriculture and biology
7. The carbon donors and carbonyls
8. The hydrogenation, hydroformylation and oxidation process

## **EC2- BASIC RESEARCH - GREEN CHEMISTRY AND NANO SCIENCE**

**SUBJECT CODE: JSPCHEC2**

### **COURSE OBJECTIVES:**

1. To know about the Techniques for characterization of nanoscale materials
2. To learn the synthesis and applications of nanomaterials
3. To study the principles and basics of green chemistry

4. To understand the various methods of green synthesis
5. To know the different literature resources

**COURSE OUTCOME:**

Student understood the knowledge about:

1. various types of Electron Microscopes
2. some important recent discoveries in nanoscience and nanotechnology
3. Chemical methods in preparation of nanomaterials
4. Structure, characterization, mechanism and formation of carbon nanotubes
5. Twelve principles of Green Chemistry with their explanations
6. Synthesis of different compounds by green method
7. Uses of Microwaves and Ultra sounds in green synthesis
8. Primary and secondary sources of Literature

**EDC – I –ELECTROCHEMICAL DEVICES AND CORROSION**

**SUBJECT CODE: JSPCHED1**

**COURSE OBJECTIVES:**

- 1.To study the fundamentals of energy conversion and applications
- 2.To learn about energy storage devices and its working principle
- 3.To know the basics of fuel cell and their fabrication
- 4.To study the principle of corrosion and its mitigation
- 5.To learn the impact of corrosion and its adverse effect

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The fundamentals of energy storage and its applications
2. The Development of energy storage devices
3. The principle of fuel cells and their usage in household applications
4. The principle of corrosion and its adverse effect on industries
5. Possible ways to control the corrosion
6. Environmental aspects of corrosion and their mitigation

**VII – ORGANIC CHEMISTRY – II**

**SUBJECT CODE: JSPCHG3**

**COURSE OBJECTIVES:**

1. To learn about the chemistry of alkaloids and steroids
2. To study about the terpenes and flavonoids
3. To learn the chemistry of carbohydrates and proteins
4. To study about the chemistry of nucleic acid and antibiotics
5. To study the retrosynthesis and disconnection approach

**COURSE OUTCOME:**

Student understood the knowledge about:

1. Structural elucidation and biosynthesis of alkaloids and steroids
2. Structural elucidation of terpenes
3. Nomenclature and general method of structure determination of flavonoids



4. Determination of the configuration of carbohydrates
5. Synthesis of peptides and different structures of proteins
6. Properties and biological implications of nucleic acids
7. Structural elucidation of antibiotics
8. The retrosynthesis and disconnection approach

## **VIII – PHYSICAL CHEMISTRY – II**

**SUBJECT CODE: JSPCHH3**

### **COURSE OBJECTIVES:**

1. To understand about the classical mechanics and wave mechanics
2. To study the approximation methods
3. To learn the fundamentals of Group theory
4. To know the application of Group theory to Spectroscopy
5. To study the Rotational, Vibrational, Raman and Electronic spectrum

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. Classical mechanics and applications of wave mechanics
2. The Variation and Perturbation method
3. LCAO, MO and VB treatments of the Hydrogen molecule
4. Symmetry elements, operations and point groups
5. Symmetry of Normal modes of vibrations
6. Applications for spectral selection rules of vibration spectra
7. Rotational and Vibrational spectrum
8. Raman spectrum and electronic spectrum

## **IX – INORGANIC CHEMISTRY – III**

**SUBJECT CODE: JSPCHI3**

### **COURSE OBJECTIVES:**

1. To study about the metal ions in biological system
2. To learn the transport and storage of oxygen
3. To know about the electron transfer in biological system
4. To study the Nitroegnase systems
5. To know the medicinal bioinorganic chemistry

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. Synthesis of macrocyclic ligands
2. Role of metal ions in biological processes
3. Structure and function of globins
4. Model synthetic complexes of iron, cobalt and copper
5. Structure and function of metalloprotiens
6. Electron transport mechanisms
7. Biological Nitrogen fixation
8. Metal ion toxicity and toxic effect of metals

**EC3 – PHYSICAL METHODS IN CHEMISTRY**  
**SUBJECT CODE: JSPCHEC3**

**COURSE OBJECTIVES:**

1. To learn about the Electronic spectra of metal complexes
2. To study about the IR and aman spectroscopy
3. To learn about the NMR spectroscopy
4. To understand the ESR and Mossbauer spectroscopy
5. To study about magnetic properties and Photoelectron Spectroscopy

**COURSE OUTCOME:**

Student understood the knowledge about:

1. Spectroscopic states and Term symbols
2. Orgel and Tanabe- sugano diagrams
3. Effect of coordination on ligand vibrations
4. Group theoretical representations
5. NMR spectrum of paramagnetic molecules
6. Hyperfine, Zerofine splitting and ESR transitions of metal complexes
7. Determination magnetic susceptibility and magnetic properties
8. X-ray, Neutron and Electron diffraction methods

**X-PHYSICAL CHEMISTRY PRACTICAL (Non Electrical)**

**SUBJECT CODE: JSPCHM4P**

**COURSE OBJECTIVES:**

1. To know about the molecular weight determination methods
2. To study the determination of distribution coefficient and equilibrium constant
3. To learn comparison of acids by kinetic studies
4. To understand about Conductometric titrations

**COURSE OUTCOME:**

Student understood the knowledge about:

1. The molecular weight determination methods
2. Determination of partition coefficients
3. Eutectic temperature and eutectic composition of a primary mixture
4. Determination of energy of activation and Arrhenius factor
5. The adsorption method
6. Determination of acid – base strength by conductometric titrations
7. Determination of strength of halides by conductometric precipitation titration
8. Determination of strength of KI solution by potentiometric redox titration

## **XI – ORGANIC CHEMISTRY – III**

**SUBJECT CODE: JSPCHJ4**

### **COURSE OBJECTIVES:**

1. To study about the aliphatic substitution reactions
2. To learn about the aromatic substitution reactions
3. To know the elimination reactions and reagents in organic synthesis
4. To study about the addition reactions
5. To learn about the oxidation and reduction reagents and molecular rearrangements

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. Aliphatic nucleophilic substitution reactions
2. Aliphatic electrophilic substitution reactions
3. Aromatic electrophilic substitution reactions
4. Aromatic nucleophilic substitution reactions
5. Elimination reactions and reagents in organic syntheses
6. Addition Reactions and Addition to carbonyl groups
7. Applications of oxidation and reduction reagents
8. Molecular Rearrangements

## **XII – PHYSICAL CHEMISTRY – III**

**SUBJECT CODE: JSPCHK4**

### **COURSE OBJECTIVES:**

1. To study about the activity of ions
2. To know about the electro-kinetic phenomena
3. To study about the electro-analytical methods
4. To study about thermal methods of analysis
5. To learn the computer applications in chemistry

### **COURSE OUTCOME:**

Student understood the knowledge about:

1. Transport of ions in solution
2. Nernst equation and its limitations
3. Theories of electrical double layer and theory of multiple layers
4. Primary and secondary batteries and energy storage system
5. Analytical applications of polarography
6. Electro-gravimetric analysis and its applications
7. Applications of Thermo-gravimetric method
8. C programming applications to simple chemistry problems

### **XIII – INDUSTRIAL CHEMISTRY**

**SUBJECT CODE: JSPCHL4**

#### **COURSE OBJECTIVES:**

1. To understand the manufacturing process of sugar and paints
2. To learn the technical aspects of cement manufacturing and its applications
3. To acquire knowledge about and petroleum products and refineries
4. To apply the electrochemistry knowledge in applications of electrical appliances
5. To understand the principle and applications of explosives, tanneries.

#### **COURSE OUTCOME:**

Student understood and acquires knowledge about:

1. Various methods of preparation of sugar and paints and varnishes
2. Principle of and manufacture of ceramics, glass and cements
3. Importance of petroleum refineries and separation various products
4. Application of electrochemical devices in industries and domestic purposes
5. Principle and applications of explosives and tanneries and water industries

### **M.PHIL CHEMISTRY**

#### **COURSE-I - RESEARCH METHODOLOGY**

**SUBJECT CODE: JSMPCH1**

#### **COURSE OBJECTIVES:**

- To learn the computer applications skill for teaching and research
- To understand the principles of research, literature survey and writing research paper and thesis writing
- To create the awareness on laboratory hygiene and safety
- To gain some knowledge about the statistical analysis of data which will be highly helpful for research
- To gain an idea about digital electronics and computer package

#### **COURSE OUTCOME**

<b>1</b>	The scholars will know the different routes to design a research problem
<b>2</b>	General terminology including various methods for the research shall be the outcome of the course.
<b>3</b>	To improve the numerical aptitude and computational knowledge in the basic collection and presentation of data.
<b>4</b>	The scholars will acquire knowledge of safe laboratory practices by handling laboratory glassware, equipment, and chemical reagents.
<b>5</b>	To know the applications of computer skill in chemical analysis

**COURSE-II – SOME ADVANCED TOPICS IN CHEMISTRY**  
**SUBJECT CODE: JSMPCH2**

**COURSE OBJECTIVES:**

- To appreciate the application of various analytical tools for the characterization of materials
- To study the theoretical concepts and applications of NMR, ESR and mass spectroscopy
- To learn the theories and importance of potentiometry and electroanalytical techniques
- To highlight the importance of fluorescence spectroscopy

Course Outcome	
On the successful completion of the course student will be able to:	
1	Different analytical tools for the characterization of materials can be very well understood by the scholars.
2	The scholars are able to predict the concepts and applications of NMR, ESR and mass spectroscopy.
3	The scholars will understand the importance of potentiometry and electroanalytical techniques.
4	The scholars will be able to articulate the importance of fluorescence spectroscopy
5	Structural analysis using Mass spectrometry and fluorescence spectroscopy

**COURSE –IV – TEACHING AND LEARNING SKILLS**  
**SUBJECT CODE: JSMPCH4**

**COURSE OBJECTIVES:**

- Acquaint different parts of computer system and their functions.
- Understand the operations and use of computers and common Accessories.
- Develop skills of ICT and apply them in teaching learning context and Research.
- Appreciate the role of ICT in teaching, learning and Research.
- Acquire the knowledge of communication skill with special reference to its elements, types, development and styles.
- Understand the terms communication Technology and Computer mediated teaching and develop multimedia/e-content in their respective subject.
- Understand the communication process through the web.
- Acquire the knowledge of Instructional Technology and its Applications.
- Develop different teaching skills for putting the content across to targeted audience.

<b>Course Outcome</b>	
<b>On the successful completion of the course student will be able to:</b>	
<b>1</b>	Develop skills of ICT and apply them in Teaching Learning context and Research. Be able to use ICT for their professional development.
<b>2</b>	Leverage OERs for their teaching and research. Appreciate the role of ICT in teaching, learning and Research. Develop communication skills with special reference to Listening, Speaking, Reading and Writing.
<b>3</b>	Learn how to use instructional technology effectively in a classroom. Master the preparation and implementation of teaching techniques. Develop adequate skills and competencies to organize seminar/conference/workshop/symposium/panel discussion.
<b>4</b>	Develop skills in e-learning and technology integration. Have the ability to utilize Academic resources in India for their teaching. Have the mastery over communication process through the web.
<b>5</b>	Develop different teaching skills for putting the content across to targeted audience. Have the ability to use technology for assessment in a classroom.

## **B.SC BOTANY**

### **CORE COURSE I – PLANT DIVERSITY I**

#### **(Algae, Fungi, Lichen and Plant Pathology)**

##### **Objectives:**

- To understand the salient features of Algae, Fungi and Lichens
- To study the structure and reproduction of various genera mentioned in the syllabus.
- To study the plant diseases.

##### **Course specific outcome:**

- They understood the general features distribution and mode of nutrition of fungi.
  - They understood about thallus organizations, vegetative and sexual reproduction.
  - They understood the importance lichen as an indicator of pollution.
- They understood the important plant diseases.

### **SKILL BASED COURSE I – MUSHROOM CULTURE**

##### **Objectives:**

- To facilitate self-employment.
- To know the nutrient value of mushroom.

##### **Course specific outcome:**

- Students knew about nutritional and medicinal value of edible mushrooms & Poisonous mushrooms
- They learnt about the Cultivation techniques of White button mushroom and Oyster mushroom
- They gained knowledge on the present status of mushroom industry in India.

### **CORE COURSE III – PLANT DIVERSITY II**

#### **(Bryophytes, Pteridophytes, Gymnosperms and Paleobotany )**

##### **Objectives:**

- To study the salient features and life cycle of plants belonging to Bryophytes, Pteridophytes and Gymnosperms.
- To study the fossilization process and formation of different types of fossils.

##### **Course specific outcome:**

- Students understood the general features distribution and economic importance of Bryophytes, Pteridophytes and Gymnosperms.
- They understood about external, internal and development of reproductive structures in Bryophytes, Pteridophytes and Gymnosperms.
- Students understood the fossils.

### **SKILL BASED COURSE II - BIOFERTILIZERS**

##### **Objectives:**

- To understand the biofertilizers and their importance in agriculture.
- To gain the knowledge on different organisms used as bio fertilizer.
- To know about the phosphate solubilizing bacteria.

**Course specific outcome:**

- Students understood the biofertilizers and their potential in agriculture compared with chemical fertilizers.
- Students gained the knowledge on the mode of action of organisms used as biofertilizers.
- They learnt about the phosphate solubilizing bacteria and their role in enrichment of soil fertility.

**CORE COURSE IV – CYTOLOGY, ANATOMY AND EMBRYOLOGY****Objectives:**

- To understand the microscope and microtechniques.
- To impart knowledge about monocot and dicot plants.
- To study the basics of embryo

**Course specific outcome:**

- Students understood meristematic tissue.
- They differentiated primary and secondary meristem and their function.
- They understood the structure and function of vascular cambium.
- They could the difference between dicot and monocot embryo.
- Students knew the importance of polyembryony.

**CORE COURSE VI – MICROBIOLOGY****Objectives:**

- To study the different types of micro-organisms and their activities.
- To understand uses in agriculture, industry and other environmental aspects.

**Course specific outcome:**

- Students learned about classification, characteristics, ultra structure of Prokaryotic and Eukaryotic microbes
- They understood the potential of microorganisms on different fields like food, industry and environment.
- Students studied different types of enzymes, acids and vaccines using micro-organisms
- They learnt the preservation processes.

