

Karmveer Vitthal Ramji Shinde Shikshan Sanstha's SHIVRAJ COLLEGE OF ARTS, COMMERCE AND D. S. KADAM SCIENCE COLLEGE, GADHINGLAJ DIST. KOLHAPUR (MAHARASHTRA) 4165002



# 2.6 Student Performance and Learning Outcome

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated



GADHINGLAJ (Dist.Kolhapur



## Karmveer Vitthal Ramji Shinde Shikshan Sanstha's SHIVRAJ COLLEGE OF ARTS, COMMERCE AND D. S. KADAM SCIENCE COLLEGE, GADHINGLAJ DIST. KOLHAPUR (MAHARASHTRA) 4165002

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## PROGRAMME OUTCOMES (POs),PROGRAMME SPECIFIC OUTCOMES (PSOs)& COURSE OUTCOMES

Sr No	Name of the Department
01	Marathi (B.A.)
02	Hindi (B.A)
03	English (B.A.)
04	Economics (B.A.)
05	Sociology (B.A.)
06	Political Science (B.A.)
07	B.Com
08	Physics (B.Sc.)
09	Chemistry (B.Sc.)
10	Computer Science (B.Sc.)
11	Microbiology (B.Sc.)
12	Statistics (B.Sc.)
13	Mathematics (B.Sc.)
14	Botany (B.Sc.)
15	BBA
16	BCA
17	B.Sc.Computer Science (Entire)
18	B. Com (IT)
19	Food Science (B.Sc.)
20	Animation (B.Sc.)
21	Marathi (M.A.)
22	Hindi (M.A.)
23	English (M.A.)
24	Economics) (M.A.)
25	Sociology (M.A.)
26	Advanced Accountancy (M.Com.)
27	Organic Chemistry (M.Sc.)
28	Computer Science (M.Sc.)



PRINCIPAL Shivraj College of Arts, Commerce & D.S.Kadam Science College, GADHINGLAJ (Dist Kolhaeur)





## Karmveer Vitthal Ramji Shinde Shikshan Sanstha's SHIVRAJ COLLEGE OF ARTS, COMMERCE AND D. S. KADAM SCIENCE COLLEGE, GADHINGLAJ DIST. KOLHAPUR (MAHARASHTRA) 4165002



2.6 Student Performance and Learning Outcome

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Programme Outcomes

Program	nme Outcomes- B.A.
	e completion of three-year graduation, students will be able to acquire the g attributes.
PO 1	Student will be able to apply techniques, skills and tools in new contexts.
PO 2	Student will be able to analyse problems objectively and find solutions
PO 3	Student will be Acquire knowledge of fundamentals, principles and methods.
PO 4	Student will be able to use skills acquired during the programme in real life situations
PO 5	Student will be able to use appropriate individual and group behaviour in real life situations.
PO 6	Student will be Effective speaking, active listening, giving and receiving feedback, empathy and respect for others.
PO 7	Student will be able to understand and interact with people belonging to diverse backgrounds (social, cultural, economic, religious and linguistic) and use culture-specific norms.
PO 8	Student will be able to use natural and community resources with a sense of responsibility and engage in environmentally sustainable practices
PO 9	Student will be able to practice ethics in public life and demonstrate adherence to human values.
PO 10	Student will be Motivation to learn and use new and beneficial things for personal and societal benefit

## PROGRAMME SPECIFIC OUTCOMES (PSOs)

### Marathi B.A.

	गातील बी ए मराठी या वर्गामध्ये मराठी विषयाचे अध्यापन केले जाते. मराठी विषय घेतलेल्या मुलांना खालील प्रमाणे विविध घ होण्यास मदत होते.
PSO 1	एक सर्जनशील लेखन कविता, कथा, कादंबरी लेखन करण्याची प्रेरणा मिळाली.
PSO 2	विद्यार्थ्यांना ग्रंथ वाचनाची आवड निर्माण झाली. नोकरीच्या संघी कोठे आहेत हे समजून आले.
PSO 3	नैतिक मूल्य रुजली व त्यामुळे ते समाजात वावरताना एक सुजाण नागरिक म्हणून नावारुपाला आले
PSO 4	विद्यार्थ्यांना वेगवेगळ्या नोकरीच्या संधी उपलब्ध झाल्या. (आकाशवाणी, दूरदर्शन, पत्रकारिता,शिक्षक, निवेदन ,सूत्रसंचालन अनुवादक लेखक कवी इत्यादी)
PSO 5	वेगवेगळ्या साहित्यकृतींच्या आधारे साहित्यिकांचा परिचय झाला.
PSO 6	विद्यार्थ्यांचा व्यक्तिमत्व विकास झाला.
PSO 7	विद्यार्थ्यांमध्ये भाषिक कौशल्याची रुजवात झाली



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Marathi (New Syllabus) Course Outcomes

## BA I: Marathi

Sem: I

Paper: (ऐच्छिक) पाठ्यपुस्तक - अभिरुची/ अक्षरबंध

CO 1	विद्यार्थ्यांमध्ये मराठी भाषेची अभिरुची वाढली .
CO 2	मराठी साहित्यातील विविध परंपरा लेखक कवी यांचा विद्यार्थ्यांना परिचय झाला
CO 3	विद्यार्थ्यांमध्ये मानवी जीवनमूल्ये, मातृभाषा प्रेम, राष्ट्रप्रेम, एकात्मता ही मूल्ये रुजली.
CO 4	विद्यार्थ्यांचा व्यक्तिमत्व विकास झाला
CO 5	विद्यार्थ्यांना चित्रपट प्रसार माध्यमे त्यांच्या लेखनाविषयी अधिक माहिती प्राप्त झाली.

### BA I: Marathi

Sem: II

Paper: (आवश्यक) पाठ्यपुस्तक - अभिव्यक्ती/ शब्द संहिता

CO 1	विद्यार्थ्यांना मराठी भाषेचे ज्ञान अवगत झाले व मराठी भाषेची आवड निर्माण झाली.	
CO 2	विद्यार्थ्यांमध्ये मराठी भाषेबददल प्रेम, राष्ट्रप्रेम एकात्मता आणि जीवनमूल्यांची जाणीव झाली.	
CO 3	मराठी साहित्यातील कथा परंपरा व लेखक परंपरा यांचा विद्यार्थ्यांना परिचय झाला. विद्यार्थ्यांचा व्यक्ति	मत्त्व विकास झाला.
CO 4	विद्यार्थ्यांना व्यवहारिक पातळीवर मराठी भाषेचा कसा वापर करायचा याची जाणीव झाली. व्यावसायिक पत्र लेखन, जाहीर निवेदन लेखन)	(जाहिरात लेखन,
CO 5	विद्यार्थ्यांमध्ये भाषिक, वाचन, श्रवण व लेखन कौशल्याची रुजवत झाली. त्यातून विद्यार्थ्यांना वाचनाच	ी आवड निर्माण झाली.
CO 6	विद्यार्थ्यांना निबंध लेखनाची तंत्र अवगत झाली.	

## BA II: Marathi

Sem: III & IV

Paper:(ऐच्छिक) सभासद बखर/वाणीकिडे काय डेंजर वारा सुटलाय & माती पंख आणि आकाश (पेपर नं 3 & 5)

CO 1	विद्यार्थ्यांना बखर वाझ्याची ओळख झाली.	
CO 2	मध्ययुगीन वाङ्गयाचा व भाषेचा परिचय झाला.	
CO 3	अनुवाद प्रक्रिया कशी असते, याचा परिचय झाला	
CO 4	आत्मवृत्त लेखनाचे कौशल्य अधिक विकसित झाले	
CO 5	वेगवेगळ्या प्रांतातील व प्रदेशातील जीवन दर्शन झाले.	
CO 6	आत्मचरित्रातून आत्मचरित्रकाराच्या व्यक्तिमत्त्वाची जडणघडण लक्षात घेतली	
CO 7	आत्मचरित्र या वाङ्च्य प्रकाराची प्रकारची ओळख झाली.	
CO 8	आत्मचरित्र या मराठी वाङ्ममय प्रकाराची ओळख झाली.	
CO 9	संवाद कौशल्य अधिक विकसित झाली.	
CO 10	नाट्य अभ्यासातून जीवन मूल्यांची रुजवात झाली.	
CO 11	नाट्यभ्यासातून नाट्य क्षेत्रातील विविध घटकांचे ज्ञान अवगत झाले	
CO 12	नाटकातील नाटककाराच्या समकालाचे प्रतिबिंब कसे उमटते याची जाणीव झाली.	



