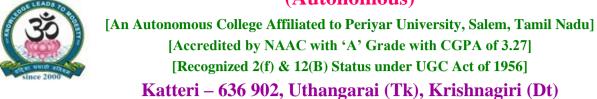
SRI VIDYA MANDIR ARTS & SCIENCE COLLEGE



Tamil Nadu, India



PROGRAM OUTCOMES,
PROGRAMME SPECIFIC OUTCOMES
AND COURSE OUTCOMES

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OVER ALL PROGRAMME OUTCOMES FOR UG

PO1	Critical Thinking: Take informed actions after identifying the assumptions that
	frame our thinking and actions, checking out the degree to which these
	assumptions are accurate and valid and looking at our ideas and decisions
	(intellectual, organisational, and personal) from different perspectives.
PO2	Effective Communication: Speak, read, write and listen clearly in person and
	through electronic media in English and in one Indian language and make
	meaning of the world by connecting people, ideas, books, media and
	technology.
PO3	Social Interaction: Elicit views of others, mediate disagreements and help
	reach conclusions in group settings.
PO4	Effective Citizenship: Demonstrate empathetic social concern and equity
	centred national development and the ability to act with an informed awareness
	of issues and participate in civic life through volunteering.
PO5	Ethics: Recognize different value systems including your own, understand the
	moral dimensions of your decisions and accept responsibility for them.
PO6	Environment and Sustainability: Understand the issues of environmental
	contexts and sustainable development.

OVER ALL PROGRAMME OUTCOMES FOR PG

PO1	Attain profound expertise in all disciplines
PO2	Acquire ability to function in multidisciplinary subjects
PO3	Learn ethical principles of and be committed to professional ethics
PO4	Attain ability to exercise in research investigations and innovations
PO5	Develop sound mind to face the risk factors of life
PO6	Incorporate self-directed and life- long learning
PO7	Obtain ability to maneuverer in diverse contexts with global perspective

BA (TAMIL)

PROGRAMME OUTCOMES (PO)

PO1	புதிய அறிவுக்கான முகவர்களாகவும், வேலைவாய்ப்பினைப் பெறுவதற்கும்
	தொழில்முனைவோராக மாறுவதற்கும் தேவையான புதிய திட்டங்களைப்
	புரிந்துகொள்ளவும் நடைமுறைப்படுத்தவும் தேவையான மாற்றி சிந்திப்பதை
	இலக்காகக் கொண்ட தொடக்கநிலைக் கற்றலை இளநிலை மாணவர்களுக்கு
	உறுதிப்படுத்துதல்.
PO2	உயர்கல்வியைத் தெரிவு செய்வதற்கான பயிற்சியை மாணவர்களுக்கு அளித்தல்
PO3	போட்டியை எதிர்கொள்ளும் திறனுடையவர்களாகவும், இந்திய நாட்டின் சமூகப்
	பொறுப்புள்ள குடிமகனாகவும் அவர்களை உருவாக்குதல்
PO4	தொழில்நுட்பம், பகுப்பாய்வு, படைப்புத்திறன் ஆகியவற்றை வெளிப்படுத்தச்
	செய்தல்
PO5	மொழிகள் மற்றும் பண்பாடுகள் குறித்த பரந்துபட்ட கருத்துப் பின்புலத்தைப்
	அறியச் செய்தல்

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	தமிழ் இலக்கியத்தில் புலமை பெறல்
PSO2	திறனாய்வு செய்யும் திறன் அறிதல்.
PSO3	போட்டித் தேர்வுகளை மாணவர்கள் எதிர்கொள்ளுதல்.
PSO4	இலக்கண இலக்கிய அறிவு பெறுதல்.
PSO5	கருத்து வெளிப்பாட்டுத் திறன் பெறுதல்.
PSO6	பழந்தமிழ் வரலாற்றை அறிதல்
PSO7	இலக்கிய வகைமைகளை அறிதல்
PSO8	படைப்பாக்கத் திறன் மற்றும் தகவல் தொடர்புத் திறன் பெறுதல்

SEMESTER - I

பாடத்திட்டம் : பி. ஏ . தமிழ்			
பருவம்	முதந்பருவம்	பாடம்	அடிப்படைப் பாடம்
தாள்	1	தலைப்பு	இக்கால இலக்கியங்களும் சிறுகதையும்
தாள் குறியீடு	20UFTA01	மதிப்பெண்கள்	100
நேரம்	6 மணி	புள்ளிகள்	3

கற்றல் விளைவுகள் (Course Outcomes)

- 1. சமூக மாற்றச் சிந்தனைகளை உள்ளடக்கிய தற்கால இலக்கியப் பரப்பை அறிதல்.
- 2. புதுக்கவிதை, சிறுகதை, உரைநடை ஆகியவற்றின் இலக்கியத்திறன் கண்டறிதல்.
- 3. சந்திப்பிழையின்றி எழுதும் திறன் பெறுதல்.
- 4. அன்றாடப் பயன்பாட்டிலுள்ள ஆங்கிலச் சொற்களுக்குப் பொருத்தமான சொற்களை உருவாக்கச் செய்தல்.
- 5. அரசுப்போட்டித் தேர்வுகளுக்கேற்ப தமிழ்மொழியில் பயிற்சி அளித்தல்.

பாடத்திட்டம் : பி. ஏ . தமிழ்			
பருவம்	முதற்பருவம்	பாடம்	முதன்மைப் பாடம்
தாள்	1	தலைப்பு	நன்னூல் - எழுத்ததிகாரம்
தாள் குறியீடு	20UTA1C01	மதிப்பெண்கள்	100
நேரம்	6 ഥഞ്ഞി	புள்ளிகள்	5

- 1. தமிழ் எழுத்துக்களின் தன்மையையும் மொழியின் கட்டமைப்பையும் உணர்தல்
- 2. எழுத்துப்பிழையின்றி எழுதுவதற்கான இலக்கண விதிகளை அறிதல்.
- 3. சொற்களின் புணர்ச்சியை அறிந்து பிழையின்றி எழுத, கற்க அறிந்து கொள்ளல்
- 4. முதலெழுத்து சார்பெழுத்து பற்றிய ஆழமான அறிவு பெறுதல்.
- 5. கற்றல் கற்பித்தல் தொடர்பான கல்வி உளவியல் அறிதல்.
- 6. பகுபதம், பகாபதம் போன்ற சொற்களின் தன்மைகளை அறிந்துகொள்ளுதல்.

பாடத்திட்டம் : பி. ஏ . தமிழ்				
பருவம்	முதந்பருவம்	பாடம்	முதன்மைப் பாடம்	
தாள்	2	தலைப்பு	இக்கால இலக்கியங்கள் (கவிதை, உரைநடை, நாடகம்)	
தாள் குறியீடு	20UTA1C02	மதிப்பெண்கள்		
நேரம்	5 மணி	புள்ளிகள்	4	

- 1. இலக்கிய வளர்ச்சிப் போக்கில் இக்கால இலக்கியங்கள் குறித்த தெளிவினை மாணாக்கர் பெறுவர்.
- 2. இக்கால இலக்கிய வடிவங்களையும் உத்திகளையும் மாணவர்கள் தெரிந்துகொள்வர்.
- 3. சிறுகதை, உரைநடை, கவிதை, நாடகம் எழுதுவது பற்றிய திறனைப் பெறுவர்.
- 4. சங்ககாலச் செய்யுள் தொடங்கி மரபுக்கவிதை தோன்றிய நிலையை அறிதல்.
- 5. இயற்கை ஈடுபாட்டைக் கவிஞர் பார்வையிலிருந்து உணர்ந்துகொள்ளுதல்.
- 6. பிறமொழி இலக்கியங்களோடு தமிழ் இலக்கியத்தை ஒப்பிட்டுப்பார்க்கும் திறனை வளர்த்தல்.

பாடத்திட்டம் : பி. ஏ. தமிழ்				
பருவம்	முதற்பருவம்	பாடம்	சார்புப் பாடம்	
தாள்	1	தலைப்பு	தமிழக வரலாறும் பண்பாடும்	
தாள் குறியீடு	20UTA1A01	மதிப்பெண்கள்	100	
நேரம்	5 மணி	புள்ளிகள்	4	

- 1. சங்ககால தமிழக வரலாற்றை அறிதல்.
- 2. பல்லவர், சோழர் வரலாற்றை அறிதல்.
- 3. பாண்டியர்கள் முதல் நாயக்கர் வரை தமிழக அரசியலை அறிதல்.
- 4. ஐரோப்பியாகள் காலம் தொடங்கி விடுதலைப் போரில் தமிழகத்தின் பங்கினை அறிதல்
- 5. பழந்தமிழரின் அரசியல், சமயம், கலைகள் பற்றி அறிதல்.
- 6. பண்பாட்டை உணர்தல், பண்பாட்டில் ஏற்பட்ட மாறுதல்களை அறிதல்.

பாடத்திட்டம் : பி ஏ தமிழ்				
பருவம்	முதற்பருவம்	பாடம்	மதிப்புக் கல்விப் பாடம்	
தாள்	1	தலைப்பு	மனவளக்கலை யோகா	
தாள் குறியீடு	20UVE01	மதிப்பெண்கள்	100	
நேரம்	2 ഥഞ്ഞി	புள்ளிகள்	2	

- 1. உடல் மனம் வலிமை பெறுதல்.
- 2. மனம் வலிமை பெறுதல்
- 3. அமைதியைக் கற்றுக்கொடுத்தல்
- 4. இளமையைத் தக்க வைத்தல்
- 5. எண்ணங்கள் நன்முறையில் அமைய வழி செய்தல்
- 6. கவலை இல்லாமல் வாழக் கற்றுக்கொடுத்தல்

SEMESTER - II

பாடத்திட்டம் : பி .ஏ . தமிழ்								
பருவம்	இரண்டாம் பருவம்	பாடம்	அடிப்படைப் பாடம்					
தாள்	2	<u>த</u> லைப்பு	இடைக்கால இலக்கியங்களும் புதினமுனம்					
தாள் குறியீடு	20UFTA02	மதிப்பெண்கள்	100					
நேரம்	6 மணி	புள்ளிகள்	3					

കന്റ്വാൻ വിതെബ്യക്ക് (Course Outcomes)

- 1. ஆன்மீகச் சிந்தனை உடையவர்களாகத் திகழ்வர்
- 2. இன்றைய வாழ்வியலில் இளையோர் உணர்ச்சிவய நிலையில் தவறுகள் செய்யக் கூடாது என்பதையும் அதன் விளைவுகளுக்கு வருந்தவேண்டி இருக்கும் என்பதையும் உணர்ந்து நற்பண்புகளை வளர்த்துக் கொள்வர்.
- 3. பக்தி இலக்கியங்களின் வழி இறையியல் கோட்பாடுகளை அறிதல்.
- 4. நாவல் இலக்கியம் வாயிலாக சமுதாயச் சிந்தனைகளை ஏற்படுத்துதல், கடிதம், கட்டுரைப் பயிற்சி அளித்தல
- 5. பணித்தேர்வுகளை எதிர்கொள்ளும் ஆற்றலும் அறிவும் பெறுவர்.

பாடத்திட்டம் : பி. ஏ . தமிழ்								
பருவம்	இரண்டாம் பருவம்	பாடம்	முதன்மைப் பாடம்					
தாள்	3	தலைப்பு	நன்னூல் - சொல்லதிகாரம்					
தாள் குறியீடு	20UTA2C03	மதிப்பெண்கள்	100					
நேரம்	6 ഥഞ്ഞി	புள்ளிகள்	5					

- 1. சொல் அமைப்பை அறிதல்
- 2. தமிழ்ப்பெயர் வகைகளை அறிந்திடும் கற்றல் நிகழும்
- 3. வினைஅமைப்பு, வினைவகைகள் உறுதியாகக் கற்பிக்கப்பெறும்
- 4. பலபொருள் ஒருசொல், ஒரு பொருள் பல சொற்களை அறிதல்
- 5. சொல் நெகிழ்வின் திறன் அறிதல்
- 6. பிழையின்றி மொழியினைப் பேசவும் எழுதவும் அறிதல்

	பாடத்திட்டம் : பி. ஏ . தமிழ்								
பருவம்	இரண்டாம் பருவம்	பாடம்	முதன்மைப் பாடம்						
தாள்	4	<u>த</u> லைப்பு	இக்கால இலக்கியங்கள் (சிறுகதையும் புதினமும்)						
தாள் குறியீடு	20UTA2C04	மதிப்பெண்கள்							
நேரம்	5 மணி	புள்ளிகள்	4						

- 1. இலக்கிய வளர்ச்சிப் போக்கில் இக்கால இலக்கியங்கள் குறித்த தெளிவினை மாணாக்கர் பெறுவர்.
- 2. இக்கால இலக்கிய வடிவங்களையும் உத்திகளையும் மாணவர்கள் தெரிந்துகொள்வர்.
- 3. சிறுகதை, புதினம் எழுதுவது பற்றிய திறனைப் பெறுவர்.
- 4. சங்ககாலச் செய்யுள் தொடங்கி சிறுகதை, புதினம் தோன்றிய நிலையை அறிதல்.
- 5. இயற்கை ஈடுபாட்டை எழுத்தாளர் பார்வையிலிருந்து உணர்ந்துகொள்ளுதல்.
- 6. பிறமொழி இலக்கியங்களோடு தமிழ் இலக்கியத்தை ஒப்பிட்டுப்பார்க்கும் திறனை வளர்த்தல்.

	பாடத்திட்டம் : பி. ஏ . தமிழ்							
பருவம்	இரண்டாம் பருவம்	பாடம்	சார்புப் பாடம்					
தாள்	2	தலைப்பு	தமிழ் மொழி வரலாறு					
தாள் குறியீடு	20UTA2A02	மதிப்பெண்கள்	100					
நேரம்	5 ഥഞ്ഞി	புள்ளிகள்	4					

- 1. மொழியின் வளர்ச்சி நிலைகளை வரலாற்றுப் போக்கில் கண்டறிதல்
- 2. மொழியின் அமைப்பைப் பகுத்துணரும் நுண்ணிய கலையை அறிதல்
- 3. தமிழின் தனித்தன்மைகளையும் மொழியியல் கொள்கைகளையும் அறிதல்.
- 4. இலக்கிய நோக்கில் மொழியின் தோற்றத்தை அறிந்துகொள்ளுதல்
- 5. வரலாந்று நோக்கில் மொழியின் அமைப்பைப் புரிந்துகொள்ளுதல்
- 6. தமிழ்மொழியின் தொன்மையும் அதன் சிறப்பையும் அநிந்துகொள்ளுதல்

பாடத்திட்டம் : பி. ஏ . தமிழ்								
பருவம்	இரண்டாம் பருவம்	பாடம்	சுற்றுச்சூழல் கல்வி					
தாள்	1	தலைப்பு	சுற்றுச்சூழலியல்					
தாள் குறியீடு	20UES01	மதிப்பெண்கள்	100					
நேரம்	2 மணி	புள்ளிகள்	2					

- 1. சுற்றுச்சூழல் கல்வியைப் பற்றி அறிந்துகொள்ளுதல்
- 2. சுற்றுச்சூழல் மாசுபடுவதை தவிர்க்கும் வழிமுறைகளைக் கையாளுதல்
- 3. இயற்கை வளங்களை அறிதல்
- 4. சூழ்நிலை மண்டலங்களையும் அவற்றின் தன்மைகளையும் அறிதல்
- 5. மக்கள்தொகைப் பெருக்கத்தினால் ஏற்படும் சுற்றுச்சூழல் பாதிப்பினை உணர்தல்
- 6. சுற்றுச்சூழல் குறித்த விழிப்புணர்வுகளை அறிதல்

MA (TAMIL)

PROGRAMME OUTCOMES (PO)

PO1	அரசு, தனியார் மற்றும் ஆராய்ச்சி நிறுவனங்கள் போன்ற பல்வேறு தளங்களில்
	முன்னோக்குச் செயல்பாடுகள், தொழில் முனைவோர் நிலை, பணிவாய்ப்பு
	போன்றவற்றைப் பெறுவதற்குரிய புதிய அறிவுப் படைப்பாளராகப் பட்டதாரிகளை
	உருவாக்குதல்.
PO2	பட்டதாரிகள் தத்தம் துறைகளில் புதிய தொழில்நுட்பங்களைக் கண்டுபிடிக்கவும்
	பின்பற்றவும் பயிற்சியளித்தல்.
PO3	சார்பற்ற நிலையில் அறிவை வெளிப்படுத்தும் வாழ்க்கை முழுவதற்குமான கற்றல்
	செயல்பாட்டில் ஈடுபடுவதற்கு மாணவர்களைப் பயிற்றுவித்தல்
PO4	தரவுகளை விளக்கவும் பகுப்பாய்வு செய்வதற்கும் உரிய மாதிரிகளை
	உருவாக்குதல், ஆய்வுகளை வடிவமைத்தல், நடத்துதல் ஆகிய திறன்
	பொருந்தியவர்களாய் பட்டதாரிகளை வடிவமைத்தல்.
PO5	பட்டதாரிகள் மொழிகள் மற்றும் பண்பாடுகள் தொடர்பான கண்டுபிடிப்புகளை
	வலுவாக வெளிப்படுத்தும் திறன் பெறுதல்.

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	இலக்கிய இலக்கண அறிவினைப் பெறுதல்.
PSO2	திறனாய்வு செய்யும் கலையினை அறிதல்.
PSO3	போட்டித் தேர்வுகளை மாணவர்கள் எதிர்கொள்ளுதல்.
PSO4	பல்துறை அறிவு பெறுதல்.
PSO5	கருத்து வெளிப்பாட்டுத்திறன் பெறுதல்.
PSO6	படைப்பாற்றல் திறனைப் பெறுதல்.
PSO7	மனித வாழ்வியல் மதிப்பீடுகளை உணரும் திறனநிதல்.
PSO8	காலந்தோறும் பண்பாட்டை அறிதல்.