**CORE COURSE VII - MORPHOLOGY, TAXONOMY & ECONOMIC BOTANY****Objectives:**

- To observe the variations among plants, especially angiosperms.
- To understand the way of description of a plant.
- To study the floral characters with an aim to identify the taxa authentically.



**Course specific outcome:**

- Students recognized morphological characters of vascular plants and they had the ability to identify the plant.
- They gained proficiency in the use of keys and identification manuals for identifying any unknown plants to species level.
- They gained the knowledge economic importance of Plants.

**CORE COURSE VIII - ECOLOGY, BIODIVERSITY, REMOTE SENSING****Objectives:**

- To understand the ecosystem and environmental factors.
- To study the biodiversity and ecosystem.
- To know about remote sensing and satellites.

**Course specific outcome:**

- Students understood the environment and environmental factors.
- Students obtained the knowledge on ecological succession and ecosystem.
- They understood the biodiversity and conservation.
- They gained knowledge about remote sensing.

**CORE COURSE IX – HORTICULTURE AND NURSERY TECHNOLOGY****Objectives:**

- To gain the knowledge about the gardening to enable them to be self reliant knowledge and self employment.
- To understand the methodology of nursery technology.

**Course specific outcome:**

- Students learned the importance of horticulture
- They knew about cultivation of plants
- They learned the propagation techniques
- Students learned about nursery techniques.

**ELECTIVE COURSE I – FORESTRY****Objectives:**

- To prepare students for careers in the forest services.
- To understand the conservation of forests.

**Course specific outcome:**

- Students learned the forest resources
- They gained knowledge on utilization of forest products.
- Students developed skills on conservation of forest.

### **SKILL BASED COURSE III - BIO-RESOURCES AND HUMAN WELFARE**

#### **Objectives:**

- To understand the micro organisms and their products
- To study the important medicinal plants and their bioactive compounds.

#### **Course specific outcome:**

- Students understood the micro organisms and the metabolites obtained from them.
- Students obtained the knowledge on various medicinal plants and their important bio active compounds.
- They studied the economic importance of woody plants.

### **CORE COURSE XII - GENETICS, PLANT BREEDING, AND EVOLUTION**

#### **Objectives:**

- To study the mendel's inheritance
- To understand the principle, the hereditary mechanism, the structure and functions of genetic materials.
- To study the principles of plant breeding
- To understand the theories of evolution

#### **Course specific outcome:**

- Students learnt about Mendelian principles
- They understood the functional units of gene
- They knew about linkage and crossing over, mutation theories.
- They learnt about the Evolution & Emergence of evolutionary thoughts.

### **CORE COURSE XIII – PLANT PHYSIOLOGY, BIOCHEMISTRY AND BIOPHYSICS**

#### **Objectives:**

- To study the recent aspects of various physiological processes in plants.
- To elucidate the interrelationships of the various pathways.
- To understand how physical principles are applied to biological system.

#### **Course specific outcome:**

- They understood the process of Photosynthesis, Respiration and Nitrogen metabolism
- They knew about the Plant Growth hormones.
- Students understood the structure and functions of primary metabolites.
- They learnt about bioenergetics and thermodynamics

## **CORE COURSE XIV – BIOTECHNOLOGY & TISSUE CULTURE**

### **Objectives:**

- To study the DNA and gene expression
- To learn about genetic engineering tools.
- To know about tissue culture techniques.
- To learn the application of biotechnology on various fields

### **Course specific outcome:**

- Students learnt the techniques in biotechnology and plant tissue culture.
- Students understood the genetic engineering tools
- They knew about the tissue culture techniques.
- They had knowledge on gene transfer.
- They learnt how to apply biotechnology and tissue culture in Agriculture, Medicine, and Industry.

## **ELECTIVE COURSE II - BIOSTATISTICS AND BIOINFORMATICS**

### **Objectives:**

- To learn the basics of statistics in Biological context.
- To apply the statistical principles in designing Biological experiments and solving biological problems.
- To know the various databases available.
- To learn the basics of computer.
- To learn sequence analysis.

### **Course specific outcome:**

- Students had the knowledge on the collection of data and interpretation.
- They got knowledge on the measures on Measures of central tendency.
- They knew about the bioinformatic concepts
- Students learnt the computer and internet.

## **ELECTIVE COURSE III – BIOINSTRUMENTATION**

### **Objectives:**

- To understand how physical principles are applied to biological system.
- To know the principles and applications of instruments.
- To learn the chromatography techniques

### **Course specific outcome:**

- The student was able to check calibration on all instruments studied.
- The student could identify the proper careful handling and precautions for all types of instruments.
- The student understood that instruments must be intelligently used to minimize errors
- The student identified various techniques and procedures needed with a particular instrument.
- The student made calculations necessary with certain instruments.

## **NON-MAJOR ELECTIVE I – MEDICAL BOTANY**

**(For Zoology students)**

### **Objectives:**

- To study the history and different systems of Indian medicines and the bioactive principles.
- To learn the conservation of herbal garden
- To know the ethnopharmacological importance of medicinal plants.
- To study the different methods of preparation of drugs

### **Course specific outcome:**

- Students knew about history and relevance of herbal drugs in Indian system of medicine.
- They learnt the chemistry of drugs from important medicinal plants
- They learned chemical constituents, adulterants, therapeutical and pharmaceutical uses of medicinal plants
- They understood the techniques for drug evaluation (Chemical, Physical and Biological), Phytochemical investigations, standardization and quality control of herbal drugs

## **ALLIED BOTANY**

### **Plant Diversity, Cytology, Genetics, Anatomy, Embryology, Ecology, Evolution, Physiology And Biotechnology**

### **Objectives:**

- To study the characteristic features of plants
- To understand the plant organization, their structure and function
- To understand the various physiological processes in plants
- To understand the external and internal metabolism of plants
- To study the cell and their organelles and cell division

### **Course specific outcome:**

- They understood the general features distribution and mode of nutrition of fungi.
- They understood about thallus organizations, vegetative and sexual reproduction.
- They could the difference between dicot and monocot embryo.
- Students knew the importance of polyembryony.
- Students recognized the major groups of vascular plants and their phylogenetic relationships.
- They gained proficiency in the use of keys and identification manuals for identifying any unknown plants to species level.
- Students knew about the mechanisms of mineral nutrition for plant growth.
- They understood the process of Photosynthesis, Respiration and Nitrogen metabolism
- They knew about the Plant Growth hormones.
- Students learnt about Mendelian principles

## **NON MAJOR ELECTIVE – For Zoology Students**

### **TITLE : Computer Application in Biological Science**

#### **Objectives:**

- To gain the basic knowledge of computer and operating systems and their application in biological sciences such as packages related to data analysis, data processing and generating graphs.
- To provide sufficient knowledge on the recent advances in Bioinformatics to the students.

#### **Course specific outcome:**

- Students gained the knowledge on the basics of computer parts and their applications
- They learnt e-resources and multimedia
- They acquired knowledge about gene banks
- Students studied how to use e-book, e-journal and digital library

## **M.SC BOTANY**

### **CORE COURSE I – PLANT DIVERSITY I**

#### **Objectives:**

- To understand the major groups of cryptogamic plants and their characteristics.
- To trace their interrelationships and study their evolutionary trends.

#### **Course specific outcome:**

- Students studied about Ultra - structure of Prokaryotic and Eukaryotic cells and their composition.
- They understood the general features distribution and mode of nutrition of fungi.
- They understood about thallus organizations, vegetative and sexual reproduction.
- They knew about general features and classification of bryophytes.
- They understood the importance lichen as a indicator of pollution.
- Students knew about evolution gametophyte and sporophyte.

### **CORE COURSE II – PLANT DIVERSITY II**

#### **(Pteridophytes, Gymnosperms, Paleobotany And Evolution)**

#### **Objectives:**

- To understand the major groups of lower vascular plants and their characteristics.
- To trace their interrelationships and study their evolutionary trends.

#### **Course specific outcome:**

- Students understood the general features distribution and economic importance of Pteridophytes, Gymnosperms.
- They understood about external, internal and development of reproductive structures in Pteridophytes and Gymnosperms.
- They gained the knowledge on the contribution of scientists.

- Students understood the evolutionary aspects of fossils found in Pteridophytes and Gymnosperms.
- Students gained the knowledge on fossil plants and theories of evolution.

### **ELECTIVE COURSE I – ECOLOGY, PHYTOGEOGRAPHY AND CONSERVATION BIOLOGY**

#### **Objectives:**

- To understand the basic concepts of ecosystem and biodiversity.
- To study the different types of environmental pollution
- To study the principle of sustainable utilization and management of bioresources.

#### **Course specific outcome:**

- Students understood the concepts of ecosystem.
- Students obtained the knowledge on causes and impacts of different types of environmental pollutions.
- They understood the phytogeography and conservation biology.

### **Core Course IV**

#### **PRACTICAL II – TAXONOMY, ANATOMY, EMBRYOLOGY, HORTICULTURE, NURSERY TECHNOLOGY, ETHANOBOTANY AND PHARMACOGNOSY**

### **CORE COURSE V – MORPHOLOGY, TAXONOMY AND PLANT PRODUCTS**

#### **Objectives:**

- To understand the relevance of molecular techniques in plant systematics.
- To study the classical taxonomy with reference to different parameters
- To study the plant products

#### **Course specific outcome:**

- Students recognized the major groups of vascular plants and their phylogenetic relationships.
- They gained proficiency in the use of keys and identification manuals for identifying any unknown plants to species level.
- They explored the uses of plants as medicine by traditional indigenous approaches.

### **CORE COURSE VI – ANATOMY, EMBRYOLOGY AND MICRO-TECHNIQUES**

#### **Objectives:**

- To understand the basic principles of differentiation of cell types.
- To know the process of growth and development embryo in plant.
- To learn the microtechniques

**Course specific outcome:**

- Students understood meristem theories.
- They learnt the properties of different woods.
- They understood the micro and sporogenesis.
- Students learnt various techniques to use in laboratory.
- Students knew staining techniques.

**ELECTIVE COURSE II – NURSERY TECHNOLOGY AND HORTICULTURE****Objectives:**

- To know the nursery techniques.
- To understand the methods of plant propagation
- To know the state of art in landscape designing and its aesthetic values.

**Course specific outcome:**

- Students learnt the importance of horticulture – career and occupational opportunities
- They learnt seed storage and seed treatment by physical and chemical methods
- They knew about hydroponics and its importance
- They learnt the techniques of gardening - Types, Methods & Tools
- They gain the knowledge on food preservation and food processing techniques.

**EXTRA DISCIPLINARY PAPER I – ETHNOMEDICINE AND PHARMACOGNOSY****Objectives:**

- To study the ethnomedicine used by the tribal in India.
- To study the methods of preparation of drugs.

**Course specific outcome:**

- Students learnt the medicines used by the tribal peoples in India.
- They learnt how to prepare medicines from plants by various methods
- They gained the knowledge on phytochemistry and pharmaceuticals.
- Students learnt about drug evaluation and biological testing of herbal drugs.

**CORE COURSE VII – PLANT MOLECULAR BIOLOGY****Objectives:**

- To understand the structure and functions of cell and their organelles.
- To study the cell signaling.

**Course specific outcome:**

- Students learnt about structural organization and function of intracellular organelles
- They gained knowledge on the organization of genes and chromosomes
- They studied about types, structure and functions of DNA and RNA.
- Students understood how cell communicate other cell and their environment.

## **CORE COURSE VIII – GENETICS AND PLANT BREEDING**

### **Objectives:**

- To understand the principle and the hereditary mechanisms.
- To study the mendelian genetics and inheritance
- To understand the methodology of plant breeding.

### **Course specific outcome:**

- Students learnt about Mendelian principles
- They knew about cytoplasmic inheritance.
- Students gained knowledge on different types of mutation and population genetics.
- Students knew in detail about breeding systems
- They learnt the techniques of Hybridization

## **CORE COURSE IX – MICROBIOLOGY**

### **Objectives:**

- To understand the basics of micro organisms with economic importance.
- To study the role of micro organisms in various fields.

### **Course specific outcome:**

- Students learnt about classification, characteristics, ultra structure of Prokaryotic and Eukaryotic microbes
- They learnt to apply micro organisms in various fields like food, soil, industry and agriculture.

## **ELECTIVE COURSE III – FORESTRY**

### **Objectives:**

- To prepare students for careers in the forest services and wood products industry.
- To understand different types of forests.

### **Course specific outcome:**

- Students learnt the forest types and their utilization
- They learnt about principles of forest management.
- They knew about forest conservation acts.

## **CORE COURSE XI– PLANT PHYSIOLOGY, BIOCHEMISTRY AND BIOPHYSICS**

### **Objectives:**

- To study the recent aspects of various physiological processes in plants.
- To understand the structure and characterization of different biochemicals.



**Course specific outcome:**

- Students knew about the mechanisms of mineral nutrition for plant growth.
- They understood the process of Photosynthesis, Respiration and Nitrogen metabolism
- They knew about the Plant Growth hormones.
- Students understood the structure and functions of carbohydrate, lipid, amino acid, protein and enzymes.

**CORE COURSE XII –BIOTECHNOLOGY****Objectives:**

- To understand the tools of genetic engineering.
- To know the art of recombining genes and traits.
- To develop the skills in handling genetic material.
- To learn gene transfer techniques.

**Course specific outcome:**

- Students learnt the techniques in biotechnology and plant tissue culture.
- They learnt how to transfer gene to plants.
- They had the ability to explain how to apply biotechnology in to Agriculture, Medicine and Industry.

**CORE COURSE XIII – RESEARCH METHODOLOGY BIOINFORMATICS AND BIOSTATISTICS****Objectives:**

- To identify the influencing factors of research parameters.
- To test the significance, validity and reliability of the research.

**Course specific outcome:**

- Students should have a good understanding of the scientific method and the rigors of scientific research
- They should be details oriented in their work, have good interpersonal skills and mental stamina to work long hours.
- Other essential skills are computer skills and to keep up with new findings in plant science.

## B.SC ZOOLOGY

### INVERTEBRATA

#### Objectives:

To study the functional aspects of different systems and their significance of invertebrates in a comparative basis.