BA II: Marathi

Sem: III & IV

Paper:. पाठ्यपुस्तक - जनाबाईचे अभंग/ तळ ढवळताना & कविता गंध / जुगाड (4 आणि 6)

CO 1	विद्यार्थ्यांमध्ये कादंबरी काव्य वामन प्रकारांची आवड निर्माण झाली.
CO 2	समकालीन कादंबरीमध्ये सामाजिक सांस्कृतिक धार्मिक राजकीय यांचे प्रतिबिंब कसे उमटते संवाद कौशल्य विकसित झाले.
CO 3	त्यानुसार संवाद लेखनाची आवड निर्माण झाली.
CO 4	विद्यार्थ्यांना संत काव्य परंपरा याविषयीची ओळख झाली.
CO 5	विद्यार्थ्यांना कवितेचा आकृतीबंध समजला त्यामुळे विद्यार्थी काव्य निर्मिती करण्यासाठी प्रवृत्त झाले

BA III: Marathi

Sem: V & VI

Paper: साहित्य विचार (पेपर नं. 7 आणि 12)

CO 1	पौरात्य, पाश्चात्य व आधुनिक साहित्यशास्त्राचे स्वरूप विद्यार्थ्यांना समजले.
CO 2	ललित व ललितेतर साहित्याची जाणीव विद्यार्थ्यांना झाली.
CO 3	भाषेतील आविष्कारांची माहिती विद्यार्थ्यांना मिळाली
CO <sub>4</sub>	साहित्य निर्मिती प्रक्रियेची जाणीव विद्यार्थ्यांना झाली
CO 5	शब्दशकीचे आकलन विद्यार्थ्यांना झाले
CO 6	भाषेतील छंद व वृत्ते विद्यार्थ्यांना समजून आले
CO 7	साहित्य भाषेचे विशेष याची माहिती विद्यार्थ्यांना झाली.

BA III: Marathi

Sem: V & VI

Paper: भाषा विज्ञान आणि मराठी भाषा (पेपर नं. 8 आणि 13)

CO 1	भाषा उत्पत्तीची सखोल माहिती मिळाली.
CO 2	भाषा विज्ञानाचा अधिक परिचय झाला.
CO 3	भाषा विज्ञान आणि मराठी भाषा यांचा संबंध लक्षात घेता आला. त्यातून भाषा विज्ञानाची विद्यार्थ्यांना अधिक ओळख झाली.
CO 4	स्वनविचार, रूप विचार व वाक्य विचार या घटकांचा विद्यार्थ्यांना अधिक परिचय झाला.
CO 5	मराठी भाषेची वर्णव्यवस्था समजून घेतली. या वर्ण व्यवस्थेची विद्यार्थ्यांनाअधिक ओळख झाली.
CO 6	ध्वनी व अर्थ परिवर्तनाची कारणे व प्रकार याविषयी विद्यार्थ्यांना अधिक माहिती मिळाली.
CO 7	प्रमाण भाषेची विद्यार्थ्यांना अधिक ओळख झाली.
CO 8	बोलीभाषांची ओळख झाली त्यांचे स्वरूप व विशेष विद्यार्थ्यांना समजून आले.

BA II: Marathi

Sem: V & VI

Paper: मध्ययुगीन मराठी वाङ्ग्याचा इतिहास (पेपर नं. 9 आणि 14)

CO 1	मध्ययुगीन महाराष्ट्राचा परिचय झाला मध्ययुगीन मराठी वाङ्म्याचा कालिकाभ्यास विद्यार्थ्यांना समजला	
CO 2	मध्ययुगीन वाङ्ग्याचे स्वरूप वैशिष्ट्ये समजली व गद्यपद्य रचना समजल्या	
CO 3	मध्ययुगीन वाइयाचे स्वरूप व स्थिती समजली गद्यपद्य रचना समजल्या.	
CO 4	पंडित कवी व त्यांच्या रचनांची ओळख विद्यार्थ्यांना झाली	



CO 5	बखर वाइयाचे स्वरूप समजून आले.
CO 6	मध्ययुगीन गद्यपद्य रचनेचे विशेष विद्यार्थ्यांना समजून आले.
CO 7	एकनाथ तुकाराम यांच्या रचनांचे विशेष विद्यार्थ्यांना समजून आले.

### BA II: Marathi

Sem: V & VI

Paper: मराठी भाषा उपयोजन आणि सर्जन & मराठी भाषा अर्थाजनाच्या संधी (पेपर नं. 10 आणि 15)

CO 1	विद्यार्थ्यांना सर्जनशील लेखन प्रक्रिया समजली.
CO 2	वैचारिक लेखनाचे स्वरूप विद्यार्थ्यांना समजले.
CO 3	शोधनिबंध व लेखन कौशल्य विद्यार्थ्यांना समजले
CO 4	चार आंतरजालावरील मराठी लेखन पद्धतीचे स्वरूप विद्यार्थ्यांना समजले.
CO 5	प्रसारमाध्यमे स्पर्धा परीक्षा उद्योग व सेवा क्षेत्र, मुद्रित शोधन या क्षेत्रातील नोकरीच्या संधीविषयी विद्यार्थ्यांना परिचय झाला.

## BA III: Marathi

Sem: V & VI

Paper: वाङ्य प्रवाहाचे अध्ययन मध्ययुगीन वाङ्य प्रवाहाचे अध्ययन & ललित गद्य व्यक्तिचित्रे

पाठ्यपुस्तक- दृष्टांत पाठ/ मुलखा वेगळी माणसं (पेपर नं. 11 आणि 16)

CO 1	मध्ययुगीन महाराष्ट्र व महानुभाव पंथ यांचा परिचय विद्यार्थ्यांना झाला .	
CO 2	महानुभाव वाङ्म्याच्या प्रेरणा व स्वरूप विद्यार्थ्यांना समजले	
CO 3	महानुभाव ग्रंथकार केसोबास यांचा परिचय विद्यार्थ्यांना झाला .	
CO 4	दृष्टांत पाठातील आशय व अभिव्यक्तींचे स्वरूप विद्यार्थ्यांना समजले .	
CO 5	दृष्टांत पाठातील भाषिक विशेषांचा परिचय विद्यार्थ्यांना झाला.	
CO 6	ललित गद्याचे स्वरूप विद्यार्थ्यांना समजले.	
CO 7	मराठीतील प्रवाहानुसार व्यक्तिचित्रांचे स्वरूप विद्यार्थ्यांना समजले	
CO 8	'मुलखा वेगळी माणस' यातील व्यक्तीचित्रांचे स्वभाव विशेष व स्वरूप विद्यार्थ्यांना समजले	
CO 9	'मुलखा वेगळी माणसं' मधील ग्रामीण व उपेक्षितांचे जीवन विद्यार्थ्यांना समजले .	
CO 10	'मुलखा वेगळी माणस' मधील भाषाशैली, अभिव्यक्ती यांचा विद्यार्थ्यांना परिचय झाला	

#### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Marathi (Old Syllabus) Course Outcomes

Course Outcomes

#### BA I: Marathi

Sem: I

Paper: (ऐच्छिक) पाठ्यपुस्तक - अभिरुची/ अक्षरबंध

CO 1	विद्यार्थ्यांमध्ये मराठी भाषेची अभिरुची वाढली .	
CO 2	मराठी साहित्यातील विविध परंपरा लेखक कवी यांचा विद्यार्थ्यांना परिचय झाला	
CO 3	विद्यार्थ्यांमध्ये मानवी जीवनमूल्ये, मातृभाषा प्रेम, राष्ट्रप्रेम, एकात्मता ही मूल्ये रुजली.	
CO 4	विद्यार्थ्यांचा व्यक्तिमत्व विकास झाला	
CO 5	विद्यार्थ्यांना चित्रपट प्रसार माध्यमे त्यांच्या लेखनाविषयी अधिक माहिती प्राप्त झाली.	