COURSE OUTCOMES

SEMESTER - I

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
முதன்மைப்பாடம் - 1 தாள் குறியீடு: 20PTA1C01				தலைப்பு : தொல்காப்பியம் - எழுத்ததிகாரம்			
பருவம்	நேர	ம்	ம் மொத்த நேரம் ப		புள்ளிகள்	மதிப்பெண்கள்	
I	6	90			5	100	

கற்றல் விளைவுகள் (Course Outcomes)

- 1. எழுத்திலக்கணக் கோட்பாட்டை மாணவர்கள் அறிவர்.
- 2. மொழிவளத்தை வளர்க்கும் ஆற்றலைப் பெறுவர்.
- 3. எழுத்துக்கள் பிறக்கும் முறைமையினை மாணாக்கர்கள் உணர்வர்.
- 4. எழுத்துக்கள் புணரும் முறைமையினை மாணாக்கர்கள் அறிந்து கொள்வர்.
- 5. மொழியைப் பிழையின்றி எழுதுவதற்கானப் பயிற்சியைப் பெறுவர்.
- 6. தொல்காப்பியர் கால இலக்கணப் பயன்பாடுகளுக்கும், இக்கால இலக்கணப் பயன்பாடுகளுக்கும் இடையேயுள்ள வேறுபாட்டை அநிவர்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்								
முதன்மைப்பாட	முதன்மைப்பாடம் - 2 தாள் குறியீடு: 20PTA1C02 தலைப்பு: இக்கால இலக்கியம்							
பருவம்	நேரம்		மொத்த நேரம்	புள்ளிகள்		மதிப்பெண்கள்		
I	6		90	5		100		

- 1. தமிழ் எழுத்துக்களின் தன்மையையும் மொழியின் கட்டமைப்பையும் உணர்தல்
- 2. எழுத்துப்பிழையின்றி எழுதுவதற்கான இலக்கண விதிகளை அறிதல்.
- 3. சொற்களின் புணர்ச்சியை அறிந்து பிழையின்றி எழுத, கற்க அறிந்து கொள்ளல்
- 4. முதலெழுத்து சார்பெழுத்து பற்றிய ஆழமான அறிவு பெறுதல்.
- 5. கற்றல் கற்பித்தல் தொடர்பான கல்வி உளவியல் அறிதல்.
- 6. பகுபதம், பகாபதம் போன்ற சொற்களின் தன்மைகளை அறிந்துகொள்ளுதல்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
முதன்மைப்பாட	முதன்மைப்பாடம் - 3 தாள் குறியீடு: 20PTA1C03 தலைப்பு: சிற்றிலக்கியங்கள்						
பருவம்	நேரம்		மொத்த நேரம்	புள்ளிகள்		மதிப்பெண்கள்	
I	6		90		4	100	

- 1. இலக்கிய வளர்ச்சியில் சிற்றிலக்கியங்கள் பெறுமிடத்தை அறிவர்.
- 2. சிற்றிலக்கியங்களின் வகைப்பாடுகளைத் தெரிந்து கொள்வர்.
- 3. சிற்றிலக்கியங்களுக்கு இலக்கணம் கூறும் பாட்டியல் நூல்களை அறிவர்.
- 4. சிற்றிலக்கியங்களின் அமைப்பு முறையின் தனித்தன்மைகளை அறிவர்.
- 5. தன்னியலாகச் சிற்றிலக்கியம் இயற்றும் திறனைப் பெறுவர்.
- 6. காலந்தோறும் சிற்றிலக்கியங்களின் வளர்ச்சியை அறிவர்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
முதன்மைப்பாடம் - 4 தாள் குறியீடு :			குறியீடு : 20PTA1C0)4	தலைப்பு : கலைகள்	தமிழர் பண்பாட்டில்	
பருவம் I	С БЛ	ம் மொத்த நே ரம் 90			புள்ளிகள் 4	மதிப்பெண்கள் 100	

- 1. பழங்கால சமுகநிலைகளை மாணாக்கர்கள் அறியச்செய்தல்
- 2. தமிழக மன்னர்களின் ஆட்சிமுறை வீழ்ச்சி முறைகள் பற்றி மாணாக்கர்களுக்கு தெரியவைத்தல்
- 3. தமிழகத்தில் ஆதிக்கம் செலுத்திய அண்டை ஆட்சியாளர்களை மாணவர்களுக்குப் புலப்படுத்தல்
- 4. தமிழர் தம் நாகரிகம், பண்பாடு, கலாச்சாரம், பழக்கவழக்கங்களை மாணாக்கர்களுக்கு எடுத்துரைத்தல்
- 5. பண்டைத் தமிழர்கள் கலைக்கு அளித்த முக்கியத்துவம் பற்றி மாணவர்கள் அறியச் செய்து ஊக்குவித்தல்
- 6. தமிழர்களின் இசைக்கலை, கட்டடக்கலை, சிற்பக்கலை, ஓவியக் கலை, கூத்துக்கலையின் வளர்ந்த நிலைகளை எடுத்துரைத்தல்

பாடத்திட்டம் : எம்.ஏ. தமிழ்								
முதன்மைப்பாட	முதன்மைப்பாடம் - 5 தாள் குறியீடு : 20PTA1C05 தலைப்பு : உரையாசிரியர்கள்							
பருவம்	நேர	TÚD	மொத்த நேரம்	ଧ୍ୱର	ர்ளிகள்	மதிப்பெண்கள்		
I	6		90		4	100		

- 1. இலக்கண வரலாற்று அறிவுபெறுவர்.
- 2. இலக்கிய வரலாற்று அறிவு பெறுவர்.
- 3. இலக்கண வளர்ச்சிநிலையை அறிவதால் மொழித் திறனில் மேம்பாடு அடைவர்.
- 4. படைப்பிலக்கிய ஆற்றல் மிக்கவர்களாகத் திகழ்வர்.
- 5. உரையாசிரியா்களின் உரையின் வழி இலக்கண இலக்கியங்களை முறையாகக் கற்கும் திறம்பெறுவர்.
- 6. பண்டைய உரைநடைகளைக் கற்றுதேர்வதால் தமிழ் உரைநடையில் வல்லமைப் பெறுவர்.

SEMESTER - II

பாடத்திட்டம் : எம்.ஏ. தமிழ்								
முதன்மைப்பாடம்	- 6 தாள்	குறியீடு : 20PTA2C0	6 தலைப்பு : ெ	தொல்காப்பியம் - சொல்லதிகாரம்				
பருவம்	நேரம்	மொத்த நேரம்	புள்ளிகள்	மதிப்பெண்கள்				
II	6	90	5	100				

- தொல்காப்பியச் சொல்லதிகார அமைப்பையும், உரை ஆசிரியர்களின் உரைத்திறனையும் அறிந்து கொள்வர்.
- 2. திணை, பால் அடிப்படையில் சொற்களைப் பாகுபடுத்தும் தன்மையையும், வழுவமைதிகள், பல்வகைத் தொடர்அமைப்புகள் குறித்தும் அறிவர்.
- 3. எண்வகை வேற்றுமைகள், உருபு மயக்கங்கள், பொருள்கோள், வினைமுற்று, எச்ச வகைகள், ஆகுபெயர் வகைகளை அறிவர்.
- 4. உயர்திணைப்பெயர்கள், அ.்.நிணைப் பெயர்கள், விரவுப்பெயர்கள் விளியேற்கும் தன்மையை அழிவர்.
- 5. உயர்திணை வினைகள், அ.்.றிணை வினைகள், விரவு வினைகள் குறித்து அறிவர்.
- 6. ஒரு பொருள் குறித்த பல சொற்கள், பல பொருள் குறித்த ஒரு சொல் ஆகியவற்றை உணர்வர்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
முதன்மைப்பாடம் - 7 தாள் குறியீடு : 20PTA2C07 தலைப்பு : க					காப்பியங்கள்		
பருவம்	நேரம்		மொத்த நேரம்	புள்ளிகள்		மதிப்பெண்கள்	
П	6	6 90		5	100		

- 1. காப்பியங்களின் உள்ளடக்கம், உத்திகளைக் கற்றுக்கொள்வர்.
- 2. காலந்தோறும் காப்பியங்களில் காணலாகும் பாடுபொருள்களின் மாற்றங்களை அறிவர்.
- 3. காப்பியச்சுவையை மாணவர்கள் அறிந்து கொள்வர்.
- 4. காப்பியங்கள் வாயிலாக அக்காலச் சமுதாயச் கூழலை அறிவர்.
- 5. பல்வேறு காப்பியங்களையும் ஒப்பிட்டு அவற்றின் தனித்தன்மைகளை அறிந்துகொள்வர்.
- 6. மீட்டுருவாக்கச் சிந்தனைகளை அறிவர்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்								
முதன்மைப்பாட	முதன்மைப்பாடம் - 8 தாள் குறியீடு : 20PTA2C08 தலைப்பு : சமய இலக்கியங்கள்							
பருவம்	நேர	ம்	மொத்த நேரம்	புள்ளிகள்		மதிப்பெண்கள்		
II	6		90		4	100		

- 1. தமிழிலக்கிய வரலாற்றில் பக்தி இலக்கியங்கள் பெறும் சிறப்பை உணர்வர்.
- 2. சமய வழிச் சமூக மாற்றத்திறன் பெறுவர்.
- 3. சமய நல்லிணக்க உணர்வை மாணவர்கள் பெறுவர்.
- 4. பல்வகை சமய இலக்கியப் போக்குகளை அறிந்து கொள்வர்.
- 5. சமயவழித் தமிழரின் வாழ்வியலை அறிவர்.
- 6. பல்வகை சமயக் கோட்பாட்டினை அறிந்துகொள்வர்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
ഖിருப்பப் பாட	விருப்பப் பாடம் - 1 தாள் குறியீடு: 20PTA2E01 தலைப்பு: பண்பாட்டு மானிடவி					<u></u>	
பருவம்	நேர	ம்	மொத்த நேரம்	புள்ளிகள்		மதிப்பெண்கள்	
II	6		90		4	100	

കന്റ്വൻ ഖിതെബ്വക്ക് (Course Outcomes)

- 1. தமிழர் தம் நாகரிகம், பண்பாட்டை மாணாக்கர்களுக்கு எடுத்துரைத்தல்.
- 2. தமிழர்களின் வழிபாடு, சடங்கு முறைகளை அறியச்செய்தல்.
- 3. பல்வேறு இனக்குழுக்களாக வாழ்ந்த தமிழ்ச் சமூகத்தைப் புலப்படுத்துதல்.
- 4. மானிடவியலின் தோற்றம் பற்றி உணரச் செய்தல்.
- 5. பழங்குடி சமுதாயத்தை விளக்குதல்.
- 6. நாட்டுப்புற நம்பிக்கைகள், பழக்கவழக்கங்களை புரியவைத்தல்.

பாடத்திட்டம் : எம்.ஏ. தமிழ்								
EDC	தாள் (தறியீடு:20PTA2ED	C1	தலைப்பு :	நாட்டுப்புறவியல் கோட்பாடுகள்			
பருவம்	நேரம்	மொத்த நேரம்	Ц	ள்ளிகள்	மதிப்பெண்கள்			
II	4	60	4		100			

- 1. நாட்டுப்புறவியல் என்னும் துறையின் வளர்நிலைகளையும் வகைமைகளையும் அறிந்துகொள்ளுதல்
- 2. தமிழரின் பண்பாட்டு, பழக்கவழக்கங்களை அறிந்து கொள்ளல்.
- 3. நாட்டுப்புறப்பாடல்களில் காணலாகும் மனித உணர்வுகளை அறிந்து கொள்வர்.
- 4. நாட்டுப்புற தெய்வங்களின் வரலாறுகளை அறிந்து கொள்வர்.
- 5. நாட்டுப்புறக் கதைகள் மற்றும் கதைப்பாடல்கள் வாயிலாக மக்களின் பண்பாடுகளை அறிதல
- 6. நாட்டுப்புறவியல் துறையில் மாணவர்களின் ஈடுபாடு அதிகரிக்கச் செய்யும்

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
பொதுத்தாள் தாள் குறியீடு : 20P2HR தஎ				தலைப்பு :	மனித உரிமைகள்		
பருவம்	நேர	ம்	மொத்த நேரம்	Ц6	ர்ளி க ள்	மதிப்பெண்கள்	
II	2		30		2	100	

- 1. மனித உரிமைகள் பற்றிய அடிப்படைச்செய்திகளை அறிதல்
- 2. காவல்துறை, நீதிமன்றச் செயல்பாடுகளை உணர்ந்து கொள்ளல்.
- 3. மனித உரிமை மீறல்களைக் கண்டறியும் வாய்ப்புப் பெறுதல்.
- 4. இந்திய மனித உரிமை ஆணையத்தின் செயல்பாடுகளை அறிதல்
- 5. தமிழ்நாடு மனித உரிமை ஆணையத்தின் போக்குகளையும் நோக்குகளையும் அநிந்துகொள்ளுதல்
- 6. உலக மனித உரிமை ஆணையத்தின் முக்கிய நோக்கத்தைத் தெரிந்து கொள்ளுதல்

பாடத்திட்டம் : எம்.ஏ. தமிழ்							
EDC			தாள் குறியீடு: 20PTA2EDC2 தலைப்பு: ப			யன்பாட்டுத் தமிழ்	
பருவம்	நேர	ம்	மொத்த நேரம்	Ц	ள்ளிகள்	மதிப்பெண்கள்	
II	4		60		4	100	

- 1. இந்த அடிப்படையில் தமிழைச் சந்திப் பிழையின்றி எழுதுதல்.
- 2. நிறுத்தற்குறிகளை முறையாகப் பயன்படுத்தல், சொற்களைச் சேர்த்தும் பிரித்தும் எழுதும் முறையை அறிதல்
- 3. செய்திக் கட்டுரை, கடிதம், ஆவணம், கட்டுரை போன்றவற்றை எழுதும் திறன்களை வளர்த்துக் கொள்ளல்
- 4. வாய்மொழிக் கருத்துப் பரிமாற்றத் திறன்களாகிய உரையாடுல் திறன் சொற்பொழிவுத் திறன் ஆகியவற்றை
- 5. பேச்சுத் தயாரிப்பு முறைகளை வளர்த்தல்
- 6. அடிக்குறிப்புப் போடுதல், துணைநூல் பட்டியல் தயாரித்தல் போன்ற திறன்களை வளர்த்துக் கொள்ளல்

BA (ENGLISH)

PROGRAMME OUTCOMES (PO)

PO1	The student would be Interpreting literary language and literary artefacts as true of
	various forms of literature such as poetry
PO2	Pronouncing, accentuating and intonating English words and sentences as per the
	prescriptions of the Received Pronunciation (RP) pattern
PO3	Students get cognizance of the social, economic, and political perspectives of the
	literatures produced and also translated into English especially in the third world
	nations.
PO4	Comprehending the central tenets of various schools of literary theories and
	applying them to interpreting critically a poem or a piece of prose
PO5	Reading of challenging and imaginative texts as an essential and rewarding part
	of a life-long commitment to learning and growth.

COURSE OUTCOMES (COs) SEMESTER - I

Programme: B.A. English							
Core – I Course Code: 20UEN1C01 Course Title					irse Title: Poetry		
Semester	Hours/	Week	Total Hours		Credits	Total Marks	
I	5		75		5	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Recognize poetry from a variety of cultures, languages and historic periods	K1 & K2
CO ₂	Understand and appreciate poetry as a literary art form	K2 & K3
CO3	Improve their understanding of the world the poets lived in.	K3 & K4
CO4	Analyze the various elements of poetry, such as diction, tone, form, genre, imagery, figures of speech, symbolism, theme, etc.	K5
CO5	Recognize the rhythms, metrics and other musical aspects of poetry.	K5

Programme: B.A. English							
Core – II		Course Co	ode: 20UEN1C02	Course Title: Grammar and Usag			
Semester	Но	urs/Week	Total Hours	Credits	Total Marks		
I		5	75	5	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Recognize and understand the meaning of targeted grammatical	K1 & K2
	structures in written and spoken form.	
CO2	Use grammatical structures meaningfully and appropriately in oral	K2 & K3
	and written production.	
CO3	Use targeted grammatical structures.	K3 & K4
CO4	Self-edit their oral and written production with growing confidence.	K5
CO5	Practice the grammar, needed to write various types of writing	K5
	including journals, and personal/academic paragraphs.	

Programme: B.A. English								
Allied – I	Allied – I Course Code: 20UEN1A01 Course Title: Social History of England							
Semester	Hours/Week	Total Hours	otal Hours Credits Total Marks					
I	6	90	5	100				

CO	CO Statement	Knowledge
Number		Level
CO1	Infer the important political events of England.	K1 & K3
CO2	Relate the framework of technological influences with the society of England	K2
CO3	Survey that the education is an essential part of people in England.	K4
CO4	Point out the schemes, policies to promote security and welfare	K5

	of people in England	
CO5	Examine the contribution of two major political parties in the	K1 & K5
	life of England.	