#### Course Outcomes

CO1.	Describe the distinguishing characteristics of the major taxa Explain the basic aspects of classification details of invertebrates Understand biodiversity, habitat, adaptation organization and taxonomic status of invertebrates
CO2.	Recall certain morphological attributes and physiological processes that are distinct and significant to each Phyla
CO3.	Understand the systemic and functional morphology of various groups of invertebrates Explain the basic aspects of structural and functional details of Invertebrates
CO4.	To compare and understand the general and specific characteristics within each Phyla
CO5.	Interpret the affinities, evolutionary relationships and adaptation of the major taxa and to explain their economic importance with respect to Non-Chordates

**SEMESTER-I&II**

#### SOFT SKILL – I AQUACULTURE

**HOURS/Week 4**

**Credit 4**

#### Objectives:

The main aim is to give information about the culture of fishes and prawns. It gives an idea for the self- employment opportunities to the students. The role of different research organizations and funding agencies to promote aquaculture.

#### Course outcome

<b>CO1</b>	To study, explore various techniques used in fishery and polyculture practices. Understanding the scientific terms, concepts, facts, phenomenon & their interrelationship of fish.
<b>CO2</b>	To provide an overview of the application of biotechnological tools in fish breeding, feed, health, processing and other issues in fisheries. Application of knowledge in Fisheries for nutrition, agriculture & live stock
<b>CO3</b>	To gain in depth knowledge and field exposure on sustainable pisciculture practices
<b>CO4</b>	To impart understanding of the nutritional requirements of fish and knowledge on mass culture and enrichment of live food organisms
<b>CO5</b>	To comprehend the taxonomy, morphology, pathology and host- parasite relation of common parasites of aquatic organisms and to understand the significance of parasites in fish health

## **CHORDATA**

### **Objectives:**

To study the functional aspects of different systems and their significance of vertebrates in a comparative basis.

### **Course outcome**

CO1	Identify the general and specific characteristics of the different classes and the organization of the representative types.
CO2	Recognize and describe the major groups of chordates
CO3	Understand the diversity of Chordates and its outline systematic. Discuss their affinities and adaptations to different modes of life.
CO4	Understand the unique features, taxonomy and functional morphology of different classes of chordates
CO5	To infer the affinities, evolutionary relationships and adaptation of the major taxa and to explain their economic importance with respect to Chordates.

## **ALLIED ZOOLOGY**

### **ANIMAL DIVERSITY AND ECONOMIC ZOOLOGY**

#### **Objectives:**

Animal diversity which is an essential topic for biologists to know the distribution, taxonomy and phylogeny of animal. To enlighten the primitive forms of invertebrates and vertebrates distribution. To help our students to understand the status and mode of living of different forms of animals. To give awareness to our students in various cultural aspects of zoology which will help them to design their future

#### **Course Outcomes**

CO1	To understand General characters of Protozoa And Coelenterata
CO2	To analyze the characters of Aschelminthes and Annelida
CO3	To understand about Larval forms of Echinoderms
CO4	Analyze and understand about Identification of poisonous and non poisonous snakes.
CO5	Aware the entrepreneurial opportunities in Apiculture ,fish culture , Sericulture and Vermiculture

## **INVERTTEBRATA& CHORDATA**

### **MAJOR PRACTICAL -1**

#### **Course Outcomes**

CO1	Familiar with the virtual dissection
CO2	Familiar with the mounting techniques
CO3	Familiar with the anatomy of organism
CO4	Familiar with the characteristic features of animal representatives of various phylum of invertebrates
CO5	Familiar with the characteristic features of chordates

## ALLIED ZOOLOGY PRACTICAL

### Course outcome

CO1	Familiar with dissection technique
CO2	Familiar with virtual dissection technique
CO3	Familiar with mounting technique
CO4	Familiar with the organ system through spotters/slides
CO5	Familiar with the Dentition of animals

## CELL BIOLOGY

### Objectives:

This course facilitates to understand the structure at molecular level and function of prokaryote and eukaryote cell. To enlighten our students about the structures and functions of cellular organelles and types of cell division.

### Course outcome

CO1	To impart knowledge about the prokaryotic and eukaryotic cell, its complex organization, biosynthesis of cellular membranes and organelles and the unified role it plays for the ultimate sustainability of the organisms
CO2	Rigorous foundation in the principles of molecular and cellular biology give insights into the mechanisms involved in the synthesis and function of macromolecules such as DNA, RNA, and proteins
CO3	Ability to make connections between the molecular mechanisms, holistic understanding of biological organisation and function from the molecules to cells, tissues, organs and entire organism
CO4	Studying biochemistry and molecular cell biology trains the students to think logically, critically and quantitatively
CO5	Learn to interpret statements made in the scientific literature, as well as in non-science areas, based on evidence, not anecdotes

## NON MAJOR ELECTIVE – FOOD PRESERVATION

### (For Zoology Student)

#### Objectives:

To study the importance of micronutrients , macronutrients ,vitamins & minerals and other components in food .To impart basic knowledge of various food processing and preservation technologies. such as Cold Preservation and freezers, Dehydration ,Irradiation, Food Packaging, Thermal Processing.

### Course Outcomes

CO1	Acquire knowledge about the basic food preservation principles, and methods used to preserve food.
CO2	Understand the interlink between living and nonliving resources for food preservation
CO3	To analyze the impact of these preservative principles to preserve different types of foods.such as pulses, nuts and oil seeds
CO4	To understand the principles behind the various methods of food preservation using sugar syrups.

<b>CO5</b>	Analyze the process of canning and bottling ,storage and their management
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## **ECOLOGY**

### **Objectives:**

The main aim of this paper is to give information about the environment of biotic and abiotic factors, bio-geo chemical cycles, Habitat, population ecology, pollution and their control measures. The toxicant related with environment, the toxic effects in different fields and to find out the environmental pollutants.

### **Course Outcomes**

<b>COI</b>	Acquire knowledge about the ecological studies and their significance
<b>CO2</b>	Understand the interlink between living and nonliving resources for an ecosystem management
<b>CO3</b>	Analyze on Community and Habitat ecology at different geographical regions to enhance species specific management
<b>CO4</b>	Understand about Community and Ecological succession.
<b>CO5</b>	Analyze the ecological significance of Wild life sanctuaries and National parks and their management

## **SOFT SKILL-II-POULTRY SCIENCE**

### **Objectives:**

The main aim is to give information about the poultry and its importance. It gives an idea for the self- employment opportunities to the students. The role of different research organizations and funding agencies to promote poultry farming.

### **Course Outcomes**

<b>COI</b>	Get knowledge about the importance of poultry farming
<b>CO2</b>	Understand the types of poultry breeding
<b>CO3</b>	Apply the knowledge in types of incubators for poultry breeding
<b>CO4</b>	Evaluate the importance of poultry Disease and its management
<b>CO5</b>	Evaluate the Economics of poultry marketing

## **BIOPHYSICS, BIO CHEMISTRY AND BIO STATISTICS**

### **Objectives:**

This paper gives information about the biochemical and biophysical aspects related to living organisms. The life supporting molecules, their metabolism, biological oxidation and its relevance. Biophysical aspects and their properties. Various statistical analysis of biological parameters.

### Course Outcome

C O1.	Develop a fundamental understanding of basic concepts of biophysics and bioinformatics
CO2.	Develop a thorough grounding in fundamental analytical approaches for quantitative study of living systems and life processes. Shall know how to organize, manage, and present data. Describe the contents and properties of the most important bioinformatics databases, perform text- and sequence-based searches
CO3.	Application of physics to the study of biological molecules, living systems and life processes Carrying out exercises or small projects that incorporate data presentation.
CO4.	Obtain and analyse information and data relating to specific genes using a number of specific databases, bioinformatics principles and tools
CO5.	To educate the interdisciplinary nature of advances in biophysics, bioinformatics and computational biology

### DEVELOPMENTAL BIOLOGY

#### Objectives:

This course provides the process of early embryonic development and review the current development in the field of embryology. The formation of embryo and embryological disorders and treatment methodology. Precaution and health care during pregnancy and gestation.

#### Course Outcomes

COI	Study the laws and theories of development and gametogenesis.
CO2	Understand the process and different methods of fertilization.
CO3	Apply the knowledge on various developmental stages of animals.
CO4	Analyze the importance of Metamorphosis and Regeneration and Hormonal control of metamorphosis.
CO5	Analyze the importance and knowledge on embryonic nutrition.

### GENETICS

#### Objectives:

To under the functional concepts of genetics, human related genetic problems, inborn errors and genetic counseling. To acquire knowledge on the applied branches of genetics.

#### Course Outcomes

CO1	Understand the core principles of genetics, the historical background, genetic crosses, basic laws governing the pattern of qualitative characters, linkage and crossing over.
CO2	Apply knowledge about transcription, translation and the genetic code to understand the flow of genetic information from DNA to proteins

<b>CO3</b>	Understanding the applications of genetics for the welfare of health and treatment of disease, and the impact of selective advantage and natural selection on human genetic disorders.
<b>CO4</b>	To understand the evolutionary events those has occurred throughout Earth's geological history starting with the hypotheses on the origin of life and identify the key events in human evolution..
<b>CO5</b>	Analyze the processes in population genetics and describe how they affect the genetic diversity within a species

### **MAJOR ELECTIVE – I: BIOTECHNOLOGY**

#### **Objectives:**

This paper deals with the applied aspects of biotechnology in medical, agricultural, industrial, microbial and environmental fields. The uses of the recombinant techniques and its application for the betterment of mankind.

#### **Course out come**

<b>CO1</b>	To impart comprehensive understanding of the principles and practices of biotechnology.
<b>CO2</b>	Understanding the principles and practices of biotechnology give insights into the DNA Technology, Technique of genetic engineering, DNA Finger printing, Methods of DNA profiling and animal tissue culture.
<b>CO3</b>	Application of genetic engineering in prevention and diagnosis of diseases and discuss the different applications of biotechnology
<b>CO4</b>	Understanding the application of genetic engineering, DNA Finger printing, DNA profiling and animal tissue culture in Life Sciences Research trains the students to think logically.
<b>CO5</b>	Interpretation will empower students to think and solve problems in the field of biotechnology.

### **SOFT SKILL – III APICULTURE AND SERICULTURE**

#### **Objectives:**

The main aim is to provide information about the culture of silkworm and honey bees. It gives an idea for the self-employment opportunities to the students and idea about the role of different research organizations and funding agencies to promote sericulture and apiculture.

#### **Course out come**

<b>CO 1</b>	Comprehend the structure, life cycle and various species of silkworm
<b>CO 2</b>	Understand the cultivation, harvest and preservation of mulberry leaves
<b>CO 3</b>	Analyze the genetics in the development of new strains

<b>CO 4</b>	Understand and analyze the different pests infecting silkworm and their control
<b>CO 5</b>	Analyze and Understand the silkworm rearing and silk thread reeling in developing silk farm

### **MAJOR PRACTICAL – III** **GENITICS, DEVELOPMENTAL BIOLOGY, BIOPHYSICS, BIOCHEMISTRY** **AND BIOSTATISTICS**

#### **Course Outcomes**

CO1	Familiar with Enumeration of Blood Group and Rh Factors.
CO2	Familiar with various developmental stages of Frog
CO3	Familiar with various developmental stages chick of embryo
CO4	Familiar with colorimetric technique -handling
CO5	Familiar with data representation techniques in Biostatistics

### **MAJOR PRACTICAL –IV** **ANIMAL PHYSIOLOGY, MICRO BIOLOGY AND EVOLUTION**

#### **Course Outcomes**

<b>CO1</b>	Familiar with Titration And Biochemical Techniques
<b>CO2</b>	Familiar with Enumeration of cells by Haemocytometer
<b>CO3</b>	Familiar with Preparation of culture media and methods of sterilisation
<b>CO4</b>	Familiar with staining and Serial dilution techniques
<b>CO5</b>	Familiar with fossils, mimicry and evolutionary significance of animals

### **PUBLIC HEALTH AND HYGIENE**

Objectives:

To give the students awareness about public health aspects and the importance and necessity of hygiene practices for healthy life.

#### **Course Outcomes**

CO1	Familiar with Scope of Health and hygiene
CO2	Familiar with Environment and Health Management
CO3	Familiar with Communicable Disease
CO4	Familiar with Non communicable Diseases
CO5	Familiar with Environmental health hazards and Mental Health



## **ANIMAL PHYSIOLOGY**

### **Objectives:**

Animal Physiology helps the students in understanding how the body functions adapts with respect to its external and internal environment, related to nervous integration, sensation, metabolism and reproduction.

### **Course Outcomes**

<b>CO1</b>	To understand the basic organization of organisms and subsequent development to an organ system.
<b>CO2</b>	To analyze the physiological processes that regulates body functions and the regulation of an organ system from the molecular all the way to the whole animal level.
<b>CO3</b>	Recognize the complimentary relationship of structure and function and describe the interactions between different organ systems to maintain homeostasis
<b>CO4</b>	Able to explain the role of the endocrine glands in maintaining homeostatic mechanisms utilized by each body system in response to internal and external environmental changes.
<b>CO5</b>	To compare the impact and changes of different and to apply knowledge of a physiological mechanism for further understanding of the cellular and molecular mechanisms of action in health and disease.

## **EVOLUTION**

### **Objectives:**

It provides basic information of phylogenies and evolution and to study the geological time scale and evolution of higher organisms from lower.

### **Course Outcomes:**

<b>CO1</b>	Understand the theories and concepts of evolution
<b>CO2</b>	Explain the process of evolution in animals
<b>CO3</b>	Compare and understand the evolution of social life in animals
<b>CO4</b>	Analyze the patterns of evolutionary changes in animals and the population dynamics, speciation and types of evolution
<b>CO5</b>	Interpret the ecological interaction, adaptation of animals and the Evolutionary process involved in: Micro and Macro evolution and Organic evolution of man

## **IMMUNOLOGY**

### **Objectives:**

The main aim of this paper is to obtain knowledge about immune systems, cells of immunity and its role in protection of our body .Antigen, antibody concepts, hypersensitivity, MHC and complement pathways. Different immunological techniques used in the clinical testing.

### **Course Outcomes**

<b>CO1</b>	The mechanisms and differences between primary and secondary responses and their relevance to immunizations
<b>CO2</b>	Comprehensive and practical understanding of basic immunological principles and techniques involved in research/clinical/applied science
<b>CO3</b>	Identify the role of antigen presenting cells, lymphocytes, and phagocytic cells in immune responses
<b>CO4</b>	Awareness about Role of immunology in protection against disease and autoimmune disorders
<b>CO5</b>	Analyze the underlying principles of immunology and its application in biological systems.