## BA I: Marathi

## Sem: II

Paper: (आवश्यक) पाठ्यपुस्तक - अभिव्यक्ती/ शब्द संहिता

CO 1	विद्यार्थ्यांना मराठी भाषेचे ज्ञान अवगत झाले व मराठी भाषेची आवड निर्माण झाली.
CO 2	विद्यार्थ्यांमध्ये मराठी भाषेबद्दल प्रेम, राष्ट्रप्रेम एकात्मता आणि जीवनमूल्यांची जाणीव झाली.
CO 3	मराठी साहित्यातील कथा परंपरा व लेखक परंपरा यांचा विद्यार्थ्यांना परिचय झाला. विद्यार्थ्यांचा व्यक्तिमत्त्व विकास झाला.
CO 4	विद्यार्थ्यांना व्यवहारिक पातळीवर मराठी भाषेचा कसा वापर करायचा याची जाणीव झाली. (जाहिरात लेखन, व्यावसायिक पत्र लेखन, जाहीर निवेदन लेखन)
CO 5	विद्यार्थ्यांमध्ये भाषिक, वाचन, श्रवण व लेखन कौशल्याची रुजवत झाली. त्यातून विद्यार्थ्यांना वाचनाची आवड निर्माण झाली.
CO 6	विद्यार्थ्यांना निबंध लेखनाची तंत्र अवगत झाली.

BA II: Marathi

Sem: III & IV

Paper: (ऐच्छिक) पाठ्यपुस्तक - सभासद बखर/ वाणीकिडे काय डेंजर वारा सुटलाय &

माती पंख आणि आकाश (पेपर नं. 3 आणि 5)

CO 1	विद्यार्थ्यांना बखर वाक्स्याची ओळख झाली.
CO 2	मध्ययुगीन वाझ्याचा व भाषेचा परिचय झाला.
CO 3	अनुवाद प्रक्रिया कशी असते, याचा परिचय झाला
CO 4	आत्मवृत्त लेखनाचे कौशल्य अधिक विकसित झाले
CO 5	वेगवेगळ्या प्रांतातील व प्रदेशातील जीवन दर्शन झाले.
CO 6	आत्मचरित्रातून आत्मचरित्रकाराच्या व्यक्तिमत्त्वाची जडणघडण लक्षात घेतली
CO 7	आत्मचरित्र या वाइय प्रकाराची प्रकारची ओळख झाली.
CO 8	आत्मचरित्र या मराठी वाङ्ममय प्रकाराची ओळख झाली.
CO 9	संवाद कौशल्य अधिक विकसित झाली.
CO 10	नाट्य अभ्यासातून जीवन मूल्यांची रूजवात झाली.
CO 11	नाट्यभ्यासातून नाट्य क्षेत्रातील विविध घटकांचे ज्ञान अवगत झाले
CO 12	नाटकातील नाटककाराच्या समकालाचे प्रतिबिंब कसे उमटते याची जाणीव झाली.

BA II: Marathi

Sem: III & IV

Paper:. पाठ्यपुस्तक - जनाबाईचे अभंग/ तळ ढवळताना & कविता गंघ / जुगाड (4 आणि 6)

CO 1	विद्यार्थ्यांमध्ये कादंबरी काव्य वामन प्रकारांची आवड निर्माण झाली.
CO 2	समकालीन कादंबरीमध्ये सामाजिक सांस्कृतिक धार्मिक राजकीय यांचे प्रतिबिंब कसे उमटते संवाद कौशल्य विकसित झाले.
CO 3	त्यानुसार संवाद लेखनाची आवड निर्माण झाली.
CO 4	विद्यार्थ्यांना संत काव्य परंपरा याविषयीची ओळख झाली.
CO 5	विद्यार्थ्यांना कवितेचा आकृतीबंध समजला त्यामुळे विद्यार्थी काव्य निर्मिती करण्यासाठी प्रवृत्त झाले



## BA III: Marathi

Sem: V & VI

Paper: साहित्य विचार (पेपर नं. 7 आणि 12)

CO 1	पौरात्य, पाश्चात्य व आधुनिक साहित्यशास्त्राचे स्वरूप विद्यार्थ्यांना समजले.
CO 2	ललित व ललितेतर साहित्याची जाणीव विद्यार्थ्यांना झाली.
CO 3	भाषेतील आविष्कारांची माहिती विद्यार्थ्यांना मिळाली
CO 4	साहित्य निर्मिती प्रक्रियेची जाणीव विद्यार्थ्यांना झाली
CO 5	शब्दशकीचे आकलन विद्यार्थ्यांना झाले
CO 6	भाषेतील छंद व वृत्ते विद्यार्थ्यांना समजून आले
CO 7	साहित्य भाषेचे विशेष याची माहिती विद्यार्थ्यांना झाली.

## BA III: Marathi

Sem: V & VI

Paper: भाषा विज्ञान आणि मराठी भाषा (पेपर नं. 8 आणि 13)

CO 1	भाषा उत्पत्तीची सखोल माहिती मिळाली.
CO 2	भाषा विज्ञानाचा अधिक परिचय झाला.
CO 3	भाषा विज्ञान आणि मराठी भाषा यांचा संबंध लक्षात घेता आला. त्यातून भाषा विज्ञानाची विद्यार्थ्यांना अधिक ओळख झाली.
CO 4	स्वनविचार, रूप विचार व वाक्य विचार या घटकांचा विद्यार्थ्यांना अधिक परिचय झाला.
CO 5	मराठी भाषेची वर्णव्यवस्था समजून घेतली. या वर्ण व्यवस्थेची विद्यार्थ्यांनाअधिक ओळख झाली.
CO 6	ध्वनी व अर्थ परिवर्तनाची कारणे व प्रकार याविषयी विद्यार्थ्यांना अधिक माहिती मिळाली.
CO 7	प्रमाण भाषेची विद्यार्थ्यांना अधिक ओळख झाली.
CO 8	बोलीभाषांची ओळख झाली त्यांचे स्वरूप व विशेष विद्यार्थ्यांना समजून आले.

## BA II: Marathi

Sem: V & VI

Paper: मध्ययुगीन मराठी वाझ्याचा इतिहास (पेपर नं. 9 आणि 14)

CO 1	मध्ययुगीन महाराष्ट्राचा परिचय झाला मध्ययुगीन मराठी वाङ्मयाचा कालिकाभ्यास विद्यार्थ्यांना समजला	
CO 2	मध्ययुगीन वाङ्मयाचे स्वरूप वैशिष्ट्ये समजली व गद्यपद्य रचना समजल्या	
CO 3	मध्ययुगीन वाङ्मयाचे स्वरूप व स्थिती समजली गद्यपद्य रचना समजल्या.	
CO 4	पंडित कवी व त्यांच्या रचनांची ओळख विद्यार्थ्यांना झाली	
CO 5	बखर वाइयाचे स्वरूप समजून आले.	
CO 6	मध्ययुगीन गद्यपद्य रचनेचे विशेष विद्यार्थ्यांना समजून आले.	
CO 7	एकनाथ तुकाराम यांच्या रचनांचे विशेष विद्यार्थ्यांना समजून आले.	

BA II: Marathi

Sem: V & VI

Paper: मराठी भाषा उपयोजन आणि सर्जन & मराठी भाषा अर्थाजनाच्या संधी (पेपर नं. 10 आणि 15)

CO 1	विद्यार्थ्यांना सर्जनशील लेखन प्रक्रिया समजली.
CO 2	वैचारिक लेखनाचे स्वरूप विद्यार्थ्यांना समजले.



CO 3	शोधनिबंध व लेखन कौशल्य विद्यार्थ्यांना समजले	
CO 4	चार आंतरजालावरील मराठी लेखन पद्धतीचे स्वरूप विद्यार्थ्यांना समजले.	
CO 5	प्रसारमाध्यमे स्पर्धा परीक्षा उद्योग व सेवा क्षेत्र, मुद्रित शोधन या क्षेत्रातील नोकरीच्या संधीविषयी विद्यार्थ्यांना परिचय झाला.	