Programme: B.A. English								
Add on Cours	Add on Course – I Course Code: Course Title: Professional English							
Semester	Hours	/Week	Total Hours	Credits	Total Marks			
I	4	4	48	4	100			

CO	CO Statement	Knowledge
Number		Level
	Recognize their own ability to improve their own competence in using the language.	K1
	Use language for speaking with confidence in an intelligible and acceptable manner.	K2
CO3	Understand the importance of reading for life.	К3
CO4	Read independently unfamiliar texts with comprehension.	K4
	Understand the importance of writing in academic life and write simple sentences without committing error of spelling or grammar.	K5

SEMESTER - II

Programme: B.A. English							
Core – III Course Code: 20UEN2C03 Course Title: Prose					e Title: Prose		
Semester	Hours/	Week	Total Hours		Credits	Total Marks	
II	5		75		5	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Gain an introductory Knowledge of English Language.	К3

CO2	Explain intensive reading skills.	K2
CO3	Evaluate the knowledge of vocabulary.	K4
CO4	Discuss the aspects of Prose and list out new vocabulary.	K5
CO5	Write grammatically correct sentences.	K5

Programme: B.A. English								
Core - IV	Core – IV Course Code: 20UEN2C04 Course Title: Indian Writing in English							
Semester	Hou	ırs/Week	Total Hours		Credits	Total Marks		
II		5	75		5	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Understand the major movements and figures of Indian Literature in English through the study of select literary texts.	K1
CO2	Gain literary sensibility and emotional response to the literary texts and implant sense of appreciation of literary text.	K2 & K3
CO3	Get exposure to the artistic and innovative use of language employed by the writers.	K3 & K4
CO4	Acquire values and develop human concern in students through exposure to literary texts.	K5
CO5	Enhance their literary and linguistic competence.	K5

Programme: B.A. English							
Allied – I	Allied – II Course Code: 20UEN2A02 Course Title: Hist English Literat			•			
Semester	Hours/	Week	Total Hours	(Credits	Total Marks	
II	6		90		5	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Explain and relate different varieties of poetry.	K1 & K3
CO2	Enable to read and analyze literary texts from different points of view	K2 & K3
CO3	Recognize the age, writer and periods of literature.	К3
	Appraise the satirical portrait of English writers in the seventeenth and eighteenth century.	K4 & K5
	Analyze the various elements of poetry, prose, drama and fiction in the modern literature.	K5

Programme: B.A. English							
Add on Course – II		Course Code:		Course Title: Professional English -			
Semester	Hours/ Week		Total Hours	Credits	Total Marks		
II		4	48	4	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Attend interviews with boldness and confidence.	K1
CO2	Adapt easily into the workplace context, having become communicatively competent.	K2
CO3	Apply to the Research &Development organizations/ sections in companies and offices with winning proposals.	K3
CO4	Read independently unfamiliar texts with comprehension.	K4
CO5	Understand the importance of writing in academic life and write simple sentences without committing error of spelling or grammar.	K5

FOUNDATION ENGLISH

Program: All UG Programme						
Part – II ENG	SLISH	Cou	rse Code: 20UFEN0		e Title: Foundation English – I	
Semester	Hours/	Week	Total Hours	Credits	Total Marks	
I	6		90	3	100	

COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Develop their awareness of the importance of English as a means of international communication.	K1
CO2	Develop positive attitudes towards learning English.	K2 & K3
CO3	Develop the linguistic competence that enables them to be aware of the cultural, economic and social issues of their society in order to contribute in giving solution.	K3&K4
CO4	Develop the linguistic competence that enables them, in the future, to present.	K5
CO5	Develop the linguistic competence that enables them, in the future, to present the culture and civilization of their nation.	K5

Program: All UG Programme							
Part – II ENGI	LISH	Cou	rse Code: 20UFEN0)2	Course Title: Foundation English –		
Semester	Hours	s/Week	Total Hours		Credits	Total Marks	
I		6	90		3	100	

CO Number	COs Statement	Knowledge Level
CO1	Be accurate both in oral and written communication as they will be	K 1
	strong in Grammar and its usage.	

CO2	Express a thorough command of English and its linguistic structures.	K2 & K3
CO3	Apply critical frameworks to analyze the linguistic, cultural and	K3&K4
	historical background of texts written in English.	
	Be familiar with the conventions of diverse textual genres including	K5
CO4	fiction, nonfiction, poetry, autobiography, biography, Journal, film,	
	plays, editorials etc.	
CO5	Familiarize with the conventions of diverse textual genre including in	K5
CO3	real time situation.	

MA (ENGLISH)

PROGRAMME OUTCOMES (POs)

PO1	Graduates are prepared to be creators of new knowledge leading to innovation and
	entrepreneurship employable in various sectors such as private, government, and
	research organizations.
PO2	Graduates are trained to evolve new technologies in their own discipline.
PO3	Graduates are groomed to engage in lifelong learning process by exploring their
	knowledge independently.
PO4	Graduates are framed to design and conduct experiments /demos/create models to
	analyze and interpret data.
PO5	Graduates ought to have the ability of effectively communicating the findings of
	Biological sciences incorporating with existing knowledge.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Listening Skills: Students will be able to acquire the ability to accurately receive and
	interpret messages in the communication process.
PSO ₂	Oral Communication Skills: Students will demonstrate the skills needed to participate in
	a conversation that builds knowledge collaboratively: listening carefully and respectfully
	to others' viewpoints; articulating their own ideas and questions clearly; and situating
	their own ideas in relation to other voices and ideas. Students will be able to prepare,
	organize, and deliver an engaging oral presentation.

and complexity, and who can articulate their own interpretations with an awareness and curiosity for other perspectives. PSO4 Writing Skills and Process: Students will be able to write effectively for a variety of professional and social settings. They will practice writing as a process of motivate inquiry, engaging other writers' ideas as they explore and develop their own. They will demonstrate an ability to revise for content and edit for grammatical and stylistic clarity. And they will develop an awareness of and confidence in their own voice as a writer. PSO5 Sense of Genre: Students will develop an appreciation of how the formal elements of language and genre shape meaning. They will recognize how writers can transgress of subvert generic expectations, as well as fulfill them. And they will develop a facility a writing in appropriate genres for a variety of purposes and audiences. PSO6 Culture and History: Students will gain knowledge of the major traditions of literature written in English, and an appreciation for the diversity of literary and social voice within—and sometimes marginalized by—those traditions. They will develop an ability to read texts in relation to their historical and cultural contexts, in order to gain a riche understanding of both text and context, and to become more aware of themselves a
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understanding of both text and context, and to become more aware of themselves a
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situated historically and culturally.
PSO7 Critical Approaches: Students will develop the ability to read works of literary
rhetorical, and cultural criticism, and deploy ideas from these texts in their own reading
and writing. They will express their own ideas as informed opinions that are in dialogu
with a larger community of interpreters, and understand how their own approach
compares to the variety of critical and theoretical approaches.
PSO8 Research Skills: Students will be able to identify topics and formulate questions for
productive inquiry; they will identify appropriate methods and sources for research an
evaluate critically the sources they find; and they will use their chosen source
effectively in their own writing, citing all sources appropriately.

<u>SEMESTER – I</u>

COURSE OUTCOMES (COs)

Programme: M.A. English							
Core – I		Course Code: 20PEN1C01			Course Title: Chaucer and the Elizabethan Age		
Semester	Hours/	Week	Total Hours		Credits	Total Marks	
I	6		90		5	100	

COs	CO Statement	Knowledge
Number		Level
CO1	Read closely and understand Middle and Early Modern English in	K1 & K2
	Chaucer and Elizabethan ages.	
CO2	Recognize and understand figurative language, such as allegory and	K2 & K3
	metaphor, and literary techniques, like irony, rhyme, and allusion.	
CO3	Demonstrate knowledge of the style, structure, and content of the	K5 & K5
	assigned literary texts, from Chaucer and Elizabethan ages.	
CO4	Identify the unique qualities of the authors studied, and compare and	K5
	contrast them.	
CO5	Develop a well-written argument about one or more literary texts or	К3
	authors, and accurately cite literary and other sources.	

Programme: M.A. English							
Core – II			rse Code: 20PEN1C0	02	Course Title: The Restoration and the Augustan Age		
Semester	Hours/	Week	Total Hours		Credits	Total Marks	
I	6		6 90		5	100	

COs	CO Statement	Knowledge
Number		Level
CO1	Discover and define the language, nature of writing in the Puritan age.	K1 & K2
CO2	Relate and understand the themes set in the Restoration period.	K3
CO3	Grade and appraise the style, language, mood and needs of the Restoration period.	K4
CO4	Organise and compare the works of the pervious era and contrast them.	K3 & K4
CO5	Classify and describe critical thinking and learn to employ various reading strategies while approaching the prescribed texts for study.	K3& K5

Programme: M.A. English						
Core – III Course Code: 20PEN1C03 Course Title: The Romant					Title: The Romantic Age	
Semester	Hours/	Week	Total Hours		Credits	Total Marks
I	6		90		5	100

COs	CO Statement				
Number	Statement	Level			
CO1	Demonstrate an understanding of the historical and cultural context of English Romanticism.	K1 & K2			
CO2	Analyze through close reading major authors and texts of English romantic period.	K2 & K4			
CO3	Discuss the philosophical ideas that inform English Romantic Literature.	K2& K5			
CO4	Evaluate and compare various thematic perspectives and styles within English Romanticism.	K5			
CO5	Analyze key themes, topics, and debates that emerge in Romantic texts.	K4 & K5			

Programme: M.A. English						
Core – IV Course Code: 20PEN1C04 Course Title: The Victor					Title: The Victorian Age	
Semester	r Hours/Week		Total Hours		Credits	Total Marks
I		6	90		4	100