## **SOFT SKILL – II VERMICULTURE:**

### **Objectives:**

The paper has been designed to make the students to gain knowledge about various cultural aspects of earthworm and the profitable production of vermicompost

### **Course Outcomes**

<b>CO1</b>	Get knowledge on the importance of earthworms.
<b>CO2</b>	Understand the Vermicomposting method and Vermicomposting requirements, in small and large scale production
<b>CO3</b>	Analyze the significance of earthworms in sustainable agriculture.
<b>CO4</b>	Apply knowledge on entrepreneurship development of Vermiproducts.
<b>CO5</b>	Analyze problems of vermicomposting and Evaluate Cost benefit analysis

## **MICRO BIOLOGY**

### **Objectives:**

These papers instruct the students the History and Scope of microbiology, Microbial Technology, Microorganisms and Environment, food microbiology, microbial diseases and treatment.

### **Course Outcome**

<b>CO 1</b>	Classify the microbes and understand the structure and characteristic features of bacteria and other microbes
<b>CO 2</b>	understand and analyze the growth, factors affecting growth, growth characteristics and requirements of bacteria and Identification of microbes
<b>CO 3</b>	understand and apply the physical and chemical control measure, explains mode of action of antibiotics and lists the microbial diseases in farm animals and humans
<b>CO 4</b>	understand and apply role of microbes in food and industries
<b>CO 5</b>	understand and apply the beneficial role of microbes in biotechnology

## **B.SC COMPUTER SCIENCE**

**Subject Code: JSCSA1**

### **CCM1 - INTRODUCTION TO INFORMATION TECHNOLOGY AND WEB DESIGN**

**Objectives:**

- Able to explain the fundamentals of Hardware and Software
- Able to explain the various tags of HTML

**Outcomes:**

CO1: Able to get exposure in basis of Computers

CO2: To learn about computer software.

CO3: Differentiate between different Web Extensions and Web Services.

CO4: Able to Design the Web Pages using HTML

CO5: Able to design Web Page Using Tables.

**Subject Code: JSCSB1P**

### **CCM2P – WEB DESIGN LAB**

**Outcomes:**

CO1: Able to design the webpages using HTML

CO2: Differentiate between different Web Extensions and Web Services.

CO3: Able to Design the Web Pages using HTML

CO4: Able to Design the Web Pages using HTML Tables.

**Subject Code: JSBCSEC1**

### **SBEC1 - MULTIMEDIA SYSTEMS**

**OBJECTIVES**

- To impart basic knowledge of multimedia
- To Understand the Multimedia related Concept

**OUTCOMES:**

CO1: Understood the basics of multimedia

CO2: Acquired the basics of the multimedia hardwares

CO3 Acquired the basics of the multimedia softwares

CO4: Would have learnt the concepts of text and sound

CO5: Would have learn animation concepts.

**Subject Code: JSCSC2**

### **CCM3 – C AND DATA STRUCTURES**

**Objective:**

- To impart basic knowledge of programming skills in C.
- Enable to write the basic programmes.
- To Understand basic Data Structures.

**Outcomes:**

CO1: Understood the programming techniques  
CO2: Acquired the basics of the C Programming  
CO3: Understood the Stack Data Structures.  
CO4: Understand about Structure and Union.  
CO5: Understand about Sorting.

**Subject Code: JSCSD2P**

**CCM4P – C AND DATA STRUCTURES LAB****Outcomes:**

CO1: Understood the programming techniques  
CO2: Acquired the basics of the C Programming  
CO3: Understood the Stack Data Structures.  
CO4: Understand about Structure and Union.  
CO5: Understand about Sorting.

**Subject Code: JSCSE3**

**CCM5 – PROGRAMMING IN JAVA****Objective:**

- To understand the basic concepts of Object Oriented Programming with Java language
- Enable to write the basic programmes

**OUTCOMES:**

CO1: Would have learnt the fundamentals of Java  
CO2: Would have learnt the usage of Exception handling  
CO3: Implement polymorphism and overloading of operators  
CO4: Apply the I/O operations to handle backup system using files.  
CO5: Would have learnt Applets and Graphics.

**Subject Code: JSNMCSEC1**

**NMEC1 – PRINCIPLES OF MANAGEMENT****OBJECTIVE:**

- To make students acquainted with fundamentals of management
- Able to acquire various practices, theories and concept related with management

**Outcome:**

CO1: Would have learnt the various Management Techniques  
CO2: To recall and identify the relevance of management concepts  
CO3: Would have learnt the Various Levels of Management  
CO4: To apply management techniques for meeting current and future management challenges faced by the organization  
CO5: To apply principles of management in order to execute the role as a manager

**Subject Code: JSBCSEC2**

## **SBEC2 – SCRIPTING LANGUAGE**

### **OBJECTIVES:**

- To provide the basic concepts of the Client/Server
- To learn the fundamentals Java Script
- To learn the fundamentals VB Script

### **OUTCOMES:**

CO1: Would have learn the basics of Client/Server

CO2: Would have learn the basics of Java script.

CO3: To know the concepts of functions.

CO4: Would have learn the basics of VB script

CO5: To know the concepts of procedures

**Subject Code: JSCSG4**

## **CCM7 – PROGRAMMING IN C#**

### **Objective:**

- To impart basic knowledge of programming skills in C#
- Enable to write the basic programmes

### **Outcome:**

CO1: Explain the concepts of programming language, the general problems and methods related to syntax and semantics.

CO2: Interpret the structured data objects, sub programs and programmer defined data type.

CO3: Outline the sequence control and data control.

CO4: Apply the concepts of storage management using programming languages.

CO5: Implementing the subprogram call and return

**Subject Code: JSCSH4P**

## **CCM8P – PROGRAMMING IN C# LAB**

### **Outcome:**

CO1: Explain the concepts of programming language, the general problems and methods related to syntax and semantics.

CO2: Interpret the structured data objects, sub programs and programmer defined data type.

CO3: Outline the sequence control and data control.

CO4: Apply the concepts of storage management using programming languages.

CO5: Implementing the subprogram call and return

**Subject Code: JSCSI5**

### **CCM9 – PROGRAMMING IN VB.NET**

#### **OBJECTIVES:**

- To Understand Basics of DotNet Framework.
- To Understand the various Programming Concepts of VB.Net

#### **Outcome:**

CO1: Would have learnt the fundamentals of VB.Net

CO2: Outline the sequence control and data control.

CO3: Understand .NET Framework architecture, its components and basics of Visual Studio.

CO4: Analyze the problem and create window based program with Visual Basic.

CO5: Develop and implement window based application using Visual Basic.

**Subject Code: JSCSJ5**

### **CCM11 – OPERATING SYSTEMS**

#### **OBJECTIVES:**

- To Visualize the different views of Operating System
- To Learn the various functions of OS.

#### **OUTCOMES:**

CO1: Explain the structure and functions of Operating system.

CO2: Illustrate the concept of concurrency.

CO3: Outline the concepts of deadlock.

CO4: Distinguish between various memory management scheme.

CO5: Explain I/O management and file system, concepts of protection and security.

**Subject Code: JSCSEC1**

### **CCE1 – DATA COMMUNICATION AND NETWORKS**

#### **OBJECTIVES:**

- To learn the basics of Communication Networks.
- To understand the various Techniques of Data Communication Networks.

#### **OUTCOMES:**

CO1: Would have learnt the fundamentals of Communication Networks

CO2: Would have learnt the Various Techniques of Data Communication Networks.

CO3: Student will be able to understand network communication using the layered concept

CO4: Student will be able to understand the concept of flow control, error control and LAN protocols

CO5: Student shall understand the functions performed by a Network Management System

**Subject Code: JSNMCSEC2**

## **NMEC2 GENERAL HEALTH AND FITNESS**

### **Outcome:**

- CO1: Would have learnt the various Health Problems.
- CO2: Would have learnt the Various Fitness and Wellness Techniques.
- CO3: Understand the role of health organisations and agencies.
- CO4: Explain the components of physical fitness and steps to achieve each.
- CO5: Demonstrate an understanding of the various health issues currently facing today's society.

**Subject Code: JSCSL6**

## **CCM12 – DATABASE SYSTEMS**

### **Objective:**

- To provide the basic concepts of the database systems
- To provide information about data models, storage structure, normalization and SQL

### **Outcome:**

- CO1: Would have learnt the various DBMS Techniques
- CO2: Illustrate the concept of Database Management System.
- CO3: Explain Entity Relationship Diagrams.
- CO4: Illustrate concept of functional dependencies and determine normalization.
- CO5: Would have learnt the Various Queries using ORACLE

**Subject Code: JSCSN6P**

## **CCM13P – RDBMS LAB**

### **Outcome:**

- CO1: Would have learnt the various DBMS Techniques
- CO2: Illustrate the concept of Database Management System.
- CO3: Explain Entity Relationship Diagrams.
- CO4: Illustrate concept of functional dependencies and determine normalization.
- CO5: Would have learnt the Various Queries using ORACLE

**Subject Code: JSCSM6**

## **CCM14 – MICROPROCESSOR AND ITS APPLICATIONS**

### **Objective:**

- To understand the basic principles of microprocessor architecture & its pin configuration.
- To write simple assembly language programs and Know the concepts of memory & I/O interfacing.

### **Outcome:**

- CO1: Understanding the Architecture, Instruction set and addressing modes of 8086 microprocessor.
- CO2: Analyze the instruction set of 8085 microprocessor.



CO3: Implement the assembly language programming of 8085 microprocessor.

CO4: Design the memory (RAM/ROM) interfacing with 8085 microprocessor.

CO5: Design and implement the interfacing of interrupts, basic I/O and DMA with 8085 Microprocessor.

**Subject Code: JSCSEC2**

## **CCE2 – SOFTWARE ENGINEERING**

### **Objective:**

- To provide fundamental concepts of software engineering
- To understand the concepts of Cost estimation, design etc.

### **OUTCOMES:**

CO1: Would have learnt the various phases of Software Engineering.

CO2: Able to apply the concepts of software engineering

CO3: Understand the concept of system and able to analyze its feasibility study.

CO4: Understand software process framework, requirement modeling approaches, software design, and software quality.

CO5: Would have learnt the various Testing Criteria.

**Subject Code: JSCSEC3**

## **CCE3 – DATA MINING**

### **Objective:**

- To understand the basic concept of data mining process
- To understand the association rule mining, classification, cluster analysis and web data mining

### **Outcome:**

CO1: Explain basic aspect of data mining.

CO2: Apply data pre- processing techniques on different datasets.

CO3: Evaluate the performance of different association rules and classification techniques.

CO4: Study basics of business intelligence and data warehousing.

CO5: Identify different advance data mining techniques and big data.

## **M.SC COMPUTER SCIENCE**

### **CORE COURSE I - DISTRIBUTED OPERATING SYSTEMS**

**(SUBJECT CODE: PCCM1)**

### **OBJECTIVES**

- To Learn the Basics of Distributed computing
- To Learn the Concepts of Distributed Operating systems
- To Learn the Distributed File Systems

**Outcomes:**

- CO1: Would have learnt about fundamentals of Distributed Operating System and Message Passing.
- CO2: Would have learnt about RPC, Exception Handling, Security and Distributed Shared Memory.
- CO3: Would have learn about Synchronization, Mutual Exclusion and Deadlock.
- CO4: Would have learnt about Resource, Task, and Process management.
- CO5: Would have learnt sufficient knowledge about file access.

**CORE COURSE II – ADVANCED JAVA PROGRAMMING  
(SUBJECT CODE: PCCM2)****OBJECTIVES**

- To Understand the OOPs Concept
- To Visualize the OOPs Concepts
- To Program Advanced OOPs Concepts using Java

**Outcomes:**

- CO1: Would have learnt about basics of java, classes, methods and Inheritance.
- CO2: Would have learnt about Packages, Interfaces, Exception Handling and Applets.
- CO3: Would have learn about Networking and AWT.
- CO4: Would have learnt about Java Beans and swing.
- CO5: Would have learnt about Servlets, Security Issues, Cookies and Session.

**CORE COURSE IV – COMPILER DESIGN  
(SUBJECT CODE: PCCM4)****OBJECTIVES**

- To Learn the Concept of Compiling
- To Understand the Basics of Compilers
- To Learn the various Parts and Working of Compilers

**Outcomes:**

- CO1: Would have learnt about basics of Compilers and Lexical Analysis.
- CO2: Would have learnt about Parsers, LR Parsers, SLR parser tables and LALR Parsing tables.
- CO3: Would have learn about translation schemes.
- CO4: Would have learnt about Symbol table and Errors.
- CO5: Would have learnt code optimization and code generation.

**ELECTIVE COURSE I – ADVANCED MICROPROCESSORS & MICROCONTROLLERS  
(SUBJECT CODE: PEC1)**

**OBJECTIVES**

- To Learn the Architecture of 8086
- To Learn the Basics of X86 Processors
- To Learn the Basics of Micro Controllers

**Outcomes:**

CO1: Would have learnt about the architecture of 8086.

CO2: Would have learnt about machine level programs, assembly level programs, and STACK.

CO3: Would have learnt about the architecture of 80286.

CO4: Would have learnt about 8255.

CO5: Would have learnt about 8051.

**CORE COURSE 5 – DATA WAREHOUSING AND DATA MINING (SUBJECT CODE: PCCM5)**

**OBJECTIVES**

- To Understand the OLAP
- To Learn the Techniques of Data Mining
- To Learn the Basics of Web Mining

**Outcomes:**

CO1: Would have learnt about Data Model, Data Warehouse and Data Mining Applications.

CO2: Would have learnt about Data Mining and its techniques.

CO3: Would have learnt about Classification and Clustering.

CO4: Would have learnt about Association Rules.

CO5: Would have learnt about Basics of Web mining and Temporal mining.

**CORE COURSE 6 – OPEN SOURCE TECHNOLOGY  
(SUBJECT CODE: PCCM6)**

**OBJECTIVES**

- To understand the difference between open source software and commercial software.
- To understand the development of web applications using open source web technologies like Apache, MySql and PHP (LAMP/XAMP).
- To understand the concepts of PHP.

**Outcomes:**

CO1: Would have learnt about Essentials of PHP.

CO2: Would have learnt about strings, arrays, operators and control statements of PHP.

CO3: Would have learnt about Web page Creation.

CO4: Would have learnt about OOPs and File Handling.