BA III: Marathi

Sem: V & VI

Paper: वाइय प्रवाहाचे अध्ययन मध्ययुगीन वाइय प्रवाहाचे अध्ययन & ललित गद्य व्यक्तिचित्रे

पाठ्यपुस्तक- दृष्टांत पाठ/ मुलखा वेगळी माणसं (पेपर नं. 11 आणि 16)

CO 1	मध्ययुगीन महाराष्ट्र व महानुभाव पंथ यांचा परिचय विद्यार्थ्यांना झाला .	
CO 2	महानुभाव वाङ्मयाच्या प्रेरणा व स्वरूप विद्यार्थ्यांना समजले	
CO 3	महानुभाव ग्रंथकार केसोबास यांचा परिचय विद्यार्थ्यांना झाला .	
CO 4	दृष्टांत पाठातील आशय व अभिव्यक्तींचे स्वरूप विद्यार्थ्यांना समजले .	
CO 5	दृष्टांत पाठातील भाषिक विशेषांचा परिचय विद्यार्थ्यांना झाला.	
CO 6	ललित गद्याचे स्वरूप विद्यार्थ्यांना समजले.	
CO 7	मराठीतील प्रवाहानुसार व्यक्तिचित्रांचे स्वरूप विद्यार्थ्यांना समजले	_
CO 8	'मुलखा वेगळी माणसं' यातील व्यक्तीचित्रांचे स्वभाव विशेष व स्वरूप विद्यार्थ्यांना समजले	
CO 9	'मुलखा वेगळी माणसं' मधील ग्रामीण व उपेक्षितांचे जीवन विद्यार्थ्यांना समजले .	
CO 10	'मुलखा बेगळी माणसं' मधील भाषाशैली, अभिव्यक्ती यांचा विद्यार्थ्यांना परिचय झाला	

## PROGRAMME SPECIFIC OUTCOMES (PSOs) HINDI (BA)

	ccessful completion of three years graduate level degree program in Commerce a should be able to
PSO 1	हिंदी भाषा के उद्भव विकास तथा विभिन्न रूपों का ज्ञान प्राप्त होगा।
PSO 2	सरकारी कार्यालयों में प्रयुक्त कार्यालयीन हिंदी का परिचय प्राप्त होगा।
PSO 3	हिंदी गद्य और पद्य का विभिन्न साहित्यिक विधाओं से परिचय होगा।
PSO 4	हिंदी भाषा के अध्ययन से अनुवादक, राजभाषा अधिकारी ,निवेदक गीतकार, पटकथा लेखक, संवाददाता,विज्ञापन लेखक,संपादक, प्रकाशक आदि पदों पर रोजगारों के अवसरों का परिचय होगा।
PSO 5	हिंदी भाषा एवं साहित्य के अध्ययन से विभिन्न भाषा एवं साहित्य में एकता एवं समन्वय की भावना की स्थापना होगी।
PSO 6	हिंदी साहित्य के अध्ययन से मानवीय,नैतिक, राष्ट्रीय मुल्यों एवं संवे दनाओं का निर्माण हुआ।
PSO 7	हिंदी साहित्य के अध्ययन से सामाजिक, राजनीतिक, धार्मिक, साहित्यिक एवं सांस्कृतिक पृष्टभूमि का ज्ञान प्राप्त होगा।

## शिवराज साहित्य, वाणिज्य एवं डी. एस. कदम विज्ञान महाविद्यालय, गडहिंग्लज हिंदी विभाग

## पदवी विभाग

## पाठ्यक्रम के परिणाम (Course Outcomes) (New Syllabus)

बी.ए. प्रथम वर्ष (हिंदी)		
COUR	COURSE OUTCOMES - हिंदी कविता एवं गद्य साहित्य - Paper No. I & II	
COI	हिंदी की विधाओं का परिचय होगा।	
CO 2	कथेतर साहित्य का परिचय होगा।	
CO3	हिंदी के गद्य और पद्य रचना तथा रचनाकारों का परिचय होगा।	
CO 4	हिंदी भाषा के श्रवण, पठन लेखन की क्षमताएं विकसित होगी।	
CO5	राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था का निर्माण होगा।	
CO 6	मानवीय मुल्यों की स्थापना एवं चेतना प्रदान होगी।	

		K.V.R.S.S.S. GADHINGLAU
	बी.ए. द्वितीय वर्ष (हिंदी)	TOM SCIENCE OU
COUR	SE OUTCOMES - आधुनिक गद्य साहित्य - Paper No. III & V	
CO 1	कहानी विधा का स्वरूप तथा परिचय कराना।	
CO 2	हिंदी कहानिकारों का परिचय होगा।	
CO 3	कथेतर रचना तथा रचनाकारों का परिचय होगा।	
CO 4		
COUR	SE OUTCOMES मध्यकालीन एवं आधुनिक काव्य - Paper No. IV & VI	
CO 1	मध्यकालीन कवियों से परिचित होगे।	
CO 2	नव्यप्रातान कावया से पारायर होगा आधुनिक हिन्दी कविता में चित्रित विविध विमर्श से परिचय।	
CO 3	नैतिक,राष्ट्रीय मुल्यों की स्थापना होगी।	
	बी. ए. तृतीय वर्ष (हिंदी)	
COUD	SE OUTCOMES - विधा विशेष का अध्ययन - Paper No. VII & XII	
COUR	SE OUTCOMES - Idei Idad di dedadi - Laper No. VII di Ali	
CO 1	उपन्यास की परिभाषा, तत्व, विकास का परिचय होगा।	
CO 2	गद्य साहित्य के मूल्यांकन की क्षमता का विकास होगा।	
CO 3	आधुनिक उपन्यासकारों के उपन्यासों में विविध विमर्श का  परिचय प्राप्त होगा।	
CO 4	आंधुनेक उपन्यासकार के उपन्यास में विषय विमर्श को चार्यच प्राप्त होगा। मानवतावाद की भावना का विकास होगा ।	
	SE OUTCOMES - साहित्य शाख - Paper No. VIII & XIII	
CO 1	काव्य के स्वरूप,परिभाषा,तत्व, प्रेरना और प्रयोजनों का परिचय होगा।	
CO 2	कार्य के भेद एवं अंगों का शास्त्रीय ज्ञान प्राप्त होगा।	
CO 3	आलोचानात्मक दृष्टि का विकास होगा।	
CO 4	विविध विधाओं का सामान्य परिचय प्राप्त होगा।	
CO 5	काव्य के भेद तथा शब्द शक्तियों का परिचय होगा।	
	SE OUTCOMES हिंदी साहित्य का इतिहास - Paper No. IX & XIV	
CO 1	हिंदी के इतिहास लेखन की परपरा का परिचय होगा।	
CO 2	विभिन्न कालों के सामाजिक, राजनीतिक परिस्थितियों से परिचित होंगे।	
CO 3	विभिन्न कोलों के सीमीजिक, रोजनीतिक परिस्थातिथा से परिचत होगी हिंदी साहित्य के प्रतिनिधि रचनाकारों का परिचय होगा।	
CO 4	साहित्य और युगजीवन का संबंध विशद करने की क्षमता का निर्माण होगा।	
	SE OUTCOMES - प्रयोजनमुलक हिंदी - Paper No. X & XV	
CO 1	पारिभाषिक शब्दों का ज्ञान प्राप्त होगा।	
CO 2	विज्ञापन वृतात लेखन,अनुवाद लेखन आदि का ज्ञान प्राप्त होगा।	
CO 3	मुद्रित एवं इलेक्ट्रॉनिक मीडिया का परिचय प्राप्त होगा।	
CO 4	विविध कोशों का परिचय प्राप्त होगा।	
COUR	SE OUTCOMES - भाषा विज्ञान एवं हिंदी भाषा - Paper No. XI & XVI	
CO 1	भाषा का स्वरूप,परिभाषा,उत्पत्ति और विशेषताओं की जानकारी प्राप्त होगी	
CO 2	भाषा विज्ञान के वैज्ञानिक अध्ययन की दृष्टि का निर्माण प्राप्त होगा।	
CO 3	भाषा के विविध अंगों का परिचय प्राप्त होगा।	
CO 4	देवनागरी लिपि का विकास तथा इतिहास का ज्ञान प्राप्त होगा।	
CO 5	भारतीय भाषाओं एवं विभिन्न बोलियों का परिचय होगा।	
	एम. ए. प्रथम वर्ष (हिंदी)	
COUR	SE OUTCOMES - प्राचीन तथा निर्गुण भक्ति काव्य - Paper No. I & V	