COs	CO Statement	Knowledge
Number		Level
CO1	Read closely and understand and evaluate the lives of the British people during the Victorian era.	K1 & K2
~~~		VIO 0 VIO
CO2	Recognize and understand the ideals and values of Victorian society with respect to religion, gender, family, class and social responsibility.	K2 & K3
CO3	Demonstrate knowledge of the style, structure, and content of the assigned literary texts, from Victorian writers	K5 & K5
CO4	Identify the unique qualities of the authors studied, and compare and contrast them.	K5
CO5	Develop a well-written argument about one or more literary texts or authors, and accurately cite literary and other sources.	K4

Programme: M.A. English								
Elective – I Course Code: 20PEN1E01 Course Title: English for Enhancement								
Semester	Hours/Week	Total Hours	Credits	Total Marks				
I	6	90	3	100				

COs Number	CO Statement	Knowledge Level
CO1	Illustrate and explain the process of communication.	K1 & K2
CO2	Improve listening and speaking techniques.	K2 & K3
CO3	Compose, write and speak complete and meaningful ideas.	K4& K5
CO4	Evaluate language structures in relation to key concepts, theories and	K5

	issues related to the study of grammar.	
CO5	Use grammatical knowledge acquired to inform pedagogical decisions.	K4

# <u>SEMESTER – II</u>

Programme: M.A. English						
Core – V Course Code: 20PEN2C05 C					Cour	rse Title: Shakespeare
Semester	Hours/	Week	<b>Total Hours</b>		Credits	Total Marks
II	5		75		5	100

# COURSE OUTCOMES (COs)

COs	CO Statement	Knowledge
Number		Level
CO1	Understand the socio political influences in the production of literature	K2
	during the Renaissance.	
CO2	Master the literary techniques used by Shakespeare.	K2 & K4
CO3	Compare the different characters analytically.	K2& K4
CO4	Compare and contrast the various aspects of Shakespearean plays.	K4
CO5	Assess the theatre as a creative space and texts as creative products.	K5

Programme: M.A. English								
Core - VI	VI Course Code: 20PEN2C06 Course Title: Twentieth Century Li							
Semester	Hours/Week	<b>Total Hours</b>		Credits	Total Marks			
II	5	75		5	100			

COs	CO Statement	Knowledge
Number		Level
CO1	Explain the paradigms of different national, ethnic, and class literatures.	K1 & K2
CO2	Recognize and identify different approaches to literature and indifferent literary traditions.	K2 & K3

CO3	Identify one's own literary assumptions, perspective, and prejudices.			
CO4	Explain how and where various literary genres arise.	K5		
CO5	Compare and contrast non-Western and Western literary and aesthetic	K4		
	values.			

Programme: M.A. English								
Core - VII	Core – VII Course Code: 20PEN2C07 Course Title: Indian Writing in English							
Semester	Hours/Week	Total Hours	C	redits	Total Marks			
П	5	75		5	100			

COs	CO Statement	Knowledge
Number		Level
CO1	Trace the development of history of Indian English literature from its	K1 & K2
	beginning to the present day.	
CO ₂	Gain knowledge of 'Indianness' through the works of Indian writing in	K2 & K3
	English; be acquainted with the Indian way of perceiving the world and	
	presenting their findings in their writings in an appreciable way.	
CO3	Identify the significance and relevance of the works of Indian writers	K4& K5
	and thereby relate to the ideas embedded in their works.	
CO4	Evaluate the literary, cultural, historical, political impact of works of	K4
	Indian writers in English and thereby their role in bringing about social	
	awareness and transformation.	
CO5	Appreciate the values and the human concern through the exposure of	K5
	literary texts in colonial and postcolonial period.	

Programme: M.A. English							
Core – VI	Core – VIII Course Code: 20PEN2C08 Course Title: American Literature						
Semester	Hours/	Week	<b>Total Hours</b>		Credits	Total Marks	
II	5		75		4	100	

COs	CO Statement	Knowledge
Number		Level
CO1	Identify and discuss strengths, limitations, and cultural assumptions of various literary forms practiced in America through the mid-nineteenth	K1 & K2
	century.	
CO2	Identify and discuss the roles which gender, race, age, class, ethnicity, wealth, poverty, and geography have played in creating American literature.	K2 & K3
CO3	Identify and describe the major critical approaches to literary interpretation: New Criticism/Formalism, Reader-Response, Feminism, and Marxism	K3& K5
CO4	Gain the knowledge of how society, culture and politics affect literature	K4
CO5	Identify and discuss aesthetic aspects of American literature, American English usage and diction.	K5

Programme: M.A. English							
Elective –	Elective – II Course Code: 20PEN2E02 Course Title: Linguistics and Stylistics						
Semester	Hours/	Week	Total Hours		Credits	Total Marks	
П	4		75		3	100	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand the nature and scope of modern linguistics and stylistics.	K1 & K2
CO2	Understand current theories, principles and the nature of meaning.	K2 & K3
CO3	Understand factors which impact language acquisition for children and adults through doing discourse analysis.	K4 & K5
CO4	Understand and apply different approaches to language acquisition research, and critically evaluate this research.	K4
CO5	Understand the nature, definitions, history and types of Style, stylistics and literary stylistics.	K5

Programme: M.A. English								
EDC Course Code: 20PEN2EDC1 Course Title: English for Competitive Examinations								
Semester	Hours/Week	<b>Total Hours</b>	Credits Total Marks					
II	4	45	4	4 100				

COs	CO Statement	Knowledge
Number		Level
CO1	Read and comprehend English.	K1 & K2
CO2	Understand the pattern of English questions for Competitive Examinations and will be equipped to answer them confidently.	K2 & K3
CO3	Master the interpersonal communication in the workplace.	K4
CO4	Write reports and proposals precisely.	K5
CO5	Update basic skills to the level of demands of companies and competitive exams.	K5

Programme: M.A. English							
Common Co	Common Course Code: 20P2HR01 Course Title: Human Rights						
Semester	Hours/	Week	<b>Total Hours</b>		Credits	Total Marks	
II	2		30		2	100	

COs	CO Statement	Knowledge
Number		Level
CO1	Apply effective written and oral communication skills to business and	K1 & K2
	legal situations.	
CO ₂	Analyze the global legal environment.	K2 & K3
CO3	Ability to analyze complex problems, finds and deploys a variety of legal	K3& K4
	authorities, and communicates effectively in a variety of settings.	
CO4	Use critical thinking skills in business situations.	K4
CO5	Apply an ethical understanding and perspective to business situations.	K3 & K4

# **BBA**

# PROGRAMME OUTCOMES (PO)

PO1	Student can acquire comprehensive knowledge in Fundamentals of Management,	
	Accounting, Business Laws, Business Organization, Human Resources Management,	
	Marketing, Economics and Computer Skills.	
PO2	Designed for capacity building to various avenues of employment, entrepreneurship and	
	higher education.	
PO3	Acquire the core competencies of business acumen, analytical & critical thinking and	
	communication skills and employ empirical approach for effective team building, crisis	
	management and business solutions.	
PO4	Apply the knowledge and skills thrive on the evolving challenges of trade & industry.	
PO5	Analyze the challenges of the dynamic world with a global outlook.	
PO6	Sensitized to ethical and moral issues in business to be more socially responsible.	

# PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Develop conceptual and practical knowledge in the field of business and management.	
PSO2	Provide strong analytical and critical thinking foundation enabling problem solving skills in the various disciplines of management.	
PSO3	Demonstrate leadership qualities to take the business/firm to greater heights.	
PSO4	Enhance the employability and professional skills to become successful manager/ executives in reputed firms.	
PSO5	Manage their business more successfully and also to identify new business opportunities and marketing avenues to establish start-ups.	
PSO6	Strengthen the ability to learn continuously to adapt to the dynamic challenges of the business world and lead business with conscience-moral, ethical and environmental values.	

# <u>SEMESTER – I</u>

# COURSE OUTCOMES (COs)

Program: BBA			
Core – I	Course Code: 20UBA1C01	Course Title: Principles of Management	

# COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number		Level
CO1	Students will be able to have clear understanding of managerial	K1 & K2
	functions like planning, and have same basic knowledge on	
	international aspect of management.	
CO2	Understand the planning process in the organization.	K2 & K3
CO3	Apply the concept of organization.	K3 & K4
CO4	Demonstrate the ability to directing, leadership and communicate effectively	K5 & k6
CO5	Evaluate isolates issues and formulate best control methods.	K6

Program: BBA		
Core – II	Course Code: 20UBA1C02	Course Title: Business Communication

CO	CO Statement	Knowledge
Number		Level
CO1	Identify key principles in business communication. Discuss the	K1 & K2
	importance of effective communication in business.	
CO2	Students gained knowledge in the communication and to draft the	К3
	layout for a business letter.	
CO3	Understand the concept of applications for appointment.	K3 & K4
CO4	Learnt to prepare a report, agenda – minutes – meeting and its kinds.	K5
CO5	Discuss the different types of reports and their purposes, Create an	K6
	informal report and technology in communication.	

Program: BBA		
Allied – I	Course Code: 20UBA1A01	Course Title: Business
		Mathematics and Statistics – I

CO	CO Statement	Knowledge
Number		Level
CO1	Learn about Arithmetic Progression, Geometric Progression and	K1 & K2
	Harmonic Progression.	
CO ₂	Apply Fundamental ideas about matrices and their operational	K3
	rules.	
CO3	Understand source, collection of data and apply for practical life.	K3 & K4
CO4	Plot and interpret straight line graphs, apply them to business	K5
	decision-making and discuss the significant features of non-linear	
	graphs.	
CO5	Demonstrate correct usage of measures of central tendency and	K6
	measures of dispersion to describe data and perform analysis of	
	data based on the results of these measures.	

# <u>SEMESTER – II</u>

	Program: BBA		
ĺ	Core – III	Course Code: 20UBA2C03   Course Title: Organisational Behaviour	

CO	CO Statement	Knowledge
Number		Level
CO1	Identify the study of Human Behaviour in organization.	K1 & K2
CO2	Describe the personality and it's determinate of personality.	K2 & K3
CO3	Appreciate different views of how people are motivated.	K3 & K4
CO4	Understand the concept of organisational culture and climate.	K5
CO5	Identify the organization change and steps in managing change.	K6

Program: BBA		
Elective – I	Course Code: 20UBA2E01	Course Title: Financial Accounting

CO	CO Statement	Knowledge
Number		Level
CO1	Understand fundamental accounting concepts, principles, conventions and methods of accounting.	K1 & K2
CO2	student can able to make necessary journal entries, Subsidiary books, Trial balance	K2 & K3
CO3	Gather knowledge about BRS and Average Due Date.	K3 & K4
CO4	Apply to make necessary journal entries in the books of record under hire.	
CO5	Gain knowledge regarding methods of providing depreciation.	K6

Program: BBA		
Allied – II	Course Code: 20UBA2A02	Course Title: Business
		Mathematics and Statistics – II

CO	CO Statement	Knowledge
Number		Level
CO1	Apply mathematics finance	K1 & K2
CO2	Understand calculus, rules of differentiation, maxima & minima	K2 & K3
CO3	Learn linear simple correlation and regression line	K3 & K4
CO4	Identify the time series analysis	K5
CO5	Describe index number & ideal index number	K6

# BBA (CA)

## PROGRAMME OUTCOMES (POs)

PO1	Student can acquire comprehensive knowledge in Fundamentals of Management,
	Accounting, Business Laws, Business Organization, Human Resources Management,
	Marketing, Economics and Computer Skills.
PO2	Designed for capacity building to various avenues of employment, entrepreneurship and
	higher education.
PO3	Acquire the core competencies of business acumen, analytical & critical thinking and
	communication skills and employ empirical approach for effective team building, crisis
	management and business solutions.
PO4	Apply the knowledge and skills thrive on the evolving challenges of trade & industry.
PO5	Analyze the challenges of the dynamic world with a global outlook.
PO6	Sensitized to ethical and moral issues in business to be more socially responsible.

#### PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Develop conceptual and practical knowledge in the field of business and management.
PSO2	Provide strong analytical and critical thinking foundation enabling problem solving
	skills in the various disciplines of management.
PSO3	Demonstrate leadership qualities to take the business/firm to greater heights.
PSO4	Enhance the employability and professional skills to become successful manager/
	executives in reputed firms.
PSO5	Manage their business more successfully and also to identify new business
	opportunities and marketing avenues to establish start-ups.
PSO6	Strengthen the ability to learn continuously to adapt to the dynamic challenges of the
	business world and lead business with conscience-moral, ethical and environmental
	values.

Program: BBA (CA)		
Core – I	Course Code: 20UBX1C01	Course Title: Principles of
		Management

# COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number		Level
CO1	Students will be able to have clear understanding of managerial	K1 & K2
	functions like planning, and have same basic knowledge on	
	international aspect of management.	
CO2	Understand the planning process in the organization.	K2 & K3
CO3	Apply the concept of organization.	K3 & K4
CO4	Demonstrate the ability to directing, leadership and communicate effectively.	K5 & k6
CO5	Evaluate isolates issues and formulate best control methods.	K6

Program: BBA (CA)		
Core – II	Course Code: 20UBX1C02	Course Title: Introduction to
		Computer Technology

CO		Knowledge
Number	CO Statement	Level
CO1	Bridge the fundamental concepts of computers with the present level of knowledge of the students.	K2
CO2	Familiarize operating systems, programming languages, peripheral devices, networking, multimedia and internet	K1 & K2
CO3	Identify categories of programs, system software and applications.	K4

	Organize and work with files and folders.	
CO4	Describe the usage of computers and why computers are essential components in business and Society.	К3
CO5	Solve common business problems using appropriate Information Technology applications and systems.	K5

Program: BBA (CA)		
Allied – I	Course Code: 20UBX1A01	Course Title: Business
		Mathematics and Statistics

CO	CO Statement	Knowledge
Number		Level
CO1	Learn about Arithmetic Progression, Geometric Progression and	K1 & K2
	Harmonic Progression.	
CO2	Apply Fundamental ideas about matrices and their operational rules.	K3
CO3	Understand source, collection of data and apply for practical life.	K3 & K4
CO4	Plot and interpret straight line graphs, apply them to business decision-making and discuss the significant features of non-linear graphs.	K5
CO5	Demonstrate correct usage of measures of central tendency and	K6
	measures of dispersion to describe data and perform analysis of data	
	based on the results of these measures.	

Program: BBA (CA)				
Core – III	Course Code: 20UBX2C03	Course Title: Organisational Behaviour		

CO	CO Statement	Knowledge
Number		Level
CO1	Identify the study of Human Behaviour in organization.	K1 & K2
CO2	Describe the personality and its determinate of personality.	K2 & K3
CO3	Appreciate different views of how people are motivated.	K3 & K4

CO4	Understand the concept of organisational culture and climate.	K5
CO5	Identify the organization change and steps in managing change.	K6

Program: BBA (CA)					
Core - IV	Course Code: 20UBX2C04	<b>Course Title:</b> Office Automation			

CO		
Number	CO Statement	Knowledge
		Level
	Students will create documents that demonstrate proficiency in the use of	K1 & K6
CO1	word processing, spreadsheet, database, and presentation applications.	
	Use Microsoft Office programs to create personal, academic and business	
CO2	documents following current professional and/or industry standards.	
CO3	It gives you the ability to use your computer for desktop publishing.	K5
CO4	They can know about menus, toolbars, task panes, and a familiar-feeling	K2 & K4
	design.	

Program: BBA (CA)			
Practical - I	Course Code: 20UBX2P01	Course Title: MS-Office Practical	

CO		Knowledge
Number	CO Statement	Level
CO1	Operate MS-Office operations	K3
CO2	Gain practical exposure on Word, Spread sheet, Power point presentation and Access	K4 & K5

Program: BBA (CA)				
Allied - II	Course Code: 20UBX2A02	<b>Course Title:</b> Managerial Economics		

CO	CO Statement	Knowledge
Number		Level
CO1	Understand about nature and scope of economics and relationship between micro and macro-economics.	K1 & K2
CO2	Gain the knowledge about demand analysis and demand forecast.	K2 & K3
CO3	Understand factors of productions and economics of large scale of productions.	K4
CO4	Understand about cost functions and difference between short run and long run cost functions.	K5
CO5	Acquire knowledge about the market structure and pricing.	K6

#### **B.COM**

## PROGRAM OUTCOMES (PO)

PO1	Student can acquire comprehensive knowledge in Finance, Accounting, Taxation,
	Business laws and Corporate Laws.
PO2	Students can equip professional interpersonal and entrepreneurial skills.
PO3	After completing three years Bachelors of Commerce (B.Com.) course, students
	would gain a through deep knowledge in Fundamentals of Commerce, Banking
	and MS – Office
PO4	All-inclusive outlooks of the course offer a number of value based and job-
	oriented courses, which ensure that students are trained up-to-date.
PO5	Students can possess wide spectrum of managerial skills with competency
	building qualities in specific areas of commerce and other related fields.

## COURSE OUTCOMES (COs)

Program: B.Com					
Core – I	Core – I Course Code: 20UCM1C01 Course Title: Financial Accounting – I				
Semester Hours/Week Total Hours		5	Credits	Total Marks	
I	5	75		4	100

# SEMESTER – I COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand fundamental accounting concepts, principles, conventions and methods of accounting.	K1 & K2
CO2	Preparation of final accounts of companies.	K2 & K3
CO3	Gather knowledge about BRS and Average Due Date.	K3 & K4
CO4	Gain knowledge regarding methods of providing depreciation.	K5
CO5	Learn about the Indian Accounting Standards.	K6

Program: B.Com					
Core – II	Course Code	rse Code: 20UCM1C02 Course Title: Business Communication			
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks	
I	5	75	4	100	

CO Number	CO Statement	Knowledge Level
CO1	Understand about various modern methods of communication.	K1 & K2
CO2	Learn how to write trade letters replies, circular letter and sales letter.	K2 & K3
CO3	Know about correspondence with banking and insurance companies.	K3 & K4
CO4	Familiarize effective communication skills by drafting application letters and resume.	K5
CO5	Creation of agenda, reports and minutes.	K6

Program: B.Com						
Allied – I	Allied – I Course Code: 20UEC1A01 Course Title: Business Economic				Title: Business Economics	
Semester	Hou	urs/Week	<b>Total Hours</b>		Credits	Total Marks
I		6	90		4	100

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand about nature and scope of economics and relationship	K1 & K2
COI	between micro and macro-economics.	
CO2	Gain the knowledge about demand analysis and demand forecast.	K2 & K3
CO3	Know about factors of productions and economics of large scale of	K4
COS	productions.	
CO4	Analyse about cost functions and difference between short run and	K5
CO4	long run cost functions.	
CO5	Acquire knowledge about market structure and pricing.	K6

#### $\underline{SEMESTER-II}$

		Program:	B.Com		
Core – III Course Code: 20UCM2C03			Course Title: Financial Accounting – II		
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks	
II	5	75	4	100	

## COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Familiarize concept of branch accounts and departmental accounts.	K1 & K2
CO2	Preparation of single entry accounts.	K2 & K3
CO3	Impart knowledge with relevance to preparation of accounts for non-trading concerns.	K4
CO4	Know about accounting procedure in case of admission of a partner and also understand accounting concept of retirement and death of a partner.	K5
CO5	Prepare accounts in case of dissolution of partnership firm and insolvency of a partner and partners.	K6

	Program: B.Com					
Core – IV Course Code: 20UCM2C04 Course Title: Business Managen					Business Management	
Semester	Hours/Week	<b>Total Hours</b>	Credits		<b>Total Marks</b>	
II	5	75	4		100	

CO Number	CO Statement	Knowledge Level
CO1	Understand basic concepts of business management and	K1 & K2
COI	theories of management.	

CO2	Acquire knowledge of nature of planning.	K2 & K3
CO3	Know about organization and departmentation.	K3 & K4
CO4	Learn about concept of direction and leadership.	K4 & K5
CO5	Gather the information about co-ordination and controlling.	K6

Program: B.Com					
Allied – II Course Code: 20UEC2A02 Course Title: Indian Econo				se Title: Indian Economy	
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks	
II	6	90	4	100	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand about developed, developing and under	K1 & K2
COI	developing countries economics.	
CO2	Acquire concepts of savings pattern and national income.	K2 & K3
CO3	Gather knowledge about agriculture revolution.	K3 & K4
CO4	Know about role of industrialization and industrial policy.	K5
CO5	Learn about the five years planning and development.	K6

#### B.COM (CA)

## PROGRAM OUTCOMES (PO)

PO1	Student can acquire comprehensive knowledge in Finance, Accounting, Taxation,
	Business laws and Corporate Laws.
PO2	Students can equip professional interpersonal and entrepreneurial skills.
PO3	After completing three years Bachelors of Commerce with Computer Application
	(B.Com (CA).) course, students would gain a through deep knowledge in
	Fundamentals of Commerce, Fundamentals of computer and Tally.
PO4	All-inclusive outlooks of the course offer a number of value based and job-
	oriented courses, which ensure that students are trained up-to-date.
PO5	Students can possess wide spectrum of managerial skills with competency
	building qualities in specific areas of commerce and other related fields.

# COURSE OUTCOMES (COs) SEMESTER – I

Program: B.Com (CA)				
Core – I Course Code: 20UCC1C01 Course Title: Financial Accounting – I				rse Title: Financial Accounting – I
Semester	Semester Hours/Week Total Hours		Credits	Total Marks
I	5	75	4	100

CO	CO Statement	Knowledge
Number	CO Statement	
CO1	Understand fundamental accounting concepts, principles, conventions and methods of accounting.	K1 & K2
CO2	Preparation of final accounts of companies.	K2 & K3
CO3	Gather knowledge about BRS and Average Due Date.	K3 & K4
CO4	Gain knowledge regarding methods of providing depreciation.	K5
CO5	Learn about the Indian Accounting Standards.	K6

Program: B.Com (CA)					
Core – II	Core – II Course Code: 20UCC1C02			se Title: Business Communication	
Semester	r Hours/Week Total Hours		Credits	Total Marks	
I	5	75	4	100	

CO Number	CO Statement	Knowledge Level
CO1	Understand about various modern methods of communication.	K1 & K2
CO2	Learn how to write trade letters replies, circular letter and sales letter.	K2 & K3
CO3	Know about correspondence with banking and insurance companies.	K3 & K4
CO4	Familiarize effective communication skills by drafting application letters and resume.	K5
CO5	Creation of agenda, reports and minutes.	K6

Program: B.Com (CA)					
Allied – I	Course Code: 20UCS1A01		Course Title	: Computer Application in Business	
Semester	Hours/Week Total Hours		Credits	Total Marks	
I	6	90	4	100	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand about basics of MS-Word.	K1 & K2
CO2	Application of programming functions in MS-Excel.	K2 & K3
CO3	Prepare the slide presentation.	K3 & K4
CO4	Create the database in MS-Access.	K5
CO5	Gain the knowledge about preparation of webpage and coding.	K6

#### SEMESTER – II

Program: B.Com (CA)					
Core – III Course Code: 20UCC2C03 Course Title : Fin			e Title: Financial Accounting – II		
Semester Hours/Week		<b>Total Hours</b>	Credits	Total Marks	
II	5	75	4	100	

#### **COURSE OUTCOMES (COs)**

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Familiarize concept of branch accounts and departmental accounts.	K1 & K2
CO2	Preparation of single entry accounts.	K2 & K3
CO3	Impart knowledge with relevance to preparation of accounts for non-trading concerns.	K4
CO4	Know about accounting procedure in case of admission of a partner and also understand accounting concept of retirement and death of a partner.	K5
CO5	Prepare accounts in case of dissolution of partnership firm and insolvency of a partner and partners.	K6

Program: B.Com (CA)					
Allied – II	Course Code	e: 20UCS2A02	<b>Course Title:</b>	Database Management System	
Semester	Hours/Week Total Hours		Credits	Total Marks	
II	6	90	4	100	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand the basics and operations of DBMS.	K1, K2
CO2	Design the database and tables, learning of SQL queries.	K2, K3
CO3	Apply the knowledge about the maintenance of database.	K4
CO4	Prepare the pictorial diagrams database (ER Diagram).	K5
CO5	Know about types and architectures of database.	K6

#### **M.COM**

## PROGRAM OUTCOMES (PO)

PO1	Student can acquire comprehensive knowledge in Finance, Accounting, Taxation,
	International Business and Corporate Laws.
PO2	Students can equip professional interpersonal and entrepreneurial skills.
PO3	All-inclusive outlooks of the course offer a number of value based and job-
	oriented courses, which ensure that students are trained up-to-date.
PO4	Students can meet the academic expectation in the fields of NET, SET and TRB
	etc.
PO5	Students can possess wide spectrum of managerial skills with competency
	building qualities in specific areas of commerce and other related fields.

# SEMESTER – I COURSE OUTCOMES (COs)

Program: M.Com.						
Core – I Course Code: 20PCM1C01 Course Title: Marketing Management						
Semester	Hours/Week	Total Marks				
Ι	6	90	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Identify core concepts of marketing and marketing process.	K1, K2 & K3
CO2	Formulate new product strategy and brand strategies.	K3 & K4
CO3	Understand channels of distribution.	K4 & K5
CO4	Gain knowledge about salesmanship and sales promotion.	K5
CO5	Create the awareness about concept of advertising and media of advertisement.	K6

Program: M.Com.						
Core – II Course Code: 20PCM1C02 Course Title: Accounting for Managerial Decision						
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
I	6	90	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Understand concept of management accounting, its importance and its role in decision making.	K1, K2 & K3
CO2	Develop knowledge about ratio analysis and interpretation of financial statements.	K4
CO3	Preparation of fund flow statement and cash flow statement.	K5
CO4	Get an idea about preparation of various types of budget.	K5
CO5	Acquire knowledge about standard costing techniques.	K6

Program: M.Com.						
Core – III	Core – III Course Code: 20PCM1C03 Course Title: Financial Manageme					
Semester	Hours/Week	<b>Total Hours</b>	Credits Total Marks			
I	6	90	5	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge about basics of financial Management.	K1, K2, & K3
CO2	Learn about cost of capital and capital budgeting.	K3 & K4
CO3	Understand Financial leverages and capital structure.	K4 & K5
CO4	Acquire Knowledge about dividend policy and dividend theories.	K5& K6

CO5	Analysis	of	working	capital	Management,	cash	and	inventory	<b>K</b> 6
	manageme	ent.							Ko

Program: M.Com.							
Core – IV	7	Cour	rse Code:20PCM1C0	Course Title: Modern Banking			
Semester Hours/Wee		Week	Total Hours		Credits	<b>Total Marks</b>	
I	6		90		4 100		

COs	CO Statement	Knowledge
Number		Level
CO1	Acquire knowledge in banking and financial system in India.	K1 & K2
CO2	Know about E-banking and Financial Services.	K3 & K4
CO3	Gain information about mobile banking and telephone banking.	K4 & K5
CO4	Gather knowledge about e-banking, m-banking and internet banking.	K5
CO5	Create knowledge regarding recent trends in Indian Banking.	K6

Program: M.Com.						
Elective – I Course Code: 20PCM1E01 Course Title: Organisational Behaviour						
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
I	6	90	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge about concept of organizational behaviour.	K1 & K2
CO2	Familiarize with concept of personality determinants and its theories.	K3 & K4
CO3	Learn about concept and theories of motivation.	K4

CO4	Gain knowledge about individual and group behaviour.	K5
CO5	Create the skills of interpersonal communication and control of	K6
	organizational conflict.	

Program: M.Com.						
Elective – I Course Code:20PCM1E02			Course Title: Business Ethics and Corporate Governance			
Semester	Hours/Week Total Hours		Credits	Total Marks		
I	6	90	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge about ethical values in real life and in business.	K1, K2 & K3
CO2	Understand ethical theories and corporate social responsibility.	K3 & K4
CO3	Recognize ethics in marketing and role of consumerism.	K4 & K5
CO4	Know about ethics in HRM practices and ethical implications.	K5
CO5	Create knowledge about concept of corporate governance.	K6

#### <u>SEMESTER – II</u>

Program: M.Com.								
Core – V	Core – V Course Code: 20PCM2C05 Course Title: Advanced Cost Accounting							
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks				
II	6	90	4	100				

COs	CO Statement	Knowledge
Number		Level
CO1	Acquire knowledge about cost accounting and preparation of cost sheet.	K1, K2 & K3
CO2	Get deep insight into material cost control and labour cost control.	K3 & K4

CO ₃	Learn	about	overheads	, its	classificat	tion, ap	portionment	K4 & K5
	reapportio	nment	and absorpti	on of ove	erheads.			
CO4	Gain knowledge about job costing and contract costing.						K5	
CO5	Application products.	on of	knowledge	towards	process co	osting, jo	oint and by	- K6

Program: M.Com.						
Core – VI Course Code: 20PCM2C06			Course Title: Investment Analysis and Portfolio Management			
Semester	Hours/Week Total Hours		Credits	Total Marks		
II	4	60	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Understand about investment options and SEBI guidelines.	K1, K2 & K3
CO2	Acquire knowledge about investment strategies and valuation of securities.	K3 & K4
CO3	Learn about fundamental analysis and its sources of information.	K4 & K5
CO4	Gain knowledge about technical analysis and market efficiency.	K5
CO5	Know about CAPM and risk free lending and borrowings.	K6

Program: M.Com.							
Core – VII Course Code: 20PCM2C07			Course Title: Advanced Business Statistics				
Semester	Hours/Week Total Hours		Credits	Total Marks			
II	6	90	4	100			

COs	CO Statement	Knowledge
Number		Level
CO1	Promote skill of applying statistical techniques in business.	K1, K2 & K3
CO2	Learn about correlation and regression analysis for research.	K3 & K4
CO3	Applications and knowledge of probability theorems.	K5
CO4	Test hypothesis by using of advanced statistical tools.	K5 & K6
CO5	Apply statistical tools in analysis and interpretation of data.	K6

Program: M.Com.								
Core - VI	Core – VIII Course Code: 20PCM2C08 Course Title: E – Commerce							
Semester	Hours/	Week	<b>Total Hours</b>	Credits	Total Marks			
II	4		60	4	100			

COs	CO Statement	Knowledge
Number		Level
CO1	Familiarize concept of E-Commerce.	K1, K2 & K3
CO2	Carry out procedures for order procurement, order processing and post sales services.	K3 & K4
CO3	Know website principles, methods of customer Communication and handle electronic payment systems.	K4 & K5
CO4	Analyze the categories of E-Commerce and its applications.	K5
CO5	Identify security issues of E-Commerce and its applications.	K6

Program: M.Com.							
Elective – II	e – II Course Code: 20PCM2E03			Course Title: Financial Markets and Services			
Semester	Hours/Week Total Hours		Credits	Total Marks			
II	4	60	4	100			

COs	CO Statement	Knowledge
Number		Level
CO1	Understand basic knowledge of financial system and RBI guidelines.	K1, K2 & K3
CO2	Know about banking functions and investment patterns.	K3 & K4
CO3	Gather knowledge about Merchant banking and its function.	K4
CO4	Gain information about financial markets, functions and features.	K5
CO5	Analyse about industrial securities investment.	K6

Program: M.Com.						
Elective – II Course Code:20PCM2E04 Course Title: International Busin				nternational Business		
Semester	Hours/Week	<b>Total Hours</b>	Credits	<b>Total Marks</b>		
II	4	60	4	100		

COs	CO Statement	Knowledge
Number		Level
CO1	Acquire knowledge about foreign trade, opportunities and challenges.	K1, K2 & K3
CO2	Provide an insight into the sources of finance for foreign trade.	K3 & K4
CO3	Know about balance of payment and recent trends.	K4 & K5
CO4	Understand export trade policies and organization.	K5
CO5	Get an idea about institutional infrastructure polices and economic	K6
	conditions.	

#### **B.SC (MATHEMATICS)**

## PROGRAMME OUTCOMES (POs)

PO1	Communicate Effectively - Well versed in communicating both in English (as
	medium of instruction) and Tamil (mother's tongue), distinguish between professional
	and non-professional dialogues. Develop LSRW (Listening, Speaking, Reading,
	Writing) skills with advanced technologies.
PO2	Environment Concern - Follow RRRR (Reduce, Reuse, Recycle, and Refuse) and
	develop affinity towards environment and practice save Nature and Water.
PO3	Ethical and Healthy Practice - Adhere to values in day to day life, practice yoga and
	other physical exercises, hence, develop self - respect and self- esteem, have strong
	integrity.
PO4	Social Consciousness - Understand the rural situations through ERP (Empowering
	Rural People), and develop social consciousness, solve the issues through interaction,
	become mediator/ moderator between government and people, and become true citizen
	of our Nation.
PO5	Subject Specialist - Acquaint their own subject and integrate with other disciplines
	(CBCS) with advanced technologies and become a Regional, National and Global
	competitor.

#### PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	Students will develop and apply concepts of expressions, equations and inequalities
	to investigate and describe.
PSO2	Real Numbers and Algebraic Expressions. Classify and Define Properties of Real
	Numbers. Solve Multi-Step Linear Equations. Problem Solving.
PSO3	Simplify and perform arithmetic operations on rational algebraic expressions,
	including those with radicals and perform the basic arithmetic operations of
	addition, subtraction, multiplication and division on polynomials.
PSO4	Demonstrate an understanding of limits and how they are used in sequences, series,
	differentiation and integration.
PSO5	The course includes axioms of real number systems, uniform convergence of
	sequences and series of functions, equi-continuity.
PSO6	Formulate and solve problems as networks and graphs. Develop linear

	programming (LP) models for shortest path, maximum flow, minimal spanning			
	tree, critical path, minimum cost flow, and transshipment problems. Use CPM and			
	PERT techniques, to plan, Schedule and control project activities.			
PSO7	Complex numbers, analytic functions, Cauchy integral theorem, Cauchy integral			
	formula, power series and conformal mapping.			
PSO8	Fluid, solid or continuum mechanics. You have good knowledge of a broad range			
	of methods and techniques based on mechanics and can use them for analysis and			
	problem solving.			
PSO9	Correlation and Regression analysis, Multiple Regression and Statistical			
	Forecasting.			
PSO10	Analyze vector functions to find derivatives, tangent lines, integrals, arc length, and			
	curvature, Differentiate vector fields, Determine gradient vector fields and find			
	potential functions, Evaluate line integrals directly and by the fundamental theorem.			
PSO11	To appreciate the basic principles of Boolean algebra, Logic, Set Theory,			
	Permutations.			

# COURSE OUTCOMES (COs) SEMESTER – I

Program: B.Sc. Mathematics						
Core – I	Course Code:20UMA1C01 Course Title: Algebra and Trigonometr					
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
I	5	75	4	100		

CO Number	CO Statement	Knowledge Level
CO1	Study the concept of Matrices and Cayley- Hamilton theorem.	K1
CO2	Finding the solution of Theory of equations.	K2
CO3	Study the concept of Reciprocal Equations	K2& K3
CO4	Evaluate Expansions of $\cos n\theta$ and $\sin n\theta$ .	K4&K5
CO5	Obtain the solution of Hyperbolic functions and Inverse hyperbolic functions.	K5

Program: B.Sc. Mathematics						
Core – II	Course Code	e:20UMA1C02	Course Title: Logic, sets and Boolean Algebra			
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
I	6	90	5	100		

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand Logic and properties.	K1
CO2	Derived Normal forms and The theory of inference for the statement calculus.	K1&K2
CO3	Describe The predicate calculus and Inference theory of the predicate calculus.	K2& K3
CO4	Define and illustrate the Relations and ordering.	K4&K5
CO5	Describe Lattices as partially ordered sets.	K5

B.Sc. Mathematics						
Allied Mathe	ematics	Course code:	Course title: Allied Mathematics – I			
B.Sc. PHY/CI	HE/CS/BCA	20UMA1A01				
Semester	F	Hours/Week	Total	Credits	Total	
I		6	Hours	5	Marks	
			75		100	

CO	CO Statement	Knowledge
Number		Level
CO1	Acquire knowledge about the rank of a matrix, characteristic roots and characteristic vectors.	K1
CO2	Solve algebraic and transcendental equations by Numerical methods.	K2
CO3	Solve the problem of radius of curvature in Cartesian coordinates,	K3 & K4

	parametric coordinates and polar coordinates	
CO4	Recall the concepts of second order differential equations and	
	acquire knowledge to find the particular integral for different types of functions.	
CO5	Analyse the different types of solutions for partial differential equations.	K6

B.Sc. Mathematics					
Allied Mathematics BBA	Course Code: 20UMA1BM01	Course Title: Business Mathematics and Statistics			
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks	
I	5	75	4	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Learn about Arithmetic Progression, Geometric Progression and	K1 & K2
	Harmonic Progression.	
CO2	Apply Fundamental ideas about matrices and their operational	K3
	rules.	
CO3	Understand source, collection of data and apply for practical life.	К3
CO4	Plot and interpret straight line graphs, apply them to business	K4 & K5
	decision –making and discuss the significant features of nonlinear	
	graphs.	
CO5	Demonstrate correct usage of measures of central tendency and	K6
	measures of dispersion to describe data and perform analysis of	
	data based on the results of these measures.	

B.Sc. Mathematics						
Allied Mathematics BBA (CA)	Course Code:20UMA1BM02	Course Title: Business Mathematics and Statistics				
Semester	Hours/Week	<b>Total Hours</b>	Credits	<b>Total Marks</b>		
I	5	75	4	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Learn about Fundamental ideas about matrices and their operational rules.	K1 & K2
CO2	Understand the Fundamental ideas of finances	K3
CO3	Understand source, collection of data and apply for practical life.	K3 & K4
CO4	Select the appropriate measure of dispersion and correctly calculate and interpret the statistic	K5
CO5	Describe the linear simple correlation and regression line	K6

## SEMESTER – II

Program: B.Sc. Mathematics					
Core – III	Course Cod	le:20UMA2C03	Course Title: Integral and Vector Calculus		
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks	
II	5	75	5	100	

CO	CO Statement	Knowledg
Number		
CO1	Find the Curvature and radius of curvature in polar coordinates.	K1
CO2	Solving technique of integrals, Integration by parts and Bernoulli's formula.	K2

CO3	Discuss Beta & Gamma functions.	K2& K3