CO5: Would have learnt about Database connection by using SQL and MySQL, Sessions, cookies and FTP.

**CORE COURSE 8 – GRID COMPUTING  
(SUBJECT CODE: PCCM8)****OBJECTIVES**

- To impart knowledge on architectures, services & toolkits of Grid Computing.
- To learn how to program the Grid Computing.
- To understand the security issues in the Grid Computing.

**Outcomes:**

CO1: Would have learnt about Basics of Grid computing.

CO2: Would have learnt about Grid computing organization and their roles.

CO3: Would have learnt about Grid computing Anatomy and Road Map.

CO4: Would have learnt about New Generation of Grid Computing Applications.

CO5: Would have learnt about Open Grid Service Architecture.

**EXTRA DISCIPLINARY COURSE – HUMAN COMPUTER INTERACTION  
(SUBJECT CODE: PEDC)****OBJECTIVES**

- To Understand Human Computer Interaction
- To Understand the Various HCI Paradigms
- To Learn the Implementation of Human Computer Interaction

**Outcomes:**

CO1: Would have learnt about interaction between Human and Computer

CO2: Would have learnt about paradigms and Interaction design basics.

CO3: Would have learnt about software process of HCI and Design Rules.

CO4: Would have learnt about Implementation and Evaluation techniques of HCI.

CO5: Would have learnt about Universal Design and Support of HCI.

## **ELECTIVE COURSE II – WEB SERVICES (SUBJECT CODE: PEC2)**

### **OBJECTIVES**

- To understand the Basics of Web Services
- To Learn SOAP with XML
- To Learn WSDL
- To Learn UDDI

#### **Outcomes:**

CO1: Would have learnt about the basic building blocks of web services, Fundamentals of SOAP, WSDL, UDDI and XML.

CO2: Would have learnt about XML Schema and Namespaces, SOAP and RPC.

CO3: Would have learnt about WSDL, SOAP and WSDL, Accessing of UDDI.

CO4: Would have learnt about Conversations, WSCL, Relationship between WSCL and WSDL.

CO5: Would have learnt about workflow, workflow management and BPML.

## **CORE COURSE IX – CRYPTOGRAPHY AND NETWORK SECURITY (SUBJECT CODE: PCCM9)**

### **OBJECTIVES**

- To Recall the Understanding of ISO/OSI Model
- To Understand the need for Security
- To Learn the techniques of Cryptography

#### **Outcomes:**

CO1: Would have learnt about OSI security architecture, Classical Encryption Techniques, - Block Cipher and DES.

CO2: Would have learnt about Advanced Encryption Standard, Block Ciphers Operation, Pseudorandom Number Generation and Stream Ciphers.

CO3: Would have learnt about Public-Key Cryptography and RSA, Other Public-Key Cryptosystems and Message Authentication Code.

CO4: Would have learnt about Electronic Mail Security, and IP Security.

CO5: Would have learnt about Intruders, Malicious Software and Firewall.

## **CORE COURSE X – PROGRAMMING IN ASP.NET (SUBJECT CODE: PCCM10)**

### **OBJECTIVES**

- To Learn the basics of DOTNET Framework
- To Learn to Program in Web Forms
- To Learn to Program in ASP.Net
- To Learn to Use ADO.Net

**Outcomes:**

CO1: Would have learnt about Basics of .Net Framework.

CO2: Would have learnt about Web Form Fundamentals.

CO3: Would have learnt about Validation form and Rich Controls.

CO4: Would have learnt about Basics of ADO.Net.

CO5: Would have learnt about Data Binding, Data Binding with Databases, and Data List.

**CORE COURSE XII – MOBILE COMPUTING  
(SUBJECT CODE: PCCM12)****OBJECTIVES**

- To understand the concept of cellular communication
- To understand the basics of wireless communication
- To understand the GSM architecture
- To understand the issues relating to Wireless applications

**Outcomes:**

CO1: Would have learnt mobile and wireless devices.

CO2: Would have learnt about Telecommunication System.

CO3: Would have learnt about Wireless LAN.

CO4: Would have learnt about Mobile IP.

CO5: Would have learnt about WAP.

**ELECTIVE COURSE III – SOFTWARE PROJECT MANAGEMENT  
(SUBJECT CODE: PEC3)****OBJECTIVES**

- To Understand the Concepts of Project Management
- To Understand the Planning aspects of a Software Project
- .To Understand Software Cost Estimation

**Outcomes:**

CO1: Would have learnt about Software Project Planning

CO2: Would have learnt about Software Cost Estimation

CO3: Would have learnt about Software Activity Planning.

CO4: Would have learnt to implement risk management.

CO5: Would have learnt about project approach.

## **BACHELOR OF COMPUTER APPLICATION**

**Subject Code : JSCAA1**

**CCM1 - WEB DESIGN**

### **OBJECTIVES**

- Able to explain the fundamental concepts of internet
- Able to explain the various tags of HTML

### **OUTCOMES:**

CO1: Able to get the exposure in Internet

CO2: Explain the concepts of internetworking techniques with their characteristics.

CO3: Illustrate the requirement for WWW format and techniques

CO4: Recognize the functioning of servers and privacy, security related mechanism

CO5: Able to Design the WebPages using HTML

**Subject Code : JSCAB1P**

**CCM2P - WEB DESIGN LAB**

### **OUTCOMES:**

CO1: Able to get the exposure in Internet

CO2: Explain the concepts of internetworking techniques with their characteristics.

CO3: Illustrate the requirement for WWW format and techniques

CO4: Recognize the functioning of servers and privacy, security related mechanism

CO5: Able to Design the WebPages using HTML

**Subject Code : JSCAYA1**

**CCA1 - DIGITAL COMPUTER FUNDAMENTALS**

### **OBJECTIVES**

- Able to Understand the Number Systems
- Able to Visualize the Logic Gates and Circuits

### **OUTCOMES:**

CO1: Able to get exposure to Number Systems

CO2: Able to Design Various Circuits with Logic Gates

CO3: Explain the concept of Boolean algebra and logic gates

CO4: Interpretation of various types of Flip-Flops.

CO5: interpretation of various types of counters and registers

Subject Code : JSBCAEC1

### **SBEC1 - MULTIMEDIA AND ITS APPLICATIONS**

#### **OBJECTIVES**

- To impart basic knowledge of multimedia
- To Understand the Multimedia related Concept

#### **OUTCOMES:**

CO1: Understood the basics of multimedia

CO2: Acquired the basics of the multimedia hardware

CO3: Acquired the basics of the multimedia software

CO4: Would have learnt the concepts of text and sound

CO5: Would have learnt animation concepts.

Subject Code : JSCAC2

### **CCM3 - PROGRAMMING IN C++**

#### **OBJECTIVES**

- To impart basic knowledge of programming skills in C++.
- To Understand the OOPs Concept
- To Visualize the OOPs Concepts using C++

#### **OUTCOMES:**

CO1: Understood the programming techniques

CO2: Acquired the basics of the C++ Programming

CO3: Understood the sequence control and data control.

CO4: Would have learnt the various OOPs Concept using C++

CO5: Apply the concepts of storage management.

Subject Code : JSCAD2P

### **CCM4P - PROGRAMMING IN C++ LAB**

#### **OUTCOMES:**

CO1: Understood the programming techniques

CO2: Acquired the basics of the C++ Programming

CO3: Understood the sequence control and data control.

CO4: Would have learnt the various OOPs Concept using C++

CO5: Apply the concepts of storage management.

Subject Code : JSCAYB2

### **CCA2 - OPERATION RESEARCH**

#### **OBJECTIVES**

- To Understand the Fundamentals of Operation Research
- To Understand the Various Problems in OR.
- To Visualize the Network Scheduling and PERT.



#### OUTCOMES:

- CO1: Would have learnt the various concepts of OR.
- CO2: Would have learnt the various types of OR.
- CO3: Explain application Of Transportation Problem
- CO4: Exposes the student to use of various scientific tools and models
- CO5: To get knowledge about various decision making through OR models

Subject Code : JS CAE3

#### **CCM5 - PROGRAMMING IN JAVA**

##### OBJECTIVES

- To Understand the OOPs Concept
- To Visualize the OOPs Concepts with Java
- To Program Applets and Graphics in Java

#### OUTCOMES:

- CO1: Would have learnt the fundamentals of Java
- CO2: Would have learnt the usage of Exception handling
- CO3: Implement polymorphism and overloading of operators
- CO4: Apply the I/O operations to handle backup system using files.
- CO5: Would have learnt Applets and Graphics.

Subject Code : JS CAF3P

#### **CCM6P - PROGRAMMING IN JAVA LAB**

#### OUTCOMES:

- CO1: Would have learnt the fundamentals of Java
- CO2: Would have learnt the usage of Exception handling
- CO3: Implement polymorphism and overloading of operators
- CO4: Apply the I/O operations to handle backup system using files.
- CO5: Would have learnt Applets and Graphics.

Subject Code : JS CAYC3

#### **CCA3 - FINANCIAL ACCOUNTING**

##### OBJECTIVES

- To Understand the Types of Accounting.
- To Visualize the Ledgers, Balance Sheets and Errors

#### OUTCOMES

- CO1: Would have learnt the Basics of Accounting.
- CO2: Would have learnt various methods of Financial Accountings.
- CO3: Student will be able to exhibit theoretical knowledge of accounting and apply same in real time business world.
- CO4: Student will be able to understand the accounting principle and standard and its application.
- CO5: Students are able to prepare Financial Statements and interpret the results there off.

Subject Code : JSCAYD3P

**CCA4P - ACCOUNTING SOFTWARE LAB**

**OUTCOMES**

CO1: Would have learnt the Basics of Accounting.

CO2: Would have learnt various methods of Financial Accountings.

CO3: Student will be able to exhibit theoretical knowledge of accounting and apply same in real time business world.

CO4: Student will be able to understand the accounting principle and standard and its application.

CO5: Students are able to prepare Financial Statements and interpret the results there off.

Subject Code : JSNMCAEC1

**NMEC1 - MANAGEMENT INFORMATION SYSTEMS**

**OBJECTIVES:**

- To learn the fundamentals of MIS
- To visualize the various Management Techniques
- To Understand the Telecommunication Networks and DSS

**OUTCOMES:**

CO1: Relate the basic concepts and technologies used in the field of management information systems

CO2: Compare the processes of developing and implementing information systems.

CO3: Outline the role of the ethical, social, and security issues of information systems.

CO4: Translate the role of information systems in organizations, the strategic management processes, with the implications for the management.

CO5: Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization.

Subject Code : JSCAG4

**CCM7 - RELATIONAL DATABASE MANAGEMENT SYSTEMS**

**OBJECTIVES:**

- To provide the basic concepts of the database systems including data models, storage structure, normalization
- To learn the fundamentals RDBMS
- To visualize the various RDBMS Techniques

**OUTCOMES:**

CO1: Would have learnt the various RDBMS Techniques

CO2: Illustrate the concept of Database Management System.

CO3: Explain Entity Relationship Diagrams.

CO4: Illustrate concept of functional dependencies and determine normalization.

CO5: Would have learnt the Various Queries using ORACLE

Subject Code : JSCAH4P  
**CCM8P - RDBMS LAB**

**OUTCOMES:**

- CO1: Would have learnt the various RDBMS Techniques
- CO2: Illustrate the concept of Database Management System.
- CO3: Explain Entity Relationship Diagrams.
- CO4: Illustrate concept of functional dependencies and determine normalization.
- CO5: Would have learnt the Various Queries using ORACLE

Subject Code : JSBCAEC2

**SBEC2 - CLIENT / SERVER SCRIPTING LANGUAGE**

**OBJECTIVES:**

- To provide the basic concepts of the Client/Server
- To learn the fundamentals Java Script
- To learn the fundamentals VB Script

**OUTCOMES:**

- CO1: Would have learn the basics of Client/Server
- CO2: Would have learn the basics of Java script.
- CO3: To know the concepts of functions.
- CO4: Would have learn the basics of VB script
- CO5: To know the concepts of procedures

Subject Code : JSCAI5

**CCM9 – PROGRAMMING IN C#**

**Objective:**

- To impart basic knowledge of programming skills in C#
- Enable to write the basic programmes

**Outcome:**

- CO1: Explain the concepts of programming language, the general problems and methods related to syntax and semantics.
- CO2: Interpret the structured data objects, sub programs and programmer defined data type.
- CO3: Outline the sequence control and data control.
- CO4: Apply the concepts of storage management using programming languages.
- CO5: Implementing the subprogram call and return

Subject Code : JSCAJ5P

**CCM10P - PROGRAMMING IN C# LAB**

**Outcome:**

- CO1: Explain the concepts of programming language, the general problems and methods related to syntax and semantics.
- CO2: Interpret the structured data objects, sub programs and programmer defined data type.
- CO3: Outline the sequence control and data control.
- CO4: Apply the concepts of storage management using programming languages.
- CO5: Implementing the subprogram call and return

Subject Code : JSCAK5

### **CCM11- DATA STRUCTURES**

#### **OBJECTIVES:**

- To Learn the Basics of Data Structures
- To Visualize the various Data Structures

#### **OUTCOMES:**

CO1: Would have learnt the various Data Structure

CO2: Would have learnt the Various Operations of Data Structures

CO3: Compare various searching and sorting techniques

CO4: Identify the asymptotic notations

CO5: Choose appropriate data structure while designing the algorithms.

Subject Code : JSCAEC1

### **CCE1 - OPERATING SYSTEMS**

#### **OBJECTIVES:**

- To Visualize the different views of Operating System
- To Learn the various functions of OS.

#### **OUTCOMES:**

CO1: Explain the structure and functions of Operating system.

CO2: Illustrate the concept of concurrency.

CO3: Outline the concepts of deadlock.

CO4: Distinguish between various memory management scheme.

CO5: Explain I/O management and file system, concepts of protection and security.

Subject Code : JSNMCAEC2

### **NMEC2 - COMMUNICATION SKILLS AND PERSONALITY DEVELOPMENT**

#### **OBJECTIVES:**

- To learn the basics of communication
- To Learn the various communication skills

#### **OUTCOMES:**

CO1: Would have learn about the attitude.

CO2: Would have learnt the Various inter personal skills.