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CO 2	प्राचीन तथा मध्य युगीन कवियों की काव्य कृतियों का सूक्ष्म अध्ययन कराना।	MADAN
CO 3	मध्य युगीन परिवेश तथा काव्य प्रवृत्तियों से परिचित कराना।	
COURSE (	OUTCOMES हिंदी साहित्य का इतिहास - Paper No. I & VI	
CO 1	मध्यकालीन विविध काव्य धाराओं का अध्ययन करना।	
CO 2	आधुनिक साहित्य की प्रवृतियों का अध्ययन करना।	
CO 3	प्राचीन साहित्य की प्रवृतियों का अध्ययन करना।	
COURSE (	OUTCOMES - भाषा विज्ञान - Paper No. III & VII	
CO 1	हिंदी भाषा तथा देवनागरी लिपि से परिचित कराना।	
CO 2	छात्रों को हिंदी भाषा अभिव्यक्ति के लिए प्रेरित करना।	
CO 3	व्याकरणिक कौशल से परिचित कराना।	
COURSE	OUTCOMES हिंदी कथा साहित्य Paper No. VI & VIII	
CO 1	उपन्यासकार तथा उनके उपन्यासों से परिचित कराना।	
CO 2	उपन्यासों का सूक्ष्म अध्ययन करना।	
CO 3	कहानियों का सूक्ष्म अध्ययन करना।	
CO 4	नाटक साहित्य का सूक्ष्म अध्ययन करना।	

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## शिवराज साहित्य, वाणिज्य एवं डी. एस. कदम विज्ञान महाविद्यालय, गडहिंग्लज हिंदी विभाग

पदवी विभाग

## पाठ्यक्रम के परिणाम (Course Outcomes) (Old Syllabus)

	बी.ए. प्रथम वर्ष (हिंदी)	
COURS	SE OUTCOMES - हिंदी कविता एवं गद्य साहित्य - Paper No. I & II	
CO 1	कथेतर साहित्य का परिचय होगा।	
CO 2	हिंदी के गद्य और पद्य रचना तथा रचनाकारों का परिचय होगा।	
CO 3	हिंदी भाषा के श्रवण, पठन लेखन की क्षमताएं विकसित होगी।	
CO 4	राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था का निर्माण होगा।	
CO 5	मानवीय मूल्यों की स्थापना एवं चेतना प्रदान होगी।	
	बी.ए. द्वितीय वर्ष (हिंदी)	
COURS	SE OUTCOMES - आधुनिक गद्य साहित्य - Paper No. III & V	
CO 1	हिंदी में रोजगार के अवसर का ज्ञान होगा।	
CO 2	हिंदी कहानिकारों का परिचय होगा।	
CO 3	कथेतर रचना तथा रचनाकारों का परिचय होगा।	
CO 4	कहानी विधा का स्वरूप तथा परिचय कराना।	
COURS	SE OUTCOMES मध्यकालीन एवं आधुनिक काव्य - Paper No. IV & VI	
CO 1	आधुनिक हिन्दी कविता में चित्रित विविध विमर्श से परिचय।	
CO 2	नैतिक,राष्ट्रीय मुल्यों की स्थापना होगी।	
	बी. ए. तृतीय वर्ष (हिंदी)	
COUR	SE OUTCOMES - विधा विशेष का अध्ययन - Paper No. VII & XII	
CO 1	मानवतावाद की भावना का विकास होगा।	
CO 2	गद्य साहित्य के मूल्यांकन की क्षमता का विकास होगा।	
CO 3	आधुनिक उपन्यासकारों के उपन्यासों में विविध विमर्श का परिचय प्राप्त होगा।	
COUR	SE OUTCOMES - साहित्य शाख - Paper No. VIII & XIII	
CO 1	रस के भेद एवं अंगो का शास्त्रीय ज्ञान प्राप्त होगा।	

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CO 2	आलोचानात्मक दृष्टि का विकास होगा।	S. A.
CO 3	विविध विधाओं का सामान्य परिचय प्राप्त होगा।	
CO 4	काव्य के भेद तथा शब्द शक्तियों का परिचय होगा।	
COURS	SE OUTCOMES हिंदी साहित्य का इतिहास - Paper No. IX & XIV	_
CO 1	साहित्य और युगजीवन का संबंध विशद करने की क्षमता का निर्माण होगा।	
CO 2	विभिन्न कालों के सामाजिक, राजनीतिक परिस्थितियों से परिचित होंगे।	
CO 3	हिंदी साहित्य के प्रतिनिधि रचनाकारों का परिचय होगा।	
COURS	SE OUTCOMES - प्रयोजनमुलक हिंदी - Paper No. X & XV	
CO 1	मुद्रित एवं इलेक्ट्रॉनिक मीडिया का परिचय प्राप्त होगा।	
CO 2	विज्ञापन वृतात लेखन,अनुवाद लेखन आदि का ज्ञान प्राप्त होगा।	
CO 3	विविध कोशों का परिचय प्राप्त होगा।	
COURS	SE OUTCOMES - भाषा विज्ञान एवं हिंदी भाषा - Paper No. XI & XVI	
CO 1	भाषा के विविध अंगों का परिचय प्राप्त होगा।	
CO 2	भाषा विज्ञान के वैज्ञानिक अध्ययन की दृष्टि का निर्माण प्राप्त होगा।	
CO 3	भारतीय भाषाओं एवं विभिन्न बोलियों का परिचय होगा।	
CO 4	देवनागरी लिपि का विकास तथा इतिहास का ज्ञान प्राप्त होगा।	
	एम. ए. प्रथम वर्ष (हिंदी)	
COURS	SE OUTCOMES - प्राचीन तथा निर्गुण भक्ति काव्य - Paper No. I & V	
CO 1	प्राचीन तथा मध्य युगीन कवियों एवं उनकी काव्य कृतियों से परिचित कराना।	
CO 2	प्राचीन तथा मध्य युगीन कवियों की काव्य कृतियों का सूक्ष्म अध्ययन कराना।	
CO 3	मध्य युगीन परिवेश तथा काव्य प्रवृत्तियों से परिचित कराना।	
COURS	SE OUTCOMES हिंदी साहित्य का इतिहास - Paper No. I & VI	
CO 1	मध्यकालीन विविध काव्य धाराओं का अध्ययन करना।	
CO 2	आधुनिक साहित्य की प्रवृतियों का अध्ययन करना।	
CO 3	प्राचीन साहित्य की प्रवृतियों का अध्ययन करना।	
COURS	SE OUTCOMES - भाषा विज्ञान - Paper No. III & VII	
CO 1	हिंदी भाषा तथा देवनागरी लिपि से परिचित कराना।	
CO 2	छात्रों को हिंदी भाषा अभिव्यक्ति के लिए प्रेरित करना।	
CO 3	व्याकरणिक कौशल से परिचित कराना।	_
COURS	SE OUTCOMES हिंदी कथा साहित्य Paper No. VI & VIII	
CO 1	उपन्यासकार तथा उनके उपन्यासों से परिचित कराना।	
CO 2	उपन्यासों का सूक्ष्म अध्ययन करना।	
CO 3	कहानियों का सूक्ष्म अध्ययन करना।	_
CO 4	नाटक साहित्य का सूक्ष्म अध्ययन करना।	

# Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj

## B.A. English Programme Specific Outcomes

	rogramme opecific outcomes
After the o	completion of three year degree programme in English, students will beable to
PSO 1	To understand different genres of literature.
PSO 2	To analyze and critically appreciate literary works.
	To learn how to do scientific study of language.
PSO 4	To enhance English communicative competence.



Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: English (New Syllabus) Course Outcomes

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BA I: English (opt)

Sem: I & II

Paper: (Optional English) Semester I & II

## DSC-A3 & DSC-A15 Modern Indian Writing in English Translation

	At the end of the course, students will be able to	
CO 1	To learn the concept and significance of translation.	
CO 2	To understand modern Indian writing in English translation.	
CO 3	To learn the skill of translation of poetry, plays and short-stories.	
CO <sub>4</sub>	To understand the value of translation in cultural transaction.	