CO4	Define a vector differentiation, Find and interpret of vector	K4
CO4	differential operator, Gradient, Direction and magnitude of gradient.	
CO5	Evaluate Gauss divergence theorem, Stoke's theorem and Green's	K5
COS	theorem.	

Program: B.Sc. Mathematics						
Core – IV	Course Co	Course Code:20UMA2C04 Course Title: Differential Equations			se Title: Differential Equations	
Semester	Hours/Week	<b>Total Hours</b>	Credits		Total Marks	
II	6	90		5	100	

CO	CO Statement	Knowledg
Number		e Level
CO1	Solve the first order differential equations through various techniques.	K1
CO2	Learn the methods for solving Linear Differential Equations with constant and variable coefficients.	K2
CO3	Evaluate the partial differential equations of first order using different methods.	К3
CO4	Understand the basic concepts of Laplace and Inverse Laplace Transforms.	K4
CO5	Apply Laplace and Inverse Laplace transforms to solve the ordinary differential equations.	K5

B.Sc. Mathematics						
Allied Mathematics B.Sc. PHY/CHE/CS/BCA  Course code 20UMA2A02  Course title: Allied Mathematics—II					Iathematics—II	
Semester Hours/Week		<b>Total Hours</b>	Credits	<b>Total Marks</b>		
I	[		6	75	5	100

CO	CO Statement	Knowledge
Number		Level
CO1	Grasp the concept of multiple integrals and its evaluations.	K1
CO2	Understand the relation between the roots and coefficients, symmetric functions of the roots, reciprocal equation and solve the related problems.	K2
CO3	Learn the Laplace and Inverse Laplace transform of elementary functions and study its applications.	K3 & K4
CO4	To solve Vector Differentiation, Limit of a vector function, Continuity and derivative of vector function.	K5
CO5	Analyse the different types of Vector Point Function.	K5 & K6

B.Sc. Mathematics					
Allied Mathematics  BBA	Course Code:20UMA2BM02	Busine		e Title: ics and Statistics – II	
Semester II	Hours/Week 5	Total Hours 75	Credits 4	<b>Total Marks</b> 100	

CO	CO Statement	Knowledge
Number		Level
CO1	Learn basic of mathematics finance	K1 & K2
CO2	Understand calculus, rules of differentiation, maxima & minima	K2
CO3	Describe index number & ideal index number, Learn linear simple correlation and regression line	K3 & K4
CO4	Learn linear simple correlation and regression line	K5
CO5	Describe index number & ideal index number	K6

#### **M.SC MATHEMATICS**

## **PROGRAMME OUTCOMES (POs)**

PO1	Identify and enhance mathematical and computational strategies in order to solve
	mathematical problems.
PO2	Construct logical arguments for solving abstract or applied mathematical
	problems.
PO3	Obtain accurate solutions for the community oriented problems via various
	mathematical models.
PO4	Know various specialised areas of advanced mathematics and its applications.
PO5	Present papers in seminars and conferences in order to defend their mathematical
	skills on various topics in the curriculum.
PO6	Work as professional mathematicians either in academia or elsewhere.
PO7	Inculcate knowledge of formulation and apply mathematical concepts which are
	suitable for real life applications.
PO8	Crack lectureship and fellowship exams affirmed by UGC like CSIR-NET and
	SET.

#### PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Develop the mathematical skills and knowledge for their intrinsic beauty, for				
	proficiency in analytical reasoning, utility in modeling and solving the real world				
	problems by using the concepts of Algebra, Analysis, Dynamics, Differential				
	Equations, Geometry, Topology, Operations Research, Fuzzy Sets & Fuzzy				
	Logic, Fluid Dynamics and Matlab.				
PSO ₂	Develop computational and logical thinking and the habit of making conclusions				
	based on quantitative information.				
PSO3	Work efficiently and constructively as a part of a team and do project				
	Individually.				
PSO4	Do projects related to emerging Social and Environmental issues.				
PSO5	Join in various Universities and Institutions like IMSC, IISc, etc., in order to do				
	summer research projects on Algebra, Analysis, Topology, Mechanics, Fluid				
	Dynamics, Differential Equations, Number Theory, Matlab, Differential				
	Geometry and Fuzzy sets.				

# SEMESTER – I

Program: M.Sc. Mathematics						
C	ore – I	Course Code	Course Code: 20PMA1C01 Course Title: Line			
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
I	6	90	5	100		

# **COURSE OUTCOMES (COs)**

CO	CO Statement	Knowledge
Number		Level
CO1	Understand basic concepts of Linear transformations, characteristic roots	K2
	and matrices of linear transformation and its applications.	
CO2	Explain about algebra of polynomials, polynomial ideals and prime	K4
	factorization of a polynomial.	
CO3	Understand basic concepts of determinants and its additional properties.	K2
CO4	Understand concepts of Simultaneous triangulations and Diagonalization.	K3
CO5	Analyse canonical Form, Jordan Form and Rational Form.	K4 & K5

Program: M.Sc. Mathematics						
Core – II Course Code: 20PMA1C02 Course Title: Real Analy					tle: Real Analysis – I	
Semester	Hours/Week		Total Hours		Credits	Total Marks
I	6		90		5	100

CO	CO Statement	Knowledg	
Number		e Level	
CO1	Describe fundamental properties of the real numbers that lead to the	K2	
	formal development of real analysis.		
CO2	Demonstrate an understanding of limits and how they are used in	K2	

	sequences, series, differentiation and integration.	
CO3	Appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.	К3
CO4	Describe fundamental properties of the real numbers that lead to the formal development of real analysis.	K5
CO5	Comprehend regions arguments developing the theory underpinning real analysis.	K4

Program: M.Sc. Mathematics						
Core – III	Core – III Course Code: 20PMA1C03 Course Title: Ordinary Differential Equation					
Semester	Hours/Week Total Hours		Credits	Total Marks		
I	6	90	4	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Acquire adequate knowledge about linear dependence and independence of the solutions of differential equations based on Wronskian value.	K2
CO2	Solve numerous initial value problems of homogenous and non-homogenous equations of n-th order.	K2
CO3	Gain understanding on the reduction of order of a homogenous equation, nature of the same with analytic coefficients and relate them on a Legendre equation.	К3
CO4	Examine the computations of Euler equations, equations with regular singular points along with the exception – The Bessel equation.	K5
CO5	Conclude the idea of Convergence of the successive approximations employing the Lipschitz condition.	K4

Program: M.Sc. Mathematics						
Core – IV	Core – IV Course Code: 20PMA1C04 Course Title: Classical Mechanics					
Semester	Hours/Week Total Hours		Credits	Total Marks		
I	6	90	4	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Understand the basic concepts of the mechanical system, generalized coordinates, work, energy and momentum	K1&K2
CO2	Solve and analyze the Lagrange's equations and integrals of motion with examples	K3&K4
CO3	Understand the Hamilton's Principle and other variational principles and gain ability to analyze those principles to the problems arising in practical situations	K3
CO4	Gain knowledge about the differential forms and generating functions in canonical transformations, the bilinear covariant and compare the Lagrange's and Poisson brackets	K4&K5
CO5	Understand and develop the Hamilton's Principal function and Hamilton Jacobi equation	K3&K5

Program: M.Sc. Mathematics						
Elective – I (From Group – A)		Course Code: 20PMA1E01		Course Title: Numerical Analys		
Semester Hours/		Week	Total Hours	Credits	Total Marks	
I	6		90	4	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Understand and apply Numerical Solution to ODE.	K2&K3
CO2	Analyze Picards and Eulers Method.	K4
CO3	Evaluate Runge - Kutta Method - First, Second order Differential	K5
	Equations	
CO4	Understand and apply Numerical Solution to PDE	K2&K3
CO5	Analyze Numerical Solution to PDE	K4

#### <u>SEMESTER – II</u>

Program: M.Sc. Mathematics						
Core – VI		Cour	se Code: 20PMA2C	06	Course	<b>Title:</b> Real Analysis – II
Semester	Hours/Week		Total Hours		Credits	Total Marks
II	6		90		5	100

CO	CO Statement	Knowledg
Number		e Level
CO1	Understand Riemann integrals and its properties.	K2
CO2	Acquire knowledge for any advanced learning in Pure Mathematics.	K2
CO3	Solve Convergence of a sequences and series of functions.	К3
CO4	Evaluate the basics of special functions.	K5
CO5	Analyse Multivariate analysis.	K4

	Program: M.Sc. Mathematics					
Core – VII	Course Cod	le: 20PMA2C07	Course Title: Partial Differential Equations			
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks		
II	6	90	4	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Understand fundamental concepts of classification of second order	K2
	partial differential equations, canonical forms.	
CO2	Analyse hyperbolic equations.	K2
CO3	Determine the occurrence of Laplace equations, boundary value	K3
	problems and develop Green's function for Laplace Equation.	
CO4	Develop the knowledge of one dimensional wave equation.	K5
CO5	Determine the occurrence of Diffusion equations, Separation of	K3&K4
	Variables and develop Green's function for Laplace Equation.	

Program: M.Sc. Mathematics					
Core – VIII	Course Code: 20PMA2C08 Course Title: Graph Theory				rse Title: Graph Theory
Semester	Hours/Week	<b>Total Hours</b>	Credits		Total Marks
II	6	90		4	100

CO	CO Statement	Knowledge
Number		Level
CO1	Know basic definitions and concepts of graphs and sub graphs.	K2
	Getting acquainted with the concepts of trees and connectivity study its applications.	K2
CO3	Recognize concepts and properties of Euler Tours and Matching and study its applications.	К3
	Assimilate knowledge about many different colouring problems for graphs, formulate applied problems as colouring problems and understand the notations of independent sets.	K5
CO5	Evaluate applications of graph theory in other disciplines.	K4

Program: M.Sc. Mathematics						
Elective – II (From Group – B)		Course (	Code: 20PMA2E05 Course Title: Fuzzy Sets and Ap		tle: Fuzzy Sets and Applications	
Semester Hou		ırs/Week	<b>Total Hours</b>	Credits	Total Marks	
II	4		60	4	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge about basic types of fuzzy sets and difference between crisp sets and fuzzy sets.	K1
CO2	Understand the concept of operations on fuzzy sets.	K2
CO3	Acquire knowledge about concepts of fuzzy arithmetic and gain knowledge to solve the related problems.	K3&K4
CO4	Discriminate relations and fuzzy relations.	K4
CO5	Create a fuzzy model and solve social, environmental and biological problems.	K6

#### **B.SC. CHEMISTRY**

## PROGRAMME OUTCOMES (PO)

PO1	Graduates are prepared to be creators of new knowledge leading to innovation and <b>entrepreneurship employable</b> in various sectors such as private, government, and research organizations
PO2	Graduates are trained to evolve new technologies in their own discipline.
PO3	Graduates are groomed to engage in lifelong learning process by exploring their knowledge independently
PO4	Graduates are framed to design and conduct experiments /demos/create models to analyze and interpret data.
PO5	Graduates ought to have the ability of effectively communicating the findings of Physical sciences; incorporating with existing knowledge

## PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	Human and Social Values and Responsibilities in the context of learning Chemistry
PSO2	Communicative Skills and the Creative scientific mind towards learning chemistry
PSO3	Positive approach towards Environment and Ecology from the Chemistry perspective
PSO4	Critical thinking and the Analytical mind, students develop for the in depth knowledge in advanced-level Chemistry
PSO5	The relevance of extension of Chemistry in the social context for solving social issues
PSO6	Employability Skills shall enable the students to find jobs in core- chemistry and other related fields
PSO7	Entrepreneurial Skills shall empower the students to start their own industries / business in core-chemistry fields
PSO8	Analytical or Experimental Skills make the students capable of doing higher-level research works in the emerging fields of chemistry

Program: B.Sc. Chemistry							
Core – I Course Code: 20UCH1C01 Course Title: General Ch			General Chemistry – I				
Semester	Hours/Week	Total Hours	Credits	Total Marks			
I	6	90	4	100			

## COURSE OUTCOMES (COs)

CO	CO Statement	Knowledge
Number		Level
CO1	Identify structure of atom	K1
CO2	Understand the concept of Dual nature of matter and atomic character in some molecules	K2
CO3	Illustrate the importance of storage and handling of chemicals	К3
CO4	Analyse the Safety and hygiene in chemical laboratory	K4
CO5	Evaluate the techniques of thermochemistry	K5&K6
CO6	Formulate the structure and bonding reactions shown by organic	K5&K6
	molecules	

Program: B.Sc. Chemistry							
Core –II	<b>Course Code:</b>	20UCH2C02	Course Title: General Chemistry – II				
Semester	Hours/Week	<b>Total Hours</b>	Credits	Total Marks			
II	5	90	4	100			

CO	CO Statement	Knowledge
Number		Level
CO1	Define chemical bonding	K1
CO2	Understand the concept of different types of overlapping	K2
CO3	Illustrate the importance of Second law of thermodynamics and	К3
	concept of entropy	
CO4	Analyse the Electrophilic substitution reactions in aromatic	K4
	Compounds	

CO5	Evaluate the Reaction intermediates	K5&K6
CO6	Formulate the Molecular orbital theory	K5&K6

Program: B.Sc. Chemistry								
SBEC – I	SBEC – I Course Code: 20UCH2S01 Course Title: Food and Nutrition							
Semester	Hours/Week		Total Hours		Credits	Total Marks		
II	2		30		1	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Define Sources of foods	K1
CO2	Understand the concept of Mal nutrition	K2
CO3	Illustrate the importance of Food poisoning and Food adulteration	K3
CO4	Analyze the Food spoilage and Food preservation	K4
CO5	Evaluate the Sources, requirement and deficiency diseases of	K5&K6
	vitamins and minerals	

# M.SC. CHEMISTRY

	Program: M.Sc. Chemistry							
Core – II Course Code: 20PCH1C01 Course Title: OrganicChemi								
Semester	Hours/	<b>Total Hours</b>		Credits	Total Marks			
I	Week	75		4	100			
	5							

#### **COURSE OUTCOMES (COs)**

Knowledge	COs	CO Statement
Level	Number	
K1	CO1	Identify bonding in organic molecules and the structural implications on properties
K2	CO2	Understand the concept of aromatic character in some molecules
K3	CO3	Illustrate the importance of stereo chemical aspects of structure and properties
K4	CO4	Analyse the chemical reactions and the mechanisms via different intermediates
K5&K6	CO5	Evaluate the techniques of studying the mechanisms of reactions
K5&K6	CO6	Formulate the nucleophile substitution reactions shown by organic molecules

Program: M.Sc. Chemistry									
Core – II	Core – II Course Code: 20PCH1C02 Course Title: InorganicChemistry – I								
Semester	Hours/	Total Hours	Credits	Total Marks					
I	Week	75	4	100					
	5								

Knowledge	COs	CO Statement
Level	Number	
K1	CO1	Identify The chemistry of transition and inner transition elements

K2	CO2	Understand the Important compounds of transition metals and
		their applications
K3	CO3	Illustrate the importance of stereo chemical aspects
		ofCoordination compounds
K4	CO4	Analyse the Crystal field stabilization energy and boron clusters
K1&K2	CO5	Evaluate the Metal-Ligand Bonding and properties of solids
K3&K4	CO6	Formulate the Styx number and wade's rule in Coordination
		Complexes

Program: M.Sc. Chemistry							
Core – III	Core – III Course Code: 20PCH1C03 Course Title: PhysicalChemistry-I						
Semester	Hours/		Total Hours		Credits	Total Marks	
I	Week		75		4	100	
		5					

Knowledge	COs	CO Statement					
Level	Number						
K1	CO1	Identify the theories of reaction rates					
K2	CO2	Understand the concept of potential energy contour plots					
К3	CO3	Illustrate the importance of concepts and applications of reaction					
		kinetic chemistry					
K4	CO4	Analyse the Acid-base and enzyme catalysis concepts					
K1&K2	CO5	Evaluate the rate of the chemical reactions					
K3&K4	CO6	Formulate the quantum mechanical postulates & Schrodinger					
		equation					

Program: M.Sc. Chemistry							
Elective -	Elective – I Course Code: 20PCH1E01 Course Title: Polymer Chemistry						
Semester	Hours/Week		Total Hours		Credits	<b>Total Marks</b>	
I	5		75		3	100	

Knowledge	COs	CO Statement		
Level	Number			
K1	CO1	Identify polymers		
K2	CO2	Understand Free radical, cationic and anionic polymerization		
К3	CO3	Illustrate the kinetics and types of co-ordination polymerization		
K4	CO4	Analyse the Properties of Commercial Polymers		
K1&K2	CO5	Evaluate the molecular weight and the properties of polymers.		
K3&K4	CO6	Design the Electrochemical synthesis of conducting polymers		

Program: M.Sc. Chemistry						
Elective –	Elective – II Course Code: 20PCH1E02 Course Title: ConductingPolymer					
Semester	Hours/Week	Total Hours	Credits	<b>Total Marks</b>		
I	5	75	3	100		

Knowledge	COs	CO Statement				
Level	Number					
K1	CO1	Identify polymers				
K2	CO2	Understand the Electrochemical synthesis of conducting polymers				
K3	CO3	Illustrate the Catalytic properties of polymerization				
K4	CO4	Analyse the Synthetic route of Polymers				
K1&K2	CO5	Evaluate the reduction and oxidation potential in doping.				
K3&K4	CO6	Design the Structural basis for semiconducting and metallic polymers				

Program: M.Sc. Chemistry					
Core - IV Course Code: 20PCH2C04 Course Title: OrganicChemistry – II					
Semester Hours/Week T			Total Hours	Credits	Total Marks
II	5		75	4	100

Knowledge	COs	CO Statement
Level	Number	
K1	CO1	Identify the addition reactions in carbon-carbon unsaturated bonds
K2	CO2	Understand the different kinds of electrophilic mechanisms in both aromatic and aliphatic compounds
К3	CO3	Illustrate the addition reactions to carbon-hetero atom multiple bonds
K4	CO4	Analyse the mechanisms of elimination reactions and their name reactions
K1&K2	CO5	Evaluate the synthetic uses of the different oxidants and reluctant used in organic synthesis.
K3&K4	CO6	Rewrite, prepare and learn some selected topics on synthetic organic chemistry by themselves through online study

Program: M.Sc. Chemistry					
Core – V Course Code: 20PCH2C05 Course Title: InorganicChemistry –					
Semester	Hours/	Total Hours	Credits	Total Marks	
II	Week	75	4	100	
	5				

Knowledge	COs	CO Statement
Level	Number	
K1	CO1	Identify the addition reactions in Inorganic compounds
K2	CO2	Understand the applications of nuclear chemistry in theoretical and analytical fields
K3	CO3	Illustrate the Inorganic reaction mechanism
K4	CO4	Analyse the Concept of nuclear energy and nuclear reactions
K1&K2	CO5	Evaluate the need of nuclear energy to the expanding human Society
K3&K4	CO6	Compile Various atomic power projects in India

Program: M.Sc. Chemistry						
Core – VI Course Code: 20PCH2C06 Course Title: Physica					le: PhysicalChemistry – II	
Semester	Hours/		Total Hours		Credits	Total Marks
II	Week		60		4	100
		4				

Knowledge	COs	CO Statement
Level	Number	
K1	CO1	learn the concept of classical mechanics
K2	CO2	Understand the concepts of mathematics of quantum chemistry and group theory
К3	CO3	Illustrate the concept of group theory
K4	CO4	Analyse the concept of building a character table
K1&K2	CO5	Evaluate the hybridization and crystal symmetry
K3&K4	CO6	Formulate the concepts of Schrodinger wave equation

#### **B.SC (PHYSICS)**

# PROGRAMME OUTCOMES (PO)

PO1	Understand basic principles and experimental basis pertaining to different branches of
	Physics and logical relationships of various fields.
PO2	Based on the gained knowledge, students can acquire technical, analytical and creative
	skills.
PO3	Transfer and apply the acquired skills, concept and principles to study different fields of
	Physics
PO4	Capable of solving problems using techniques with mathematical skills, conceptual and
	mathematical models.
PO5	Develop proficiency in design and construction of portable devices using laboratory
	components / instruments and to draw valid conclusions from experimental data.

# COURSE OUTCOMES (COs)

	Program: B.Sc. Physics					