CO3: Understand the concepts of business communication

CO4: To understand about Interview

CO5: To understand about the Job seekers in the internet

Subject Code : JSBCAEC3

### **SBEC3 – INTRODUCTION TO OFFICE MANAGEMENT**

#### **OBJECTIVES:**

- To Learn the Basics of Office Management
- To Visualize the various Office Management Techniques

**OUTCOMES:**

- CO1: Would have learnt the Fundamentals of Office Management.  
CO2: Would have learnt the Various Techniques of Office Management.  
CO3: Understand the concepts, need and importance of Office management  
CO4: Critically analyse and understand the process of management  
CO5: Understand adopt and integrate Communication skills

Subject Code : JSCAL6

**CCM12 – PROGRAMMING IN VB.NET****OBJECTIVES:**

- To Understand Basics of DotNet Framework.
- To Understand the various Programming Concepts of VB.Net

Outcome:

- CO1: Would have learnt the fundamentals of VB.Net  
CO2: Outline the sequence control and data control.  
CO3: Understand .NET Framework architecture, its components and basics of Visual Studio.  
CO4: Analyze the problem and create window based program with Visual Basic.  
CO5: Develop and implement window based application using Visual Basic.

Subject Code : JSCAM6

**CCM14 - DATA COMMUNICATION AND COMPUTER NETWORKS****OBJECTIVES:**

- To Learn the basics of Communication Networks.
- To Understand the various Techniques of Data Communication Networks.

**OUTCOMES:**

- CO1: Would have learnt the fundamentals of Communication Networks  
CO2: Would have learnt the Various Techniques of Data Communication Networks.  
CO3: Student will be able to understand network communication using the layered concept  
CO4: Student will be able to understand the concept of flow control, error control and LAN protocols  
CO5: Student shall understand the functions performed by a Network Management System

Subject Code : JSCAEC2

**CCE2 - SOFTWARE ENGINEERING****OBJECTIVES:**

- Understand the various phases of software development and software Engineering tools
- Know various Validation and Verification Techniques

**OUTCOMES :**

- CO1: Would have learnt the various phases of Software Engineering.  
CO2: Able to apply the concepts of software engineering  
CO3: Understand the concept of system and able to analyse its feasibility study.  
CO4: Understand software process framework , requirement modeling approaches, software design, software quality.  
CO5: Would have learnt the various Testing Criteria.

Subject Code : JSCAEC3

### **CCE3 - E - COMMERCE AND ITS APPLICATIONS**

#### **OBJECTIVES:**

- To know the concepts of Internet and E-Commerce and their applications
- To Learn the Advertising and Marketing Techniques on the Internet.

#### **OUTCOMES:**

CO1: Would have learnt the Concepts of E-Commerce.

CO2: Understand different Knowledge base systems.

CO3: Understand the application of tools and services to the development of small scale E - Commerce applications

CO4: Would have learnt the Applications of E- Commerce.

CO5: Understand designing of knowledge base Systems to improve the efficiency of organizations based on their need.

### **B.SC PHYSICAL EDUCATION**

**SEMESTER: 1**

**SUB CODE: JSPSA1**

**CREDIT: 5**

#### **MAJOR PAPER – I**

#### **COURSE OUTCOMES**

1. The pass out would be able to compare the relationship between general education and Physical education.
2. He would be able to identify and relate with the History of Physical Education.
3. He would be able to comprehend the difference between ancient Modern Olympics
4. He would able to identify the works of Philosophers of Education and Physical Education.
5. He would know history of international and national sports events and awards.

**SUB CODE: JSPSYA1**

**CREDIT: 5**

#### **ALLIED PAPER - I**

#### **THEORIES OF YOGA AND GYMNASTICS**

#### **COURSE OUTCOMES**

1. Classify the types of yoga and stages of yoga
2. Demonstrate the techniques in asanas, bandhas and pranayama
3. Analyze the effect of yoga and pranayama on various individuals
4. Influence the yogic practice on physiological systems
5. Combine the asanas with pranayama and meditations

**SEMESTER: II**

**SUB CODE: JSPSB2P**

**CREDIT: 4**

**MAJOR PAPER - II**

**MAJOR GAMES GROUP-I (PRACTICAL- I)\***

**GAME: HOCKEY, KABADDI, KHO-KHO&VOLLEYBALL**

**COURSE OUTCOMES**

1. Find the basic rules and regulations of various games
2. Demonstrate the basic skills of various games
3. Analyse the strategies of the various games
4. Estimate the performance of the players
5. Construct the play fields of various games

**SEMESTER: II**

**SUB CODE: JSPSC2**

**CREDIT: 5**

**MAJOR PAPER - III**

**SPORTS MANAGEMENT**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: explain the concepts of organization, administration and supervision

CO2: construct playfield, gymnasium and swimming pool

CO3: analyze the organization schemes of physical education

CO4: judge the facilities of infrastructure

CO5: adapt the standard of physical education program

**SEMESTER: II**

**SUB CODE: JSPSYB2P**

**CREDIT : 5**

**ALLIED PAPER - II**

**YOGA AND GYMNASTICS (ALLIED –PRACTICALS -I)**

**COURSE OUTCOMES**

1. Enlighten yoga and various games
2. Demonstrate various yoga asanas and different games
3. Analyze the effects of yoga
4. Determine the values of asanas, pranayama's, bandhas and kriyas
5. Develop the techniques of yoga and different games.

**SEMESTER: II**

**SUB CODE: JSBPSEC1**

**CREDIT: 4**

**SOFT SKILL – I**

**THEORIES OF MAJOR GAMES\***

**COURSE OUTCOMES**

CO1: understand the history, rules, regulations and skills of the games

CO2: apply the fundamental techniques of specialization games

CO3: distinguish between beginners and advance players

CO4: judge the performance of players and matches

CO5: adapt with the new trends in various game

**SEMESTER: III**

**SUB CODE: JSPSD3**

**CREDIT: 4**

**MAJOR PAPER - IV**

**HUMAN ANATOMY AND PHYSIOLOGY**

**COURSE OUTCOMES**

CO1. Label the different parts of human body

CO2. Develop the functions of the human body

CO3. Inspect the different sports injuries of the human body

CO4. Evaluate the physiological fitness of the human body

CO5. Create health conscious among sports person.

**SEMESTER: IV**

**SUB CODE: JSNMPSEC1**

**CREDIT : 2**

**NON MAJOR ELECTIVE - I**

**FITNESS AND SPORTS INNOVATIONS**

**COURSE OUTCOMES**

1. The students will be learn Physical Fitness and Wellness-Importance of Physical Fitness and Wellness
2. The students will be learning Physiological changes accompanying the Aging Process.
3. The students will be learning Improvised Trainings.
4. The students will be learn Drug abuse in Sports
5. Develop the knowledge of Modern Equipment's.



**SEMESTER: IV**

**SUB CODE: JSPSE4**  
**CREDIT : 4**

**MAJOR PAPER - VI**  
**SPORTS PHYSIOTHERAPY**

**COURSE OUTCOMES**

1. The students will be able to summarize the various sports injuries and first aid techniques.
2. Apply the first aid techniques depends upon the sports Injuries. Classify the sports injuries and suggest suitable.
3. Rehabilitation and massage techniques.
4. Estimate the effects of rehabilitation and massage
5. Develop the knowledge of injury management.

**SEMESTER: IV**

**SUB CODE: JSPSF4P**  
**CREDIT: 4**

**MAJOR PAPER – V**  
**MAJOR GAMES: GROUP II (PRACTICAL-II)\***  
**GAME: BASKETBALL, CRICKET, FOOTBALLAND HANDBALL**

**COURSE OUTCOMES**

1. Find the basic rules and regulations of various games
2. Demonstrate the basic skills of various games
3. Analyse the strategies of the various games
4. Estimate the performance of the players
5. Construct the play fields of various games

**SEMESTER: IV**

**SUB CODE: JSPSYC3**  
**CREDIT: 5**

**ALLIED PAPER - III**  
**TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION\***

**COURSE OUTCOMES**

1. Relate the different types of tests and measurement in physical education
2. Identify the sports performance using different sports skill tests
3. Compare and contrast the results of different test and measurements
4. Determine the value of sports skill tests
5. Improve and modify the existing skill test using computer application

**SEMESTER: IV**

**SUB CODE: JSPSYD4P**

**CREDIT: 5**

**ALLIED PAPER - IV**

**EVALUATION PROCESS IN PHYSICAL EDUCATION (ALLIED PRACTICALS-II)\***

**COURSE OUTCOMES**

1. Relate the different types of tests and measurement in physical education
2. Identify the sports performance using different sports skill tests
3. Compare and contrast the results of different test and measurements
4. Determine the value of sports skill tests
5. Improve and modify the existing skill test using computer application

**SEMESTER: IV**

**SUB CODE: JSBPSEC2**

**CREDIT: 4**

**SOFT SKILL – II**

**RESEARCH AND STATISTICS FOR PHYSICAL EDUCATION AND SPORTS**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: outline the methods of teaching physical activities and basic statistics

CO2: organize the tournaments and various types of physical activities

CO3: analyze the various teaching techniques in the field of physical education

CO4: evaluate the learning capabilities of the students

CO5: compose the effective physical education classes

**SEMESTER: V**

**SUB CODE: JSPSG5**

**CREDIT: 4**

**MAJOR PAPER - VII**

**THEORIES OF TRACK AND FIELD**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: find the rules and regulation of track and field events

CO2: apply the fundamental techniques of track and field events

CO3: distinguish between advance athletes and beginners

CO4: judge the performance of athletes

CO5: adapt with the new trends in teaching and coaching of track and field events

**SEMESTER: V**

**SUB CODE: JSPSH5**

**CREDIT: 4**

**MAJOR PAPER - VIII**

**METHODS IN PHYSICAL EDUCATION**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: outline the methods of teaching physical activities and basic statistics

CO2: organize the tournaments and various types of physical activities

CO3: analyze the various teaching techniques in the field of physical education

CO4: evaluate the learning capabilities of the students

CO5: compose the effective physical education classes.

**SEMESTER: V**

**SUB CODE: JSPSEC1**

**CREDIT: 5**

**ELECTIVE PAPER - I**

**APPLIED KINESIOLOGY**

**COURSE OUTCOMES**

1. To succeed in kinesiology and physical education
2. Students should be interested in the benefits and processes related to fitness and physical activity.
3. Students will need to develop strong critical thinking skills
4. Students in order to think critically about the role of activity
5. Students will promote health and well-being.

**SEMESTER: V**

**SUB CODE: JSBPSEC3**

**CREDIT: 4**

**SOFT SKILL-III**

**SAFETY EDUCATION AND FIRST AID**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: explain the factors influencing health and safety

CO2: make use of the knowledge on hygiene and various health programmes

CO3: analyze the pollutions, various diseases and find their remedies

CO4: assess the mental health, community health and family life education

CO5: build and follow the principles of health education and safety measures

**SEMESTER: VI**

**SUB CODE: JSPSJ6**

**CREDIT : 5**

**MAJOR PAPER - XII**

**SCIENCE OF SPORTS TRAINING**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: find the concepts of physical fitness through sports training

CO2: determine physical fitness components for the sports person

CO3: classify the differences of technique and tactical preparation

CO4: evaluate the performance of a player

CO5: design a training schedule for sports person

**SEMESTER: VI**

**SUB CODE: JSPSK6**

**CREDIT : 5**

**MAJOR PAPER - XIII**

**EXERCISE PHYSIOLOGY**

**COURSE OUTCOMES**

CO1. Label the different parts and function of the human body

CO2. Develop the functions of the human body

CO3. Inspect the different sports injuries of the human body

CO4. Evaluate the physiological fitness of the human body

CO5. Create health conscious among sports person

**SEMESTER: VI**

**SUB CODE: JSPSL6**

**CREDIT : 4**

**MAJOR PAPER - XIV**

**HEALTH EDUCATION**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: explain the factors influencing health and safety

CO2: make use of the knowledge on hygiene and various health programmes

CO3: analyze the pollutions, various diseases and find their remedies

CO4: assess the mental health, community health and family life education

CO5: build and follow the principles of health education and safety measures

**SEMESTER: VI**

**SUB CODE: JSPSM6P**

**CREDIT: 4**

**MAJOR PAPER - X**

**TRACK & FIELD EVENTS (MAJOR PRACTICAL-IV)**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: find the rules and regulation of track and field events

CO2: apply the fundamental techniques of track and field events

CO3: distinguish between advance athletes and beginners

CO4: judge the performance of athletes

CO5: adapt with the new trends in teaching and coaching of track and field events

**SEMESTER: VI**

**SUB CODE: JSPSN6P**

**CREDIT: 4**

**MAJOR PAPER - XI**

**TEACHING PRACTICE (MAJOR PRACTICAL – V)**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: select the suitable methods for teaching physical activities

CO2: make use of the learnt teaching techniques in the physical education classes

CO3: motivate the students for active participation in sports

CO4: evaluate the learning capabilities of the students

CO5: construct a new technique in teaching methodology.

**SEMESTER: VI**

**SUB CODE: JSPSEC2**

**CREDIT: 5**

**ELECTIVE PAPER - II**

**APPLIED PSYCHOLOGY AND SOCIOLOGY**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: explain the basic concepts of psychology and sociology

CO2: apply the psychological and sociological principles in the field of physical education and sports.