BA I: English (opt)

Sem: I

#### Paper:B.A. II (Opt.) Semester III & IV DSC-C5 & DSC-C29 Literature and Cinema

	At the end of the course, students will be able to	
CO 1	To define the relationship between literature and cinema.	
CO 2	To acquire knowledge of film adaptation.	
CO 3	To gain knowledge of cinematic techniques.	
CO 4	To learn textual and film aesthetics.	

BA I: English (opt)

Sem: I

#### Paper: DSE-C6 & DSC-C30 Partition Literature

	At the end of the course, students will be able to
CO 1	To understand the political dimensions of partition literature.
CO 2	To acquire knowledge of partition literature.
CO 3	To understand short stories, poetry and fiction based on partition theme.
CO 4	To imbibe values of non-violence and co-existence.

BA I: English (opt)

Sem: I

## Paper: DSC - D18 Language & Linguistics IDS (Paper I and II, Semester III & IV)

CO 1	To acquaint the students with language and linguistics in general
CO 2	To acquaint the students with Phonetics and Phonology
CO 3	To acquaint the students with Morphology and syntax
CO 4	To acquaint the students with Semantics and Pragmatics



BA III: English (Spl.)

Sem: V & VI

#### Paper: DSE-E11 & DSE-E136 Introduction to Literary Criticism (Paper VII & XII)

At the end	of the course, students will be able to
CO 1	To acquire knowledge of key concepts, trends and movements in literary criticism.
CO 2	To define the difference between literary creation and literary criticism.
CO 3	To learn literary devices and their application.
CO 4	To learn to critically appreciate literary works.

BA III: English (Spl.)

Sem: V & VI

## Paper: DSE-E12 & DSE- E137Understanding Poetry (Paper VIII & XIII)

CO 1	To gain knowledge of various types of poetry.	
CO 2	To learn the prescribed poems.	
CO 3	To acquire skills of critical analysis of poetry.	
CO 4	To develop poetic sensibility.	

BA III: English (Spl.)

Sem: V & VI

#### Paper : DSE- E13 & DSE-E138 English Drama (Paper IX & XIV)

	At the end of the course, students will be able to	
CO 1	To define drama and understand its features.	
CO 2	To understand types of drama.	
CO 3	To acquire skills of dramatics.	
CO 4	To imbibe human values through dramatic art.	

BA III: English (Spl.)

Sem: V & VI

#### Paper: DSE- E14 & DSE-E139 English Novel (Paper X & XV)

	At the end of the course, students will be able to	
CO 1	To define the concept of novel and understand its features.	
CO 2	To understand types of novels.	
CO 3	To learn novelistic devices such as irony and satire.	
CO 4	To develop sensitivity towards human misery and suffering.	

BA III: English (Spl.)

Sem: V & VI

#### Paper DSE-E15 & DSE-E140 Language and Linguistics (Paper XI & XVI)

At	the end of the course, students will be able to
CO 1	To understand linguistics as a branch of science.
CO 2	To learn the science of speech sounds, word formation and sentence structures.
CO 3	To apply linguistic knowledge in day-to-day use of English.
CO 4	To develop competence in English language.



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: English (Old Syllabus) Course Outcomes

## Class: BA I (AECC 1&2) B.Com I (AECC A&B) & B.Sc. I (AECC A&B)

Sem: I

# Paper: Ability Enhancement Compulsory Courses: English forCommunication and Business Communication

	At the end of the course, students will be able to
CO 1	To develop English vocabulary and usage.
CO 2	To communicate in English- oral & written mode.
CO 3	To acquire employability skills.
CO 4	To learn to enjoy literary pieces.

Class: B. A. I (AECC 1&2) B.Com. I (AECC A&B) & B.Sc. I (AECC A&B) Sem: Semester I & II

## Paper: English Compulsory Courses- Ability Enhancement Compulsory Courses: English forCommunication and Business Communication

	At the end of the course, students will be able to
CO 1	To understand the difference between oral and written English.
CO 2	To acquire advanced communication skills- oral & written mode.
CO 3	To develop skills of e-communication.
CO 4	To learn to enjoy literary pieces.

### Class: B.A. III (AECC 5 & 6) & B.Sc. III (AECC C & D) Sem: Semester V & VI

#### Paper: English Compulsory Courses: Ability Enhancement Compulsory Course: English forCommunication

	At the end of the course, students will be able to
CO 1	To learn employability skills such as interview techniques and group discussion.
CO 2	To learn English for competitive examinations.
CO 3	To learn professional writing skills such as media writing.
CO 4	To learn to enjoy literary pieces.

B. A. I (Opt.) Semester I & II

#### Paper I & II Introduction to English Literature: The Short Story and Novel

CO 1	To learn the concept of Short Story and Novel.
CO 2	To understand the difference between Short Story and Novel.
CO 3	To learn the prescribed short stories and the novel
CO 4	To develop literary sensibility.



B.A. II (Opt.) Semester III & IV Paper III & V Modern English Literature

CO 1	To understand modern world poetry (prescribed texts).	
CO 2	To understand modern drama (prescribed text).	
CO 3	To develop literary and linguistic skills.	
CO <sub>4</sub>	To develop literary sensibility.	

B.A. II (Opt.) Semester III & IV Paper IV & VI Indian English Writing

	d of the course, students will be able to
CO I	To understand prescribed literary texts.
CO 2	To understand the features of Indian Writing in English.
CO 3	To know the contribution of Indian writers to world literature.
CO 4	To develop literary sensibility.

Linguistics IDS (Paper I and II, Semester III & IV)

t the end	of the course, students will be able to
CO 1	To acquaint the students with language and linguistics in general
CO 2	To acquaint the students with Phonetics and Phonology
CO 3	To acquaint the students with Morphology and syntax
CO 4	To acquaint the students with Semantics and Pragmatics

B.A. III (Spl.) Semester V & VI

Paper VII & XII Literary Criticism and Critical Appreciation

At the end o	f the course, students will be able to
CO1	To understand key concepts, trends and movements in literary criticism
CO 2	To learn various theories and approaches in literary studies.
CO 3	To learn literary devices and their application.
CO 4	To learn to critically appreciate literary works.

Paper IX & XIV Understanding Drama

CO 1	To define drama and understand its features.
CO 2	To understand types of drama.
CO 3	To learn the prescribed plays along with the cultural ethos.
CO 4	To acquire skills of dramatics.

## Paper X & XV Understanding Novel

At the end	of the course, students will be able to
CO 1	To define the concept of novel and understand its features.
CO 2	To understand types of novels.
CO 3	To learn the prescribed texts.
CO 4	To develop sensitivity towards human misery and suffering.



Paper XI & XVI The Structure and Function of Modern English

CO 1	To learn English phonology, morphology and syntax.
CO 2	To learn cohesive devices and discourse analysis.
CO 3	To apply linguistic knowledge in day-to-day use of English.
CO 4	To develop competence in English language.

B. A.I (AECC 1&2) B.Com.I (AECC A&B) & B.Sc. I (AECC A&B) Semester I & II English Compulsory Courses- Ability Enhancement Compulsory Courses: English for Communication and Business Communication

	At the end of the course, students will be able to	_
CO 1	To develop English vocabulary and usage.	
CO 2	To communicate in English- oral & written mode.	
CO 3	To acquire employability skills.	
CO <sub>4</sub>	To learn to enjoy literary pieces.	_

B.A. II (AECC 3 & 4) and B.Com. II (AECC C & D) Semester III & IV English Compulsory Courses: Ability Enhancement Compulsory Courses: English forCommunication and Business Communication

	At the end of the course, students will be able to
CO 1	To understand the difference between oral and written English.
CO 2	To acquire advanced communication skills- oral & written mode.
CO 3	To develop skills of e-communication.
CO4	To learn to enjoy literary pieces.

B.A.III (AECC 5 & 6) & B.Sc. III (AECC C & D) Semester V & VI English Compulsory Courses: Ability Enhancement Compulsory Course: English for Communication

	At the end of the course, students will be able to
CO 1	To learn employability skills such as interview techniques and group discussion.
CO 2	To learn English for competitive examinations.
CO 3	To learn professional writing skills such as media writing.
CO 4	To learn to enjoy literary pieces.

Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj

Programme Specific Outcomes (PSOs)

#### PROGRAMME SPECIFIC OUTCOMES (PSOs) ECONOMICS

	After successful completion of three years graduate level degree program in Commerce a student should be able to
PSO 1	The students after completion of B.A. programme in economics will develop understanding of the major concepts and principles in economics.
PSO 2	Student will be able to think critically following the economic way of thinking

PSO 3	They will be able to analyse economic behaviour in practice. They have effective oral communication and writing skills for clearly
PSO 4	They have effective oral communication and writing skills for clearly expressing economic point of view.
PSO 5	They will have an ability to work efficiently in diverse field statistics, economics and banking.
PSO 6	The students are able to use modern library, searching and retrieval methods to obtain information about topics/subjects relating to economics from various sources
PSO 7	They secure employment in various services of economics, statistics and banking

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Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj

Dept: Economics (New Syllabus)

Course Outcomes .....

**BA I: Economics** 

Sem: I

Paper: Indian Economy I & II

CO 1	To introduce the students to the Indian economy.
CO 2	To develop and understanding of challenges facing the SCG Indian economy.
CO 3	This paper intends to acquaint the students with various dimension of, as also the challenges, confronting the Indian economy.
CO 4	It endeavours to provide useful insights to the students about the present economic standing and composition of the Indian economy.
CO 5	To acquaint the students with the policies and performance of major sectors in Indian economy
CO 6	To explain the economic reforms introduced in India since 1991

**BA II: Economics** 

Sem: III & IV

Paper: Macro Economics

CO 1	Macroeconomics helps us to understand how an economy is moving as a whole.
CO 2	It helps to bring stability in price level and analysis fluctuations in business activities
CO 3	It helps to achieve the goal of growth, a higher GDP level and higher level of employment
CO 4	It helps us understand the functioning of a complicated modern economic system
CO 5	Private companies decide the investments are depending on macroeconomics data like inflation or sector growth
CO 6	In macroeconomics, a variety of economy-wide phenomena is thoroughly examined such as inflation, price levels, and rate of growth, national income gross domestic product and changes in unemployment.
CO 7	It is useful in multiple ways to multiple parties.



**BA II: Economics** 

Sem: III & IV

Paper: Money and Banking

CO 1	To create the awareness among the students and job prospects in banks and financial sector.
CO 2	Clear understanding of the operation of banks and financial institutions to the students with practical inputs

**B.A II: Economics** 

Sem: III & IV

Paper: Principles of Co-operation

CO 1	The objective of this paper is to awareness about the working of co-operatives in rural and urban area.
CO 2	The co-operative movement has been considered as the SCG
CO 3	Third important sector in the economy followed by private and public sector
CO 4	The principles of co-operation and the values of the co-operative institutions need to be studied in Indian context

**BA II: Economics** 

Sem: V & VI

Paper: Principles of Micro Economics

CO I	Explain what economics is and explain why it is important maximizing strategies under different market conditions. 9. Understand the factor pricing
CO 2	Understand consumer decision making and consumer behaviour
CO 3	Define the concept of utility and satisfaction
CO 4	Derive revenue and cost figures as well as curves
CO 5	Understand producer decision making and producer behavior.
CO 6	Analyze the economic behavior of individual firm and markets.
CO 7	To identify the market structure.

**BA II: Economics** 

Sem: V & VI

Paper: Economics of Development

CO 1	Identify the dimensions of development.
CO 2	Distinguish the fundamental and contemporary development debate.
CO 3	Know the theories of economic development.
CO 4	Get acquainted with economic planning and its importance in development
CO 5	Get acquainted with development of planning and planning machinery in India
CO 6	Evaluate sectoral performance of the Indian economy.
CO 7	Compare and analyse Indian model of economic development

**BA III: Economics** 

Sem: V & VI

Paper: International Economics

CO 1	Explain international trade.	
CO 2	Understand the measurement of gains from international trade.	



CO 3	Distinguish different rates of exchange and measure the terms of trade.
CO 4	Analyse and distinguish between balance of trade and balance of payments.
CO 5	Understand the various types of foreign capital analyse the impact of international institutions on Indian economy.

**BA III: Economics** 

Sem: V & VI

Paper: Research Methodology in Economics

CO 1	Get acquainted with the basic concepts of research and its methodologies.
CO 2	Select and define appropriate research problem and parameters.
CO 3	Understand the sampling techniques as a method of data collection
CO 4	Write a research report (thesis) and research proposal
CO 5	Use techniques of data analysis in research.

**BA III: Economics** 

Sem: V & VI

Paper: History of Economic Thoughts

CO 1	Understand the basic economic ideas of various economic thinkers of the world.
CO 2	Understand the development of economic thoughts.
CO 3	Understand the economic concepts and theories of neo-classical and Indian thinkers

## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Dept: Economics (Old Syllabus)

Course Outcomes

BA I: Economics

Sem: I

Paper: Indian Economy I & II

CO 1	To explain the economic reforms introduced in India since 1991
CO 2	To develop and understanding of challenges facing the SCG Indian economy.
CO 3	This paper intends to acquaint the students with various dimension of, as also the challenges, confronting the Indian economy.
CO 4	It endeavours to provide useful insights to the students about the present economic standing and composition of the Indian economy.
CO 5	To acquaint the students with the policies and performance of major sectors in Indian economy

BA II: Economics

Sem: III & IV

Paper: Macro Economics

CO 1	It helps to achieve the goal of growth, a higher GDP level and higher level of
	employment

	GUEGE OF ANS COM
rn economic system	GADHINGE
nacroeconomics	STROAM SCIENCE
s thoroughly ational income	

CO 2	It helps us understand the functioning of a complicated modern economic system
CO 3	Private companies decide the investments are depending on macroeconomics data like inflation or sector growth
CO 4	In macroeconomics, a variety of economy-wide phenomena is thoroughly examined such as inflation, price levels, and rate of growth, national income gross domestic product and changes in unemployment.
CO 5	It is useful in multiple ways to multiple parties.

**BA II: Economics** 

Sem: III & IV

Paper: Money and Banking

Clear understanding of the operation of banks and financial institutions to the students with practical inputs
To create the awareness among the students and job prospects in banks and financial sector.

Sem: III & IV

Paper: Principles of Co-operation

CO 1	Third important sector in the economy followed by private and public sector
CO 2	The co-operative movement has been considered as the SCG
CO 3	The principles of co-operation and the values of the co-operative institutions need to be studied in Indian context

**BA II: Economics** 

Sem: V & VI

Paper: Principles of Micro Economics

CO 1	Define the concept of utility and satisfaction	
CO 2	To identify the market structure	_
CO 3	Understand producer decision making and producer behavior.	
CO 4	Analyze the economic behavior of individual firm and markets.	
CO 5	Derive revenue and cost figures as well as curves	

**BA II: Economics** 

Sem: V & VI

Paper: Economics of Development

CO 1	Distinguish the fundamental and contemporary development debate.
CO 2	Know the theories of economic development.
CO 3	Get acquainted with economic planning and its importance in development
CO 4	Get acquainted with development of planning and planning machinery in India
CO 5	Evaluate sectoral performance of the Indian economy.



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**BA III: Economics** 

Sem: V & VI

Paper: International Economics

Understand the various types of foreign capital analyse the impact of international institutions on Indian economy.
Understand the measurement of gains from international trade.
Distinguish different rates of exchange and measure the terms of trade.
Analyse and distinguish between balance of trade and balance of payments.

**BA III: Economics** 

Sem: V & VI

Paper: Research Methodology in Economics

CO 1	Write a research report (thesis) and research proposal	
CO 2	Select and define appropriate research problem and parameters.	
CO 3	Understand the sampling techniques as a method of data collection	
CO 4	Use techniques of data analysis in research.	-

**BA III: Economics** 

Sem: V & VI

Paper: History of Economic Thoughts

CO 1	Understand the economic concepts and theories of neo-classical and Indian thinkers
CO 2	Understand the development of economic thoughts.