Core – I	<b>Course Code:</b>	20UPH1C01	Course Title: Properties of Matter and Acoustics			
Semester	Hours/Week Total Hours		Credits	Total Marks		
I	6	90	5	100		

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand the concept of modulus, Surface Tension, Osmosis and Acoustics	K1 & K2
CO2	Gather knowledge about the measurement of modulus for different material, tension of different liquid, diffusion process and production, detection and applications of Ultrasonics	
CO3	Able to gain knowledge in calculating the modulus values of different materials, difference in surface tension of liquids and vibrational	K4 & K5

	motions.	
CO4	Gain knowledge regarding methods of production of Ultrasonic	K4, K5 & K6
C04	waves, process of diffusion and liquid motions.	K4, K3 & K0

Program: B.Sc. Physics						
Core – I	Core – II Course Code: 20UPH2C02 Course Title: Mechanics				rse Title: Mechanics	
Semester	Hours/	Week	Total Hours	Credits	Total Marks	
II	5		75	5	100	

CO Number	CO Statement	Knowledge Level
CO1	Acquire knowledge of analyzing the motion of objects using fundamental laws of Physics.	K1 & K2
CO2	Acquire a knowledge about Dynamics and Rigid bodies	K2
CO3	Understand gravitational potential energy	K2 & K4
CO4	Analyze the variation of acceleration due to gravity 'g'	K4
CO5	Solve simple problems involving the dynamic motions of objects.	K5 & K6

# M.SC (PHYSICS)

PO1	A graduate with Master degree has in depth and detailed functional knowledge of the
	fundamental theoretical concepts and experimental methods in respective discipline.
PO2	Engage in self-direct continuous learning, aimed at global competency, which will promote professional and personal growth
PO3	Students will show that they have learnt laboratory skills, enabling them to take measurements in laboratories and analyze the measurements to draw valid conclusions.
PO4	Combining various academic disciplines and professional specializations to cross borders and redefine problems in order to explore solutions based on the new understanding of complex situation.
PO5	Acquiring knowledge at a higher level that would help to develop the necessary skills and recognize the need for the preparation and ability to engage in independent life- long learning in the broadest context of technological change.

# **COURSE OUTCOMES (COs)**

	Program: M.Sc. Physics							
Core – l	Core – I Course Code: 20PPH1C01 Course Title: Mathematical Physic							
Semester	Hours/	Week	<b>Total Hours</b>		Credits	Total Marks		
I	6		90		4	100		

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Use the complex derivatives function, use and operate analytic functions, demonstrate knowledge of integration in the complex plane, use the Cauchy integral theorem and formula, understand residues and their use in integration.	K1 & K2
CO2	Gain a working knowledge of know elementary ideas in Gamma and Beta functions, series solutions and special functions, will be able to apply to solve problems in classical, statistical and quantum mechanics as well as electromagnetism	K2

	Evaluate the Fourier transform of a continuous function, and be familiar	K2 & K3
CO3	with its basic properties and convolution theorem and also learn Laplace	
	transform, properties and special functions will help the students to	
	critically analyze physical problems.	
	Understand Tensors and its importance in physics because they provide a	K4
CO4	concise mathematical framework for formulating and solving physics	
CO4	problems in areas such as elasticity, fluid mechanics, and general	
	relativity.	
	The basic ideas of Group Theory and the closely related representation	K6
CO5	theory have many important applications in physics, chemistry, and	
	materials science.	

Program: M.Sc. Physics							
Core – II	Core – II Course Code: 20PPH1C02 Course Title: Classical Mechanics						
Semester	Hou	rs/Week	<b>Total Hours</b>		Credits	Total Marks	
I		6	90		4	100	

CO	CO Statement	Knowledge
Number		Level
CO 1	Formulate and solve classical mechanics problems using Lagrangian	K1 & K2
	and Hamiltonian methods.	
CO 2	Find constants of motion according to the Hamilton Jacobi theory	K3 & K4
	using Canonical transformations.	
CO 3	Study periodic motion by action-angle variables and find derivatives	K3 & K4
	in phase space using Poisson brackets.	
CO 4	Apply methods of classical mechanics, including normal modes, to a	K5 & K6
	continuum system such as a fluid.	
CO 5	Use symmetries of a system to identify conserved quantities and	K5 & K6
	predict the nature of normal modes of its linearization.	

Program: M.Sc. Physics							
Core – III	Cour	se Code: 20PPH1C0	CO3  Course Title: Linear And Non-Linear Integrated Circuits And Applications				
Semester	Hours/Wee	k Total Hours	Credits	Total Marks			
I	5	75	4	100			

CO Number	CO Statement	Knowledge Level
CO1	Acquire elaborate knowledge about operational amplifier and its applications	K1 & K2
CO2	Understand the concepts of oscillators & multivibrators and its applications in electronic devices.	K2 & K3
CO3	Gain the knowledge of basic digital circuits and memory devices.	K3 & K4
CO4	Develop the practical knowledge in the field of registers and counters.	K5 & K6
CO5	Understand the working principles of data converting circuits and active filters.	K5

Program: M.Sc. Physics							
Elective – I Course Code: 20PPH1E01 Course Title: Energy Physics						Energy Physics	
Semester	Hours/	Week	Total Hours	Credits		Total Marks	
I	5		75	4		100	

CO	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge about origin and types of diverse energy sources	K1 & K2
CO2	Understand properties of energy sources and identify their application potentials	K2 & K3
CO3	Gather research-based knowledge about principal, construction and	K3&K4

	operation of different energy conversion technologies	
CO4	Acquire information pertaining to application potential of various	K5
	energy sources through appropriate technologies	
CO5	Develop skills to design portable energy conversion devices and	K6
	their demonstration	

Program: M.Sc. Physics							
Core Practical – I		Cour	Course Code: 20PPH2P01		Course Title: General and Advanced Physics Experiments		
Semester I and II	Hours/Week 4		Total Hours		Credits 4	Total Marks	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Understand the strength of material using Young's modulus.	K1 & K2
CO2	Acquire knowledge of thermal behaviour of the materials.	K2 & K3
CO3	Understand theoretical principles of magnetism through the experiments.	K4
CO4	Acquire knowledge about arc spectrum and applications of laser	K5 & K6
CO5	Improve the analytical and observation ability in Physics Experiments	K6

Program: M.Sc. Physics						
Core Practical	l – II	Cours	urse Code: 20PPH2P02 Course Title:		e: Electronics Experiments	
Semester	ster Hours/Week		<b>Total Hours</b>	Credits	Total Marks	
I and II	4	4	120	4	100	

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Conduct experiments on applications of FET and UJT	K1 & K2
CO2	Analyze various parameters related to operational amplifiers.	K2 & K3
CO3	Understand the concepts involved in arithmetic and logical circuits using IC's	K4
CO4	Acquire knowledge about Combinational Logic Circuits and Sequential Logic Circuits	K5
CO5	Analyze the applications of counters and registers	K6

#### **B.SC (COMPUTER SCIENCE)**

# **PROGRAMME OUTCOMES (POs)**

PO1	Understand fundamental concepts of key areas in Computer Science and enable
	students expose technical, analytical and creative skills.
PO2	Build student's effective communication, ethical attitudes, team work and logical
	proficiency.
PO3	Students are to be passionately engaged in primary learning with intend to think
	differently, understanding and applying knowledge of mathematical, logarithmic
	and computing skills to acquire employability.
PO4	Students are to be imparted with a broad conceptual background in the Computing
	sciences to design, implement and evaluate a computational system.
PO5	Make use of modern tools and techniques to develop practical skills for fulfilling the
	needs of industry and society.

# PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Possess basic knowledge on core concepts of Computer Science the knowledge of
	Computer Science through theory and practicals.
PSO2	Demonstrate mastery of Computer Science in the following core knowledge areas
	Data Structures and Programming Languages
	Databases, Software Engineering and Web Development
	Operating System and Computer Hardware
PSO3	Apply problem-solving skills and the knowledge of programming languages in
	computer science to solve real world problems.
PSO4	Empowered with analytical mind and critical thinking.
PSO5	Develop practical skills to fulfill the needs of industry and society

Program: B.Sc. Computer Science						
Core – I Course Code: 20UCS1C01 Course Title: Programming in Python						
Semester	Hours/	Total Hours	Credits	Total Marks		
I	Week	75	3	100		
	5					

CO	CO Statement	Knowledge
Number		Level
CO1	Understand and explain Python Programming.	K1 & K2
CO2	Interpret the fundamental Python syntax and semantics.	K2 & K3
CO3	Understand the concept of scripting and the contributions of scripting	K3
	languages.	
CO4	Articulate the Object-Oriented Programming concepts used in python.	K3
CO5	Connect a Python program with a database.	K3 & K4

Program: B.Sc. Computer Science							
Core – II	Course Code: 20UCS1C02   Course Title: Digital Computer						
		Fundamentals					
Semester	Hours/	Total	Credits	Total Marks			
I	Week	Hours	3	100			
	5	75					

CO	CO Statement	Knowledge
Number		Level
CO1	Describe various number system and codes.	K1 & K2
CO2	Apply Boolean laws and rules to simplify simple expressions.	K2 & K3
CO3	Experiment combinational and sequential circuits.	K4 & K5
CO4	Identify and illustrate basic organization of computer.	K3
CO5	Illustrate the memory concepts, I/O devices and peripherals.	K3 & K4

Program: B.Sc. Computer Science							
Core – III Course Code: 20UCS2C03 Course Ti					tle: Programming in C		
Semester	Semester Hours/		<b>Total Hours</b>	(	Credits	Total Marks	
II	II 5		75	3		100	

CO	CO Statement	Knowledge
Number		Level
CO1	Remember and understand the concept of C.	K1 & K2
CO2	Apply the concept of Array, Function, String and Pointers.	K3
CO3	Analyze the concept of branching and looping statements.	K4
CO4	Develop solutions to problems using C programming.	K4 & K5
CO5	Ability to build C programming to solve real world problems.	K6

#### M.SC (COMPUTER SCIENCE)

# **PROGRAMME OUTCOMES (POs)**

PO1	Understand the advanced concepts of key areas in Computer Science and enable
	students to expose technical, analytical and creative skills.
PO2	Understanding and applying knowledge of mathematics, science, algorithmic and
	computing skills to acquire solution of complex scientific problems.
PO3	Build the student's effective communication, ethical attitudes, team work and logical
	proficiency.
PO4	Students are to be imparted with a broad conceptual background in the Computing
	sciences to design, implement and evaluate a computational system.
PO5	Make use of modern IT tools and techniques to develop practical skills for fulfilling the
	needs of industry and society.
PO6	Develop research oriented skills to identify, analyse and synthesize scholarly literature
	relating to the field of Computer Science.

#### PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Posses the knowledge in the field of Computer Science through theory and practicals.
PSO2	Students will demonstrate high-level expertise in computer Science research and in the
	synthesis of research.
PSO3	Communicate computer science concepts, designs, and solutions effectively and
	professionally.
PSO4	Use software development tools, software systems, and modern computing platforms.
PSO5	Design, correctly implement and document solutions to significant computational
	problems.

Program: M.Sc Computer							
Science							
Core – I	Core – I Course Code: 20PCS1C01 Course Title: Design and Analysis of						
			Algorithms				
Semester Hours/		<b>Total Hours</b>	Credits	Total Marks			
I	Week	60	4	100			
	4						

CO	CO Statement	Knowledge
Number		Level
CO1	Understand fundamental algorithmic design concepts and	K1 & K2
	techniques for computational problem solving.	
CO2	Apply an appropriate algorithm design techniques for solving	K2 & K3
	problem.	
CO3	Ability to analyze the performance of algorithms by comparing	K4
	the efficiency of algorithms with asymptotic complexity.	
	Ability to design algorithms using standard paradigms like:	K5 & K6
CO4	Greedy, Divide and Conquer, Dynamic Programming	
	Backtracking and branch and bound.	
CO5	Ability to understand P & NP class problems for formulating	K6
	solutions using standard approaches.	

Program: M.Sc Computer Science							
Core – II	Core – II Course Code: 20PCS1C02 Course Title: Advanced Web Technology						
Semester	Hours/	<b>Total Hours</b>	Credits	Total Marks			
I	Week	60	4	100			
	4						

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Understanding basic concept of Web Technology.	K1, K2
CO2	Recognize an importance of validation control, cookies and session.	K3& K4
CO3	Applying the knowledge of ASP.NET object, ADO.NET data access and SQL to develop a client server model.	K4, K5, K6
CCC	Recognize the difference between Data list and Data grid controls in accessing data	K4
CO5	Enable to create a simple component and Database components in ASP.Net.	K5, K6

Program: M.Sc Computer Science							
Core – I	П	Course Code: 20PCS1C03		Course Title: Advanced			
			Database Management System			Ianagement Systems	
Semester	Semester Hours/		Total Hours		Credits	Total Marks	
I	4		60		4	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Know about relational model and SQL.	K1, K2
CO2	Understand the basic concepts of E-R model, relational database and normalization.	K3& K4
CO3	Learn parallel, distributed and Object Oriented Databases	K4, K5, K6
CO4	Student will be proficient in XML database	K4
CO5	Students will understand the concept of Spatial, Temporal databases and transaction processing.	K5, K6

Program: M.Sc Computer Science							
Core – IV	Core – IV Course Code: 20PCS1C04 Course Title: Discrete Mathematics						
Semester	Hours/	<b>Total Hours</b>	Credits	Total Marks			
I	Week	60	4	100			
	4						

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Solve discrete mathematics problems that involve: computing	K1, K2
	permutations and combinations of a set,	
	fundamental enumeration principles and graph theory.	
CO2	Demonstrate a working knowledge of set notation and	K3& K4
	elementary set theory, recognize the connection between set	
	operations and logic, and prove elementary results involving sets.	
CO3	Formulate and interpret statements presented in Boolean logic.	K4, K5, K6
	Reformulate statements from common language to formal logic.	
CO4	Apply truth tables and the rules of propositional and predicate	K4
	calculus	
CO5	Learn about Graph Theory.	K5, K6

	Program: M.Sc Computer Science						
Elective – I	Cou	rse Code: 20PCS1E02	2 Course Titl	e: Wireless Networks			
Semester	Hours/	<b>Total Hours</b>	Credits	Total Marks			
I	Week	60	3	100			
	4						

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Students will get the knowledge of wireless communication	K1
CO2	Knows the structures and standards of wireless communication	K1 & K2

CO ₃	Conversant With The Latest 3G/4G And WiMAX Networks	K3
	And Its Architecture.	
CO4	Design and Implement Wireless Network Environment For Any	K4
	Application Using Latest Wireless Protocols And Standards.	
CO5	Implement Different Type Of Applications For Smart Phones	K4
	And Mobile Devices With Latest Network Strategies	

Program: M.Sc Computer Science						
Core - V	7	Course Code: 20PCS2C05			Course Title: Distributed	
	Operating System					rating System
Semester	Hours/	Week	Total Hours		Credits	Total Marks
II	4		60		4	100

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Clear understanding on several resource management techniques like distributed shared memory and other resources.	K1, K2
CO2	Knowledge on mutual exclusion and Deadlock detection of Distributed operating system.	K3 & K4
CO3	Able to design and implement algorithms of distributed shared memory and commit protocols.	K4, K5, K6
CO4	Able to design and implement fault tolerant distributed systems	K4
CO5	Learn the structure and design issues of Multiprocessor and Database Operating Systems.	K5, K6

Program: M.Sc Computer Science								
Core – VI	Core – VI Course Code: 20PCS2C06 Course Title: Advanced Java Programming							
Semester	Hours/Week Total Hours Credits Total Marks							
II	3	45		4	100			

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Able to understand basics of Java programming	K1, K2
CO2	Create ability to handle exceptions in Java.	K3 & K4
CO3	Able to develop a Graphical User Interface (GUI) with Applet and Swing.	K4, K5, K6
CO4	Create interactive applications using AWT components.	K4
CO5	Understand JDBC and Network programming concepts in Java.	K5, K6

Program: M.Sc Computer Science							
Core - V	II	Course Code: 20PCS2C07			Course Title: Cryptography and		
	Network Security				work Security		
Semester	Hours/	Week	Total Hours	,	Credits	Total Marks	
II	3		45		4	100	

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Understand the fundamentals of networks security, security architecture, threats and vulnerabilities.	K1, K2
CO2	Apply the different cryptographic operations using symmetric cryptographic algorithms.	K3 & K4
CO3	Apply the different cryptographic operations using public key cryptography.	K4, K5, K6
CO4	Apply the various Authentication schemes to simulate different applications.	K4
CO5	Understand various Security practices and System security Standards	K5, K6

Program: M.Sc Computer Science							
Core – V	Ш	Course Code: 20PCS2C08			Course Title: Optimization		
		Techniques					
Semester	Hours/V	Week	<b>Total Hours</b>		Credits	<b>Total Marks</b>	
II	3		45		4	100	

CO	CO STATEMENT	KNOWLED
NUMBER		GE LEVEL
CO1	Learn about Linear Programming Problem	K1 & K2
CO2	Learn about Elements of Queueing System	K1 & K2
CO3	Apply game theory to analyze different situations of each player	K2
CO4	Apply Mathematical Techniques to find solution in the real life Situations	K2
CO5	Solve the problems related to Network Analysis, Transportation and Assignment	К3

Program: M.Sc Computer Science						
Elective –	rse Code: 20PCS2E04	4	Course Title: Data Mining			
	And Warehousing					Warehousing
Semester	Hours/	Week	Total Hours		Credits	Total Marks
II	3		45		3	100

CO	CO STATEMENT	KNOWLEDGE
NUMBER		LEVEL
CO1	Understand the basics of Data Mining & Data Warehousing.	K1
CO2	Identify the appropriate Data Mining techniques for problem Solving	K2
CO3	Demonstration of various data mining techniques and ware housing tool	К3
CO4	Implement the classification and clustering techniques	K4
CO5	Aware about Spatial, Multimedia and Text Mining	K4

#### **B.C.A**

# PROGRAMME OUTCOMES (POs)

PO1	To provide thorough understanding of nature, scope and application of
	computer and computer languages.
PO2	Effectively communicate business issues, management concepts, plans and
	decisions both in oral and written form using appropriate
	supportive technologies.
PO3	Develop various real time applications using latest technologies a
	programming languages.
PO4	Blend analytical, logical and managerial skills with the technical aspects to
	resolve real world issues.
PO5	Become employable in various IT companies and government jobs.

# PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Apply fundamental concepts and methods of Computer Science to a wide range of
	applications.
PSO2	Understand the basic concepts of digital fundamentals, OOP concepts, Databases,
	web applications and hardware related applications.
PSO3	Ability to understand the principles and working of computer systems.
PSO4	Able to understand, analyze and develop computer programs in the areas related to
	algorithm, system analysis, web design and networking for efficient design of
	computer based system.
PSO5	Ability to apply mathematical methodologies to solve computation task, model real
	world problem using appropriate data structure and suitable algorithm.