CO3: analyze the mentality of sportspersons

CO4: evaluate the role of psychology and sociology in physical education and sports

CO5: invent new techniques to solve the psychological problems of sportsper

**SEMESTER: VI**

**SUB CODE: JSPSEC3**

**CREDIT: 4**

**ELECTIVE PAPER - III**  
**SPORTS BIO-MECHANICS**

**COURSE OUTCOMES**

Upon completion of the course, the students will be able to

CO1: Explain the basic concepts of Biomechanics

CO2: Various motion and its uses

CO3: Linear Kinetics, Force, Newton's Laws of Motion and Angular Kinetics

CO4: Study of Friction and its types

CO5: Principles in fundamental movements

## **B.COM**

### **BUSINESS ECONOMICS**

#### **SUB.CODE:JSCOYA1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Recall the role and responsibilities of business economist.
CO-2	Represent demand in graphical forms and understand what shifts the demand curve.
CO-3	Understand the law of supply and elasticity of supply
CO-4	Explain the Different methods of competition and theories of market.
CO-5	Apply the concept of cost and revenue

### **FINANCIALACCOUNTING – II**

#### **SUB.CODE:JSCOC2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Able to maintain royalty and non-trading accounts.
CO-2	Develop accounting skills to prepare Consignment and Joint venture account.
CO-3	Prepare accounts of branches under debtors, stock and debtors system of accounting of dependent branches
CO-4	Recall the accounting procedure for hire purchase system and prepare relevant accounts.
CO-5	Prepare the insolvency accounts of an individual

### **PRINCIPLES OF MANAGEMENT**

#### **SUB.CODE:JSCOYB2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Explaining the concepts based on management and its features
CO-2	Summarizing the principles and importance of planning
CO-3	Interpreting various concepts based on organization and its element
CO-4	Understanding the important topics in Staffing and Recruitment.
CO-5	Understanding and analyse the importance of controlling, coordination and communication

**BUSINESS STATISTICS****SUB.CODE:JSCOEC1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Recall and relate various method of collection of data and its diagrammatic representation
CO-2	Explain and Compute measures of averages
CO-3	Explain and Compute measures of dispersion
CO-4	Provide practical exposure on calculation of time series
CO-5	Familiarise the concept of interpolation and extrapolation

**OFFICE MANAGEMENT****SUB.CODE:JSBCOEC1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	To familiar with modern office management and business communications
CO-2	Get familiar with Office Assistant skills for complete office related tasks.
CO-3	They become well versed with the work culture of an office
CO-4	To gain knowledge about the behaviour of organization and people.
CO-5	Ability to organize and structure data.

**HIGHER FINANCIAL ACCOUNTING****SUB.CODE:JSCOD3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understanding the basic concepts of partnership and procedures related to calculation of ratios.
CO-2	Understanding the procedures at the time of admission of a partner
CO-3	Acquiring the procedures to be followed at the time of retirement of a partner
CO-4	Can easily prepare the journal entries of amalgamations and sale of partnership firms
CO-5	Analyzing dissolution and insolvency of firms and individuals.



**BUSINESS LAW****SUB.CODE:JSCOE3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Assessing the various elements related to business law and contract
CO-2	Interpreting different type of contract and its features
CO-3	Able to learn the conditions of indemnity and guarantee
CO-4	Explain about the agency system related to creation and termination of an agency
CO-5	Examine the distinct between sale and agreement to sell and its features and Critically evaluate conditions and warranties of Sale of Goods Act

**BUSINESS COMMUNICATION****SUB.CODE:JSCOYC3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Outline the importance of effective business communication
CO-2	Understand the intricacies of responding to business related queries, Orders, Credit, and Claims
CO-3	Categorizing effective correspondence with banks, Government, Import and Export Agencies.
CO-4	Apply the various procedures understood in writing of application letters.
CO-5	Apply the usage of the modern communication devices.

**CUSTOMER RELATIONSHIP MANAGEMENT****SUB.CODE:JSNMCOYC1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Create understanding about customer support.
CO-2	Apply the customer support methodology in business ventures
CO-3	Implement the ERP and related technology
CO-4	Able to develop sound customer relationship management
CO-5	Design and implement the different models of CRM

## **COST ACCOUNTING**

**SUB.CODE:JSCOF4**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Recall various concepts of costing and costing methods
CO-2	Analyze the various methods of calculating cost of material and labour
CO-3	Analyze the various methods of overheads
CO-4	Outline the cost under process costing system
CO-5	Examine about operational costing and contract costing

## **MODERN BANKING PRACTICES**

**SUB.CODE:JSCOG4**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Identify the functions of the Commercial Banks & Reserve Bank of India.
CO-2	Examine the various types of accounts and its opening procedures.
CO-3	Explain the features of Negotiable instruments.
CO-4	Analyse the role of paying banker and collecting banker as per bank rules
CO-5	State the recent trends in e-banking and Develop banking skills which supports business and entrepreneurship

## **PRINCIPLES OF INSURANCE**

**SUB.CODE:JSCOYD4**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	To understand the concept of insurance and its evolution
CO-2	Able to distinguish various Life Insurance Plans and law relating to life insurance
CO-3	To classify and analyze various categories of general insurance products.
CO-4	To know the law relating to marine insurance
CO-5	To familiarize the students with concepts of Rural insurance and health insurance schemes

**BUSINESS ETHICS****SUB.CODE:JSBCOEC2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Students will be able to understand the business ethics.
CO-2	To Imbibe types ethical issues
CO-3	Understand the internal ethics relating the employees in the organisation
CO-4	Understand the external ethics relating the consumers and society
CO-5	Acquire the knowledge related to Vendor, Government and Social Audit

**CORPORATE ACCOUNTING– I****SUB.CODE:JSCOH5**

<b>CO No.</b>	<b>Course Outcomes</b>	<b>PSOs Addressed</b>	<b>Cognitive Level</b>
CO-1	Explaining about the basic provisions towards issue of shares.	1	U
CO-2	Understanding the concepts of redemption of preference shares & debentures and its accounting	2	U
CO-3	Analyze the companies final accounts	2	An
CO-4	Estimating methods of valuation of goodwill and shares	4	E
CO-5	Preparation of accounts during business acquisition and work with internal reconstruction in companies accounts.	2	U

**CC-IX FINANCIAL SERVICES****SUB.CODE:JSCOI5**

<b>CO No.</b>	<b>Course Outcomes</b>	<b>PSOs Addressed</b>	<b>Cognitive Level</b>
CO-1	Understand the role and functions of the financial system	2	U
CO-2	Demonstrate an awareness of the mutual funds	4	Ap
CO-3	Outline the concept of leasing and types of venture capital	4	Ap
CO-4	Understanding the RBI guidelines regarding hire purchase	2	U
CO-5	Evaluate and create strategies to promote factoring in India.	2	U

**FUNDAMENTALS OF INFORMATION TECHNOLOGY****SUB.CODE: THEORY-JSCOJ5****PRACTICAL-JSCOJ5P**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understand the concept of input and output devices of computers and how it works
CO-2	Will have a working knowledge of paragraph formatting, macro and mail-merge in MS-Word.
CO-3	Creation of Excel worksheet with multiple options and formula
CO-4	Application of MS-Access in various fields
CO-5	Develop slide presentation for their assignments

**INCOME TAX****SUB.CODE: JSCOEC2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understand the various concepts of income tax and related terminologies
CO-2	Describe how to arrive taxable salary
CO-3	Measure the income from house property
CO-4	Measure the profits and gains of business and profession and capital gains
CO-5	Exercise the set off and carry forward and deductions from gross total income

**STRESS MANAGEMENT****SUB.CODE:JSNMCOEC2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understand the basic principles of stress management
CO-2	Recognize your stress triggers and how to manage them
CO-3	Develop proactive responses to stressful situations
CO-4	Use coping tips for managing stress both on and off the job
CO-5	Develop a long term action plan to minimize and better manage stress

## **CORPORATE GOVERNANCE**

**SUB.CODE:JSBCOEC3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Demonstrate a solid understanding of the purpose and nature of corporate governance
CO-2	Evaluate the significance in relation to corporate governance framework
CO-3	Explain the importance of regulation, markets and information in corporate ethics.
CO-4	Evaluate international differences and similarities in relevant institutions and developments corporate social responsibility
CO-5	Critically assess governance concerns for individual corporations and the concept of whistle

## **LABOUR LAWS**

**SUB.CODE:JSCOK6**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understand the scope and objectives of-Factories Act, 1948 (with amendments)
CO-2	Enumerate the provisions relating to Industrial Dispute Act
CO-3	Understand the importance of Trade Union Act
CO-4	Discuss the legislations relating to welfare of workers such as Minimum Wages Act.
CO-5	Explain the importance of Industrial legislations to Workmen Compensation Act, etc

## **MANAGEMENT ACCOUNTING**

**SUB.CODE: JSCOL6**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Outline the various concepts relating to management accounting and Ratio analysis.
CO-2	Able to prepare fund flow and cash flow statement.
CO-3	Comparing various alternatives using marginal costing and decision making.
CO-4	Analyze new budget and budgetary control for organizations
CO-5	Prepare various capital expenditure decision proposals

## **CORPORATE ACCOUNTING – II**

**SUB.CODE: JSCOM6**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Gain the knowledge of amalgamation of the company.
CO-2	Understand the process of liquidation in the company accounts.
CO-3	Can understand and prepare the accounts of Holding Companies
CO-4	Able to prepare the accounts of Banking Companies and double accounts system.
CO-5	Can understand the concept of Human Resources Accounting and Inflation Accounting.

## **AUDITING**

**SUB.CODE: JSCON6**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Be proficient with the general principles of auditing.
CO-2	Understand the process of verification and valuation of the assets and liabilities.
CO-3	Know the significances of vouching principles and procedures
CO-4	Know the statutory rights, duties, roles and qualification of auditors in Limited company.
CO-5	Understand the various aspects of investigation

## **BUSINESS ENVIRONMENT**

**SUB.CODE:JSCOEC3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understand the concept, significance and changing dimensions of Business Environment
CO-2	Identify various types of Business Environment and tools for scanning the Environment
CO-3	Gain insights on economic environment of business.
CO-4	Appreciate the importance and impact of LPG on a business firm.
CO-5	Familiarise with the techniques of environmental analysis.

## **M.COM**

### **ECONOMIC LEGISLATION**

#### **SUB.CODE: JSPCOA1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Remember and understand the scope and objects Industries Development and Regulation Act and Consumer Protection Act
CO-2	Understand and appreciate the importance of Essential Commodities Act
CO-3	Analyses the legislations relating to foreign trade foreign contribution act
CO-4	Comprehend and critically evaluate the laws relating to SEBI Act and Sick Industrial Companies Act
CO-5	Understand the provisions relating to Copy Right Act and Trade and Merchandise Mark Act

### **ADVANCED COST TECHNIQUES**

#### **SUB.CODE:JSPCOB1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Develop knowledge and understanding of the operation and maintenance of accounting systems for the capture, measurement and reporting of cost-based information.
CO-2	Assess the relevance, strengths and weaknesses of different costing systems.
CO-3	Cherish the importance of planning, evaluation and control in the management process by way of understanding different Cost techniques.
CO-4	Make written and oral presentations based on different costing method.
CO-5	Become a Cost Accountant/ Cost & Accounts Executive or Manager/ Senior Accountant/Associate and Deputy Manager/ Finance Analyst/ Compliance Officer.

### **MANAGEMENT INFORMATION SYSTEM**

#### **SUB.CODE:JSPCOC1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Thoroughly understand the concept of management information system and the advantages of computer based information system
CO-2	Develop skills towards the working of transaction processing system
CO-3	Understand the working of database management technology
CO-4	Explain the workings and components decision support system
CO-5	Able to explain system analysis and design

**SERVICES MARKETING**  
**SUB.CODE:JSPCOEC1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Define the services marketing and list out the reasons for its growth and explain its role in an economy.
CO-2	Should have better exposure about the evolution and growth of service marketing sector
CO-3	Explain the role of People, process and physical evidence in services marketing.
CO-4	Discuss the marketing mix if various services like banking, tourism and hotels.
CO-5	Students are more inclined to tackle challenges and opportunities in banking and financial service sector

**FINANCIAL MANAGEMENT**  
**SUB.CODE: JSPCOD2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Identifies the basic concepts of financial Management
CO-2	Classify and compute various leverages and identify the sources of Long Term Finance.
CO-3	Summarize and compute the cost of capital of the firm.
CO-4	Classify and compute various Capital Structure Theories
CO-5	Exemplify and compute the different models of dividend policy.

**ADVANCED BUSINESS STATISTICS**  
**SUB.CODE:JSPCOE2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Understanding and applying correlation and regression analysis.
CO-2	Learned to apply the analysis of Time Series, application of theory of probability and probability distributions.
CO-3	Also deriving sampling distributions and application of estimation process.
CO-4	Conducting hypothesis testing for different types of situations and appreciating the importance of concepts involved in such testing
CO-5	Learned to conduct ANOVA and understand the application of nonparametric testing



**ENTREPRENEURIAL DEVELOPMENT**  
**SUB.CODE:JSPCOF2**

CO No.	Course Outcomes
CO-1	Recognize the concept of entrepreneurship and the functions of an entrepreneur
CO-2	Examine the various Entrepreneur Development Agencies
CO-3	Appraise the feasibility of starting a business
CO-4	Discover the role of Entrepreneur Development programme
CO-5	Explain the importance of women entrepreneurs and resolve the problems of sickness in Small Scale Industries

**TOURISM MANAGEMENT**  
**SUB.CODE: JSPCOEC2**

CO No.	Course Outcomes
CO-1	Explain the myths and problems in tourism system
CO-2	Understand the planning for tourism
CO-3	Understanding the management of tourism
CO-4	Developing skills to organise tourism
CO-5	Equip knowledge towards travel agency management

**INTERNET AND E-COMMERCE**  
**THEORY (SUB.CODE: JSPCOED1)**  
**PRACTICAL (SUB.CODE:JSPCOED1P)**

CO No.	Course Outcomes
CO-1	Logically observed and experienced the main activities of E-Commerce
CO-2	Are able to start up and create e-commerce website
CO-3	Familiarized with online payment services and different cyber laws
CO-4	Ability to understand the EDI system and web security issues.
CO-5	Acquired knowledge of E-marketing tools and E-mail applications

**INVESTMENTMANAGEMENT**  
**SUB.CODE:JSPCOG3**

CO No.	Course Outcomes
CO-1	Create investment awareness among the young generation and Understand the objectives of Investment, Analyse the various investment alternatives that are available for an investor and evaluate the criteria for selecting the best investment proposals
CO-2	analyse the various aspects of Capital Market in India.
CO-3	plain the importance of Mutual Funds and Mutual Fund investors' protection in India.
CO-4	Analyse and Compare the intrinsic value of shares with that of the Market value of

	shares on the basis of Fundamental analysis and apply the technical tools and find out the movement of share prices in Stock Exchanges.
CO-5	Evaluate and analyse the principles of portfolio management, portfolio models, cultivates the habit of investing in securities and helps in managing portfolio in a profitable manner

## **RESEARCH METHODOLOGY**

**SUB.CODE:JSPCOH3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Perceive the nature and scope of research and classify the various types of research
CO-2	Acquire knowledge about the steps involved in research process and various methods of research design.
CO-3	Determine sampling methods, decide the sample size and classify primary data and interpret them
CO-4	Evaluate the primary data using statistical tools and interpret the results
CO-5	Present the research report in the order of presentation

## **HUMAN RESOURCE MANAGEMENT**

**SUB.CODE: JSPCOI3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Acquaint with the techniques and principles to manage human resource of an organisation.
CO-2	Gaining the benefits of human resource development to the employees of an organisation with a view to attaining goals of the organisation.
CO-3	Analyze the real time implications of the selection process.
CO-4	Identify the role of employee with measure of incentives
CO-5	Develop skills in efficient management of human resources in any organisation, handling the discipline and grievance procedures effectively.