PSO6	Student will able to know various issues, latest trends in technology development and
	thereby innovate new ideas and solutions to existing problems.
PSO7	Gain knowledge and skill set in applying core concepts.
PSO8	Able to communicate effectively and to improve their competency skills to solve real
	time problems.
PSO9	Analyze and apply latest technologies to solve problems in the areas of computer
	applications.

Program: Bachelor of Computer Applications (BCA)						
Core – I	Core – I Course Code: 20UCA1C01 Course Title: Programming in Python					
Semester	Hours/	Total Hours		Credits	Total Marks	
I	Week	60		3	100	
	4					

CO	CO Statement	Knowledge
Number		Level
CO1	Understand and explain Python Programming.	K1 & K2
CO2	Interpret the fundamental Python syntax and semantics.	K2 & K3
CO3	Understand the concept of scripting and the contributions of	K3 & K4
	scripting languages.	
CO4	Articulate the Object-Oriented Programming concepts used in python.	K5
CO5	Write codes using Multiple level of organizational structures, functions,	K6
	classes, modules and package.	

Program: Bachelor of Computer Applications (BCA)						
Core – II		Course Code: 20UCA1C02		Course Title: Digital		
		Computer Fundament		r Fundamentals		
Semester Hours		Week	Total Hours		Credits	<b>Total Marks</b>
I	5		75		3	100

CO	CO Statement	Knowledge
Number		Level
CO1	Understand the Number system and conversion from one system to another system.	K1 & K2
CO2	Understand the functional concepts of Logic gates.	K1, K2 & K3
CO3	Analyze the concept of Boolean Algebra and Simplifying the Boolean expression.	K3 & K4
CO4	Applying the knowledge to perform arithmetical operations using	K4 & K5

	Logical circuit.	
CO5	Gain the Knowledge about memory Elements.	K5

Program: Bachelor of Computer Applications (BCA)					
Core – II	I Co	irse Code: 20UCA2C	03 Cours	se Title: Programming in C	
Semester	Hours/Week	Total Hours	Credit	ts Total Marks	
II	4	60	3	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Understand and explain C Programming.	K1 & K2
CO2	Able to define data types and use them in simple data processing applications.	K2 & K3
CO3	Analyze programming problems to choose when regular loops should be used and when recursion will produce a better program.	K3 & K4
CO4	Design, implement, test and debug programs that use arrays for character strings and that use pointers for character strings.	K3, K4 & K5
CO5	Develop solutions to problems using C programming.	K6

Program: Bachelor of Computer Applications (BCA)					
Core – IV	Cour	rse Code: 20UCA2C	O4 Cours	e Title: Data	
			Structures & Algorithms		
Semester	Hours/Week	Total Hours	Credits	Total Marks	
II	4	60	3	100	

CO	CO Statement	Knowledge
Number		Level
CO1	Understand the representations of data and various algorithms.	K1 & K2
CO2	Analyze the complexity of different algorithms.	K2 & K3

CO3	Remember the concept of algorithms for searching, sorting and	K1, K2 &
	dynamic programming.	K3
CO4	Adapting the algorithmic concepts and implement new ones.	K4 & K5
CO5	Apply appropriate algorithms and data structure for real time.	K6

#### **B.SC (BOTANY)**

# PROGRAMME OUTCOMES (POs)

PO1	The study of botany will provide a good knowledge about Microbiology,
	Phycology, Taxonomy, Molecular Biology, Medicinal plants, Plant Tissue Culture
	and Ecological distributions.
PO2	Acquire tremendous opening to enhance the plant science knowledge on Plant
	Diversity and ecological dimension of vascular cryptogams and Angiosperms and
	to study the plant kingdom.
PO3	Gain knowledge and understand the range of plant diversity in terms of structure,
	function and environmental relationship from primitive to highly evolved plant
	groups.
PO4	Gather knowledge on various physiological and biochemical pathways and their
	vital role in biotic factors.
PO5	Apply logical information on the significance of moral natural standards and
	resulting duties applicable to biodiversity protection, practical and manageable
	utilization of plants.
PO6	Students can reveal the medicinal properties of plants in the socioeconomic values
	of identified plant sciences and to spread information on different parts of
	therapeutic plants and proper contemplations on human health issues.
PO7	Information on conservation of plant resources and different hotspots expand
	studies to investigate their helpful qualities economically, socially and
	aesthetically.
PO8	Use look into research based information and research techniques including the
	lab experiments, analysis and data prediction, information, and advancement of
	the data to provide a substantial ends.
	the data to provide a substantial citas.

# PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Through scientific classification, the students understand about the plant						
	communities and binomial names, economic significance including the						
	utilizations and varieties among several types of Angiosperms.						
PSO2	Students can apply the knowledge and relate the information gained from the						
	allied subjects viz; Zoology and Chemistry, to explain and conclude through the						

	interdisciplinary approaches.
PSO3	The students enhance knowledge on the pathways of metabolisms, transport and
	translocation of water and solutes and biochemical parameters like carbohydrate,
	protein and lipid together with a better understanding of regulation of growth,
	development and influence of environment.
PSO4	The students will have the option to secure tremendous academic information on
	the science of fossils and living plants alongside their associations with their
	condition in the environment.
PSO5	Investigation of horticulture and arranging procedures helps to the students to
	execute information on the procedure of development of nurseries and the
	management and maintenance of the gardens.

Program: B.Sc. Botany							
Core – I	Core – I  Course Code: 20UBO1C01  Course Title: Plant Diversity – I  (Algae, Fungi and Lichen)						
Semester	Hours/Week Total Hour		rs	Credits	Total Marks		
I	5	75		5	100		

CO	CO Statement	Knowledge
Number		Level
CO1	Differentiate and identify the algal species using algal pigments.	K1
CO2	Know about the distribution and mode of nutrition on fungal species.	K2
CO3	Apply knowledge on lichen as indicators of pollution.	K3
CO4	Enlarge the knowledge of Lichen and its functions.	K3

Program: B.Sc. Botany							
Core – II  Course Code: 20UBO2C01  Course Title: Plant Diversity (Bryophytes, Pteridophytes, Gymn Paleobotany)				ophytes, Gymnosperms and			
Semester Hours/Week II 5		<b>Total Hour</b> 75	.s	Credits 5	<b>Total Marks</b> 100		

CO	CO Statement	Knowledge
Number		Level
CO1	Explore the knowledge on Plant diversity i.e. Bryophytes,	K1
	Pteridophytes and Gymnosperms.	
CO2	To understand the internal structure and reproduction of Cryptogams	K2
	and Phanerogams.	
CO3	Apply the medicinal and economic knowledge of Bryophytes,	K3
	Pteridophytes and Gymnosperms for the benefit of human welfare.	
CO4	Apply the knowledge on earlier period evidences of fossils for the	K3
	identification and also to establish the age of the fossil plants through	
	radiocarbon dating.	

# M. SC (BOTANY)

# PROGRAMME OUTCOMES (POs)

PO1	Able to comprehend basic principles of Botany.
PO2	Explain concept and current applications of plant sciences and advances in the
	relevant subject areas including microbial, environmental, food, pharmaceutical
	and ethno medical sciences.
PO3	Describe structure and reproduction of different forms of plant life from lower to
	higher group and to compare life cycles of various groups of plants.
PO4	Explore quantitative parameters of plant community.
PO5	Provide importance to technical terms in all branches of botany and construct
	floral formula and floral diagram of a flower.
PO6	Acquire knowledge pertaining to analysis data and interpret biological results.
PO7	Demonstrate principles and practical experience of a wide range of biochemical
	techniques in plant science innovations.
PO8	Understand scope of Botany for further education, research and employment
	approaches and to manage projects in multidisciplinary.

#### PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Students will gain in depth knowledge about lower forms, morphology,					
	taxonomy, anatomy and embryology of plants towards their identification and					
	classification to involve plants further in biochemical and pharmaceutical aspects.					
PSO2	Students will be able to apply biostatistics & bioinformatics tools and biophysical					
	principles for the analysis of relevant biological situations and develop intellectual					
	skills on biological data and databases.					
PSO3	Students will acquire knowledge to explicate ecological interlinking of life on					
	earth by studying energy and nutrient flow through the environment. They will					
	able to correlate physical features of the environment with structure of					
	populations, communities and ecosystem.					
PSO4	Students will gain basic knowledge on local, rare, endangered, endemic, and					
	exotic medicinal plants, their therapeutic values and cultivation practices for their					

	effective conservation.
PSO5	Students will be able to inter-relate integral and ubiquitous role of microbes with
	their environment. Students will acquire knowledge to recognize plant diseases
	and their management in economically important crop plants.

Program: M.Sc. Botany									
Core – I		Course Code: 20PBO1C01		Course Title: Plant Diversity (Algae, Fungi, Lichen Bryophytes)			- I and		
Semester Hours/		Veek	<b>Total Hours</b> 90	Cred	dits	Т	otal Mark	S	

# COURSE OUTCOMES (COs)

COs	CO Statement	Knowledge
Number		Level
CO1	Identify and describe primitive plants such as algal, fungi and bryophytes.	K1
CO2	Summarize the classification of lower plant groups	K2
CO3	Illustrate the morphology and reproduction of selected algae, bryophytes and fungal forms.	К3
CO4	Find out the economic and ecological importance of lower group of plants.	K3

	Program: M.Sc. Botany							
Core – II			Course Code:		Plant	Diversity	- II	
			20PBO1C02	(Pteridophytes, Gymnosperms Paleobotany)		and		
						<u> </u>		
Semester	Semester Hours/		Total Hours	Cred	dits	] ]	Total Mark	S
I	I 6		90	5			100	

COs	CO Statement	Knowledge
Number		Level
CO1	Recognize various forms of pteridophytes and gymnosperms.	K1
CO2	Understand the characteristics features and classification of pteridophytes and gymnosperms.	K2
CO3	Illustrate the morphology and reproduction of selected pteridophytes and gymnosperms.	К3
CO4	Analyze the chronological events by studying the fossils.	К3

Program: M.Sc. Botany					
Core – III		(	Course Code: Course Title: Microb		Microbiology and Plant
		20PBO1C03		Pathology	
Semester	Hours/	Week	Total Hours	Credits	Total Marks
I	5		75	4	100

COs	CO Statement	Knowledge
Number		Level
CO1	Enumerate the characteristics features of microorganisms.	K1
CO2	Describe various isolation and cultural techniques of the microorganisms.	K2
CO3	Explain the economic importance of microbes.	K2
CO4	Implement the disease management techniques in the fields.	К3

Program: M.Sc. Botany					
Elective -	- I		Course Code: 20PBO1E01	Course Title: A	Algal Biotechnology
Semester I	Hours/	Week	<b>Total Hours</b> 60	Credits 4	Total Marks 100

COs	CO Statement	Knowledge
Number		Level
CO1	Gain knowledge on commercial utility of algae.	K1
CO2	Explain the industrial applications of algae.	K2
CO3	Summarize the medicinal uses of algae.	K2
CO4	Demonstrate the role of algae as indicator in environmental health.	К3

Program: M.Sc. Botany					
Core – I	V		Course Code: 20PBO2C04	Course Title: P	lant Systematics
Semester	Hours/	Week	Total Hours	Credits	<b>Total Marks</b>
II	5		75	4	100

COs	CO Statement	Knowledge
Number		Level
CO1	Acquire knowledge both on ICN and APG classifications.	K1
CO2	Differentiate various systems of classifications based on their natural and phylogenetic characters of flowering plants.	K2
CO3	Apply the proficiency skills on identification of any unknown plant species using the manual of floras.	К3
CO4	Classify the plants based on their phylogeny.	K4

Program: M.Sc. Botany						
Core – V		(	Course Code: Course Title: Anatomy, E		Anatomy, Embryology	
		20PBO2C05 of Angiosperms and Mic		and Micro techniques		
Semester	Hours/	Week	<b>Total Hours</b>	Credits	<b>Total Marks</b>	
II	5		75	5	100	

COs	CO Statement	Knowledge
Number		Level
CO1	Knowledge on plant tissue and cellular organelles	K1
CO2	Explain the anomalous growth in plants.	K2
CO3	Illustrate the fertilization and development of embryo.	К3
CO4	Differentiate tissues using various microtechnique.	K4

Program: M.Sc. Botany						
Core - V	Core - VI			Course Title: Cell Biology, Genetic and Molecular Biology		
Semester Hours/Week II 5		Total Hours 75	Credits 5	Total Marks 100		

COs	CO Statement	Knowledge
Number		Level
CO1	Gain insight in fundamentals of cell morphology with functions.	K1
CO2	Understand the biosynthesis of nucleic acids and cell division.	K2
CO3	Solve the relationship between phenotype and genotype.	К3
CO4	Distinguish the molecular aspects in prokaryotes and Eukaryotes and its gene expression.	K4

#### **B.SC (ZOOLOGY)**

# **PROGRAMME OUTCOMES (POs)**

PO1	Apply the knowledge of various branches of Zoology and General biology
	meant both for a graduate terminal course and for higher studies.
PO2	Acquire basic skills in the observation and study of nature, biological
	techniques, experimental skills and scientific investigation.
PO3	Learning handling DNA sequence data and its analysis which equip students to
	get employed in R&D in the industry involved in DNA sequencing services,
	diagnostics, and micro biome analysis.
PO4	Development of theoretical and practical knowledge in handling the animals
	and using them as model organism
PO5	Development of an understanding of zoological science for its application in
	medical entomology, Apiculture, Aquaculture, Agriculture and Modern
	medicine.

#### PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	Identify and list out common animals in vertebrate and non-vertebrate Explain			
	various physiological and biochemical changes in human			
PSO2	Students can apply the knowledge and relate the information gained from the allied			
	subjects viz; Botany and Chemistry, to explain and conclude through the			
	Interdisciplinary approaches.			
PSO3	The students enhance knowledge on the pathways of metabolisms and Explain th			
	role and impact of different environmental conservation programmes			
PSO4	Understanding the importance of genetic engineering new tools			
PSO5	Identify animals beneficial to humans and Use tools of information technology for			
	all activities related to zoology			

# COURSE OUTCOMES (COs) SEMESTER – I

Course Code: 20UZO1C01 Course Title: Invertebrate – I

CO	CO Statement	Knowledge
Number		Level
CO1	Define the evolution any history of phylum.	K1
CO2	Understand about the Invertebrates animals.	K2
CO3	Understand the external as well as internal characters of Invertebrates.	К3
CO4	Investigate the economic importance of Invertebrates animals.	K6

#### SEMESTER – II

Course Code: 20UZO2C02 Course Title: Invertebrate –

II

CO Number	CO Statement	Knowledge Level
CO1	Define the internal and external morphology of the animal.	K1
CO2	Understand the concepts of Metamorphosis, regeneration and autonomy.	K2
CO3	Demonstrate the Mouthparts of insects.	К3
CO4	Distinguish the economic importance of Molluscs.	K4
CO5	Investigate the Water vascular System in Asterius rubens	K6

#### M.SC (ZOOLOGY)

# **PROGRAMME OUTCOMES (POs)**

PO1	Students gain knowledge and skill in the fundamentals of animal sciences, Understands
101	the complex interactions among various living organisms.
PO2	Analyse complex interactions among the various animals of different phyla, Their
PO2	distribution and their relationship with the environment.
PO3	Apply the knowledge of internal structure of cell, its functions in control of Various
PO3	metabolic functions of organisms.
PO4	Understands the complex evolutionary processes and behavior of animals.
PO5	Apply the knowledge and understanding of Zoology to one's own life and work.

#### PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	Understand the nature and basic concepts of cell biology, Genetics, Taxonomy,
<b>FSO1</b>	Physiology, Ecology and Applied Zoology.
	Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology,
	Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and
PSO ₂	techniques of Zoology, Toxicology, Entomology, Nematology Sericulture,
	Biochemistry, Fish biology, Animal biotechnology, Immunology and Research
	methodology
PSO3	Analyse the relationships among animals, Plants and Microbes.
PSO4	Understand the applications of biological sciences in Apiculture, Aquaculture, and
FSU4	Medicine.
PSO5	Gains knowledge about research methodologies, effective communication and skills of
1805	problem solving methods.

#### SEMESTER – I

Course Code: 20PZO1C01 Course Title: Biology of

#### Invertebrates

CO	CO Statement	Knowledge
Number		Level
CO1	Define invertebrates based on their morphology.	K1
CO2	Know the feeding mechanisms of invertebrates.	K2

CO3	Get the knowledge about chemical coordination and reproduction in	W2
	Invertebrates.	KJ

Course Code: 20PZO1C02 Course Title: Biology of

#### Chordates

CO	CO Statement	Knowledge
Number	Statement	Level
CO1	Classify chordates based on their morphology.	K2
CO2	Differentiate fishes and amphibians based on the morphology.	K5
CO3	Select the adaptations of birds and mammals for terrestrial life.	K6

Course Code: 20PZO1C03 Course Title: Cell and Molecular Biology

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	Describe and discuss the properties and biological significance of the major classes of molecules found in living organisms and the relationship between molecular structure and biological function.	
CO2	Cell and molecular biology is platform for the emergency of different fields like genetic engineering, cell culture, biotechnology and molecular biology.	
CO3	Explain the structure of membranes and intracellular compartments and relate these to function.	K4
CO4	Describe the processes that control eukaryotic cell cycle and cell death.	K5
CO5	Link the rapid advances in cell and molecular biology to a better understanding of diseases, including cancer	K6

Course Code: 20PZO1C04 Course Title: Biochemistry

CO Number	CO Statement	Knowledge Level
CO1	Describe and discuss the properties and biological significance of the major classes of molecules found in living organisms and the relationship between molecular structure and biological function.	

CO2	Cell and molecular biology is platform for the emergency of different fields like genetic engineering, cell culture, biotechnology and molecular biology.	
CO3	Explain the structure of membranes and intracellular compartments and relate these to function.	K4
CO4	Describe the processes that control eukaryotic cell cycle and cell death.	K5
CO5	Link the rapid advances in cell and molecular biology to a better understanding of diseases, including cancer	K6

#### 

CO	CO Statement	Knowledge
Number	CO Statement	Level
CO1	To understand fundamental analytical principles and processes used in clinical laboratory testing.	K2
CO2	To apply the practical and theoretical basis for laboratory test selection and interpretation.	К3
CO3	To analyse clinical, public health and management skill.	K5
CO4	Investigate the principles and uses of bioinstrumentation in medical laboratory.	<b>K</b> 6

Course Code: 20PZO1P01 Course Title: Biology of Invertebrate and Vertebrates

Cell and Molecular Biology and Biochemistry

CO Number	CO Statement	Knowledge Level
CO1	Understand and study the section of certain animals from Coelenterata, Aschelminthes and Annelida to understand the evolution of different types of coelom.	K2
CO2	Evalute of prepared slides of mouth parts of Honey bee, Housefly, Thrips, Mosquito, Bed bug and Butterfly to relate structure and type	K5
CO3	Study of the following specimens: Amphioxus, Balanoglossus, Ascidian, Peteromyzon, Ichthyophis, Draco, Pigeon and Bat.	K6