## **INDUSTRIAL LAW**

**SUB.CODE:JSPCOJ3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Students should able to elaborate the concept of Industrial Law
CO-2	The students should able to illustrate the role of Factories Act 1948
CO-3	Students should able to outline the important causes & impact of industrial disputes and its settlement
CO-4	Student should be able to summarize the important provisions of Wage Legislations, in reference to Minimum Wages Act 1948 & Payment of Bonus Act 1965
CO-5	Student should able to summarize the important provisions of Provident Fund Act 1952 and Workmen Compensation Act

**RETAIL MANAGEMENT**  
**SUB.CODE:JSPCOEC3**

CO No.	Course Outcomes
CO-1	Gain knowledge of retailing and other basic thing
CO-2	Understand the theories of retailing
CO-3	Reveal their understanding of the entire strategies related with retail marketing.
CO-4	Know various forms of retailing business techniques in India.
CO-5	Acquire in depth knowledge of global retail market.

**INDIRECT TAXES**  
**SUB.CODE:JSPCOK4**

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Acquire knowledge about special provisions relating to indirect taxes.	5	An
CO-2	Analyse and apply the concept of GST	5	Ap
CO-3	Analyse the levy and collection under TNGST/CGST Acts	4	An
CO-4	Analyse the levy and collections under the integrated GST Act 2017	4	Ap
CO-5	Gain knowledge about Customs law in India	2	E

**EXPORT AND IMPORT PROCEDURES**  
**SUB.CODE:JSPCOL4**

CO No.	Course Outcomes
CO-1	Impart knowledge on methods of exporting and registration formulation for exports
CO-2	Understand the concept of export pricing and methods of payment
CO-3	Acquire knowledge about export and import procedure and steps in pre-shipment procedures
CO-4	Explain how to prepare documents for export and import
CO-5	Understand the functioning of institution involved in foreign trade

**SEMESTER –IV**  
**MANAGEMENT OF WORKING CAPITAL**  
**SUB.CODE:JSPCOM4**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Evaluate the importance of effective working capital management and its role in meeting the firm's strategic objectives and its impact in value creation.
CO-2	Identify how to manage cash.
CO-3	Evaluate comparative working capital management policies and their impact on the firm's profitability, liquidity, risk and operating flexibility.
CO-4	Apply the knowledge for managing receivables
CO-5	Develop skills to maintain the proper inventory management system in the organisation

**MPHIL COMMERCE**

**COURSE I – RESEARCH METHODOLOGY**  
**SUB.CODE– JSMPCO1**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Scholars would have understood the concepts of research methods in Commerce
CO-2	Scholars would have learnt to design the Research Proposal and decide the sample techniques and size.
CO-3	Scholars would have become familiar with the mode of collecting data and do the interpretation of the same.
CO-4	Scholars would have been exposed to the statistical tools and packages, imperative for researches
CO-5	Scholars would have learnt the art of writing the reports and to be cautious of plagiarism.

**COURSE II – UNIT – I ORGANISATION THEORY AND BEHAVIOUR**  
**SUB.CODE – JSMPCO2**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Explain the concepts of organisational behaviour and marketing management
CO-2	Acquire the leadership and personality skills among the scholars
CO-3	Describe the elements of the Marketing Mix, its importance and its application
CO-4	Elucidate the concept of buyer persona and its importance for constructing effective marketing campaigns.
CO-5	Describe marketing research, how it is done and how it helps in achieving marketing effectiveness.

**COURSE III – FINANCIAL MARKETS AND SERVICES****SUB. CODE – JSMPCO3**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Able to understand the concept, structure and role of financial system
CO-2	Explain the instruments and players in financial markets
CO-3	Understand the role and functions of development banks in India
CO-4	Develop knowledge about the merchant banking, mutual funds, lease financing and hire purchase companies
CO-5	Clearly explain the services of factoring, credit cards and venture capital scheme

**COURSE IV – TEACHING AND LEARNING SKILLS****SUB. CODE – JSMPCO4**

<b>CO No.</b>	<b>Course Outcomes</b>
CO-1	Develop the knowledge of Computer Applications and the use of ICT tools.
CO-2	Students will be able to understand the research methods associated with the study of human communication, and apply at least one of those approaches to the analysis and evaluation of human communication.
CO-3	Students will be able to find, use, and evaluate primary academic writing associated with the communication discipline.
CO-4	Oriented towards Basics of pedagogy and familiarized with the educational process.
CO-5	Understand the concept and process of teaching-learning.

## **BACHELOR OF BUSINESS ADMINISTRATION**

### **MANAGEMENT PRINCIPLES**

#### **SUBJECT CODE: JSADA1**

##### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: To develop the primary types of managers and roles they play.
- CO2: Describe current development in management practices.
- CO3: Able to construct the stages of the planning cycle.
- CO4: Improve knowledge of process based theories of motivation.
- CO5: Explain the basic control process and monitoring points

### **BUSINESS COMMUNICATION**

#### **SUBJECT CODE: JSADB1**

##### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Identify key principles in Business Communication.
- CO2: Understand the importance of being an effective Business Communication
- CO3: Develop the three parts of the writing process.
- CO4: Recognize the role and important of their audience.
- CO5: Pinpoint Common social media platforms used by Business.

## **MANAGERIAL ECONOMICS**

**SUBJECT CODE: JSADYA1**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Understanding the basic concepts of managerial economics.
- CO2: Able to Know the Law of DMR and three stages of production.
- CO3: Provide facility to Compare and contrast the different market types and its price.
- CO4: Explore the grand knowledge about National Income and its measurement.
- CO5: Identify the impact and functions of Money.

## **MARKETING MANAGEMENT**

**SUBJECT CODE: JSADC2**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Demonstrate strong conceptive knowledge in the functional areas of Marketing Management.
- CO2: Effective understanding of Marketing Environment.
- CO3: Able to perceive the ingredient of Buying behavior and marketing mix.
- CO4: Can realize the significance of market segmentation.
- CO5: Mastery in CRM

## **MATHEMATICS AND STATISTICS FOR MANAGERS**

**SUBJECT CODE: JSADYB2**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Organise to manage and present data.
- CO2: Identify the characteristics of different discrete and continuous distributions.
- CO3: Know the practical issues arising in sampling studies.
- CO4: Critically evaluate the uses and limitations of Differential Calculus.
- CO5: Understand the different dimensions of Matrices.

## **ORGANIZATIONAL BEHAVIOUR**

**SUBJECT CODE: JSADEC1**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Development of the field of Organizational behavior.
- CO2: Indentify the process used in developing communication.
- CO3: Demonstrate skills required for working in groups (team building)
- CO4: Identify the various leadership styles and the role of leaders in a decision making process.
- CO5: Analyse and compare different models used to explain individual behavior related to motivation

## **FINANCIAL ACCOUNTING**

**SUBJECT CODE: JSADD3**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Understand the basic knowledge of Financial Accounting Concepts.
- CO2: Develop the Art of keeping books.
- CO3: Proficient in practical preparation of primary financial statements.
- CO4: Gain the knowledge in preparation of Capital and Revenue Accounting.
- CO5: Explore the grand idea to work the average due date all account current.

## **BUSINESS LAW**

**SUBJECT CODE: JSADE3**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Integrate the concept of Business Law with Business
- CO2: Impart the basic legal knowledge of Pledge and Bailment.
- CO3: Demonstrate the contract of Agency.
- CO4: Communicate effectively in a Partnership firm.
- CO5: Ability to know the legal aspects in sale of Goods Act.

## **MANAGEMENT INFORMATION SYSTEMS**

**SUBJECT CODE: JSADYC3**

### **Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Identify the basic components of Management Information System.
- CO2: Conceptualize Information Systems as combination of hardware and software technologies.
- CO3: Understand the need for information at various levels of management.
- CO4: Management information design - examine in the context of any growing company.
- CO5: Know the applications of information system in various level of management.

## **PRINCIPLES OF INSURANCE**

**SUBJECT CODE: JSNMDEC1**

### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Understand the basic Elements of Insurance
- CO2: Able to indicate the role and function of LIC
- CO3: Analyze the nature of fire insurance
- CO4: Demonstrate the types of marine policies
- CO5: Explore the terms and conditions of deposit and credit insurance



**PERSONNEL MANAGEMENT**  
**SUBJECT CODE: JSADF4**

**Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Develop the understanding of the concept of Personnel Management.
- CO2: Ability to design job description and job specification.
- CO3: Ability to know the impact of training and performance appraisal.
- CO4: Rational design of compensation and salary administration.
- CO5: Implement the employees' relations in an organisation.

**COST ACCOUNTING**  
**SUBJECT CODE: JSADG4**

**Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Familiar about the basic of Cost Accounting.
- CO2: Develop the knowledge of materials handling in an organisation.
- CO3: Create overall view about the overheads and its appropriate allocations.
- CO4: Expertise in process job and contract costing.
- CO5: Ability to grasp the fact of standard costing.

**COMPANY LAW AND SECRETARIAL PRACTICE**  
**SUBJECT CODE: JSADYD4**

**Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Able to the list the contents of Memorandum, Articles, Rights and liabilities of members.
- CO2: Will recognize the rights and duties of secretary.
- CO3: Differentiate duties and liabilities of directors.
- CO4: Able to pinpoint the procedures in Winding up.
- CO5: Organize Company meeting and communicate it properly.

**PRODUCTION MANAGEMENT**  
**SUBJECT CODE: JSADH5**

**Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Develop an ability to perform the role of a production and a materials manager in an organization.
- CO2: Improve due date performance of plant location and plant lay out with capacity constraints.
- CO3: Understand ethical issues in purchasing and negotiations.
- CO4: Integrate the organization wide materials requirement to develop overall plan.
- CO5: Develop the knowledge and skills needed to plan and control manufacturing of goods and services in an industrial setting.

**OPERATIONS RESEARCH**  
**SUBJECT CODE: JSADI5**

**Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Identify and develop operational Research models from the verbal description of the real system.
- CO2: Understand the mathematical tools that are needed to solve optimization problems.
- CO3: Use mathematical software to solve the proposed models.
- CO4: Develop a report that describes the model and the solving techniques.
- CO5: Course experiences dealt with large scale data sets

**MANAGEMENT ACCOUNTING**  
**SUBJECT CODE: JSADJ5**

**Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Enlighten the students about the true knowledge on fundamentals of Management Accounting.
- CO2: Gains the proper idea about the financial statement and its analysis.
- CO3: Familiarize their concept and preparation of Fund Flow Statement.
- CO4: Conversant about the cash flow statement.
- CO5: Enriched in marginal costing and budgetary control.

**ADVERTISEMENT AND SALES PROMOTION**  
**SUBJECT CODE: JSADEC2**

**Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Able to demonstrate the elements of Marketing Mix and Salesmanship.
- CO2: Analyze the aspects of Advertisement copy.
- CO3: Pinpoint the role of Advertising Agency.
- CO4: Confidence in practicing and following ethical and legal aspects of sales promotion.
- CO5: Able to measure effectiveness of personnel selling.

**E-COMMERCE**  
**SUBJECT CODE: JSNMADEC2**

**Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Understand the e-commerce infrastructure and trends.
- CO2: Able to know the legal security issues [EDI].
- CO3: Identify e-commerce net digital design.
- CO4: Analyze the channel conflict management security.
- CO5: Integrate theoretical frameworks with business strategies.

## **TOURISM AND TRAVEL MANAGEMENT**

### **SUBJECT CODE: JSBADEC3**

#### **Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Ability to understand the fundamental concept of tourism
- CO2: Understand the theoretical framework of destination planning and various intricate in it
- CO3: Getting an all around idea about organizing, controlling and staffing in tourism organisation
- CO4: Gaining knowledge towards National Tourism Organisation and Accommodation management
- CO5: Students know about travel and tourism agencies, their structure and organisation

## **STRATAGIC MANAGEMENT**

### **SUBJECT CODE: JSADK6**

#### **Course Outcome**

**On successful completion of the course, students will able to:**

- CO1: Understand the basic concepts and principles of strategic management.
- CO2: Analyze strategic macro environmental issues.
- CO3: Assess organizational performance.
- CO4: Able to formulate SBU strategies.
- CO5: Expertise in implementing strategy at the single business unit level.
- CO6: Students will be able to develop their capacity to think and execute strategic early.

## **FINANCIAL MANAGEMENT**

### **SUBJECT CODE: JSADL6**

#### **Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Helps students to understand the basic concepts of Financial Management.
- CO2: Provides insight on the measurement of cost of capital.
- CO3: Able to recognize the factors affecting the capital structure.
- CO4: Developed in decision making skills on capital budgeting.
- CO5: Identify and rectify the factors influencing financial planning.

## **ENTREPRENEURIAL DEVELOPMENT**

### **SUBJECT CODE: JSADM6**

#### **Course outcome**

**On successful completion of the course, students will able to:**

- CO1: Able to understand the functions of entrepreneurs and the classification of Entrepreneur.
- CO2: Spot the factors influencing the entrepreneurship and issues of EDP.
- CO3: Mastery about SIPCOT and the role of government in entrepreneurial growth.
- CO4: Proficient in overcoming the problem of rural entrepreneur.
- CO5: Design and evaluate project report and marketing plan.

## **BANKING**

**SUBJECT CODE: JSADN6**

### **Course outcome**

**On successful completion of the course, students will able to:**

CO1: Able to understand in the function of commercial Banks.

CO2: Pinpoint the Bankers right.

CO3: Mastery in the aspect of Cheque.

CO4: Proficiency in E-banking modern banking operations

CO5: Expertise in RBI policy rates and reserve rates.

## **INDUSTRIAL RELATIONS AND LABOUR LEGISLATION**

**SUBJECT CODE: JSADEC3**

### **Course Outcome**

**On successful completion of the course, students will able to:**

CO1: Able to elaborate the concept of industrial relations.

CO2: Aware of the present state of industrial relations in India.

CO3: Be acquainted with the concepts, principles and issues connected with trade unions, collective bargaining and workers participation.

CO4: Grasp the various process and procedures of handling employee relations.

CO5: Better understanding of the problem with effective solution.