# PROGRAMME SPECIFIC OUTCOMES (PSOs) SOCIOLOGY (BA)

After su student s	ccessful completion of three years graduate level degree program in SOCIOLOGY a should be able to
PSO 1	Students will be developed innovative approach about the sociology.
PSO 2	Theoretical knowledge will be Enhance in students for understanding the public sphere
PSO 3	Enhance the participation in local, state, national and international NGOs
PSO 4	Emerge as a successful researcher
PSO 5	Develop the perspective among the students about gender equality
PSO 6	Become a responsible human being well informed in social values and norms
PSO 7	Students will be able to better understanding for eradication of caste system



# Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Sociology (New Syllabus)

Course Outcomes

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BA I: Sociology

Sem: I

Paper: Introduction to Sociology

CO 1	Get to know the nature of Indian society
CO 2	To Understand the structure of social culture and socialization
CO 3	Understand the function of social institutions
CO 4	Introduce to the basic concepts of sociology, subject matter and importance of sociology and origin and development of sociology
CO 5	Understanding in brief knowledge of human society and structure and also sociology

BA I: Sociology

Sem: II

Paper: Applied Sociology

CO 1	Understand the role of Medias in the society
CO 2	Understand the career opportunities in future through sociology
CO 3	Understand the social change and modern society
BA II: S	Sociology

Sem: III

Paper: Social issues & Problems

CO 1	Understand the nature of social problems and social issues in India
	Able to provide the solutions according to current social issues
CO 3	Understand the nature of current social issues
CO 4	Understand the nature of current sociocultural, economic and legal issues           Awareness of contemporary social problems in India
	problems in India

BA II: Sociology

Sem: III

Paper: social movements in India

CO 1	Understand the social movements in India.
CO 2	Understand the importance of social movements
CO 3	Understand the varieties of ideas and debates about India.
CO <sub>4</sub>	Understand the multiple socio- political former it in the
CO 5	Understand the multiple socio- political forces, ideologist with shape the nations Awareness of contemporary social movements in India.
CO 6	Understand the nature of social problems and social issues in India.
	provents and social issues in India.

BA II: Sociology

Sem: IV

Paper: Sociology of Health

CO 1	Create awareness of social health.
CO 2	Understand socio-medical aspects of society.
CO 3	Introduce the basic concept in sociology of health.
CO 4	Understand the policies regarding health delay the
	Understand the policies regarding health declared by Government of India



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BA II: Sociology Sem: IV Paper: gender and violence CO 1 Understand the nature gender CO 2 Aware in gender acuality

CO 1	Understand the nature gender and violence
CO 2	Aware in gender equality
CO 3	Understand the domestic violence
CO 4	Create awareness of sexual Harassments at work place through Vishakha Guideline Act 2013.

# BA III: Sociology

Sem: V

Paper: Western Sociological Thinkers

CO 1	Acquaintance with the sociological thoughts of the pioneers of sociology Making awareness of the parameter of the pioneers of sociology
	Making awareness of the perennial of structure verses agency
CO 3	Conceptual understand social facts and characteristics
CO 4	Use of theory in society

BA III: Sociology Sem: V Paper: Social Research Method-I

CO 1	Introduce to various steps in conducting research
02	Acquaintance with different types of research and issues in research.
CO 3	Understand the utility of social research for social development.
	and you social research for social development.

BA III: Sociology Sem: V Paper: Rural Sociology

CO 1	Understand the profile of rural community
$co_2$	Introduce the basic concepts of Rural Community and Rural Development
CO 3	Understand Conceptual classification of Panchyat Raj System
CO 4	Create awareness among government schemes in rural developments
	entry among government schemes in rural developments

BA III: Sociology Sem: V

Paper: Human Rights

CO 1	Students will be Understand the concepts of Human Rights.
CO 2	Identify issues and problems relating to the realization of human rights in India.
CO 3	Understand the nature and role of human rights in India.
CO 4	Contribute to the resolution of human rights in India.
CO 5	Contribute to the resolution of human rights in social issues and problems Educate the society about the human rights and duties in order to create responsible citizenship



BA III: Sociology Sem: V Paper: Sociology of Religion

CO 1	Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion.
CO 2	Students will be able to make a link between texts and paraphrase their arguments and use these to communicate their ideas in research papers, projects and presentations.
CO 3	By encompassing contemporary developments, the course enables students to think about linkages between religion and society at various levels.
CO 4	Students will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.

BA III: Sociology Sem: VI

Paper: Indian Sociological Thinkers

CO 1	Understanding the characteristics and dynamics of the social world, and how postclassical sociologists attempt to understand the social world.
CO 2	Appreciating the relevance and limits of the contemporary theories or theoretical approaches to make sense of social reality in India.
CO 3	Understanding the basic methodological approaches of the thinkers, through some original texts and their role in building sociological knowledge.

BA III: Sociology Sem: VI Paper: Social Research Methods-II

CO 1	Impart the basic research skills	
CO 2	Introduce the various steps in conducting social research	
CO 3	Acquaintance with different types of research and issues in research	

BA III: Sociology Sem: VI Paper: Rural Sociology

CO 1	Introduce the basic concepts of Rural Community and Rural Development
CO 2	Understand the profile of rural community
CO 3	Understand Conceptual classification of Panchayat Raj System.
CO 4	Create awareness among government schemes in rural developments
CO 5	Get introduction to the Indian Rural Social Structure
CO 6	Understand the nature of village studies conducted by different Indian sociologists



BA III: Sociology Sem: VI Paper: Social Anthropology

Students will be able to conceptual understanding about anthropology
Students will be understanding the social aspects of tribal's in India.
Students will be reciprocal of tribals issues and problems.

BA III: Sociology Sem: VI Paper: Urban Sociology

CO 1	To appreciate the significance of the city and the process of urbanization and its Consequences across the globe, through cross disciplinary texts and ethnographic studies.
CO 2	To understand the urban in the historical as well as modern contexts - the idea of Urbanism and urban space and the intersections in these of institutions, processes and Identities. This is to be achieved by exposing students to critical theoretical debates which help them to gain a deeper understanding of city life.
CO 3	To learn about key urban processes such as migration, urbanization, displacement and urban slums etc.

## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Sociology (Old Syllabus)

Course Outcomes

BA I: Sociology Sem: I

Paper: Introduction to Sociology

CO 1	Get to know the nature of Indian society
CO 2	Understand the structure of social culture and socialization
CO 3	Understand the function of social institutions
CO 4	Introduce to the basic concepts of sociology, subject matter and importance of sociology and origin and development of sociology
CO 5	Understanding in brief knowledge of human society and structure and also sociology

BA I: Sociology Sem: II Paper: Applied Sociology

CO 1	Understand the role of Medias in the society	
CO 2	Understand the career opportunities in future through sociology	
CO 3	Understand the social change and modern society	_



BA II: Sociology Sem: III Paper: Structure of Indian Society

CO 1	To Promote the students for Understand the nature of social Society.
CO 2	To Promote the students for Understand the nature of socio-Cultural Value system.
CO 3	To Promote the students for Understand the nature of current socio-cultural, economic and legal issues.

## BA II: Sociology

Sem: III

Paper: Social Problems

CO 1	Understand the nature of social problems and social issues in India
CO 2	Able to provide the solutions according to current social problems
CO 3	Understand the nature of current socio-cultural, economic and legal problems
CO 4	Awareness of contemporary social problems in India

Sem: IV

Paper: Social Change in Indian Society

CO 1	To Promote the students for Understand the change in Indian Society
CO 2	To Promote the students for Understand the change in socio-Cultural Value system
CO 3	To Promote the students for Understand the nature of current socio-cultural, economic and legal issues & change

BA II: Sociology

Sem: IV

Paper: gender and violence

CO 1	Understand the nature gender and violence
CO 2	Aware in gender equality
CO 3	Understand the domestic violence
CO 4	Create awareness of sexual Harassments at work place through Vishakha Guideline Act 2013.

BA III: Sociology Sem: V Paper: Sociological Thinkers

CO 1	Acquaintance with the sociological thoughts of the pioneers of sociology
CO 2	Making awareness of the perennial of structure verses agency
CO 3	Conceptual understand social facts and characteristics
CO 4	Use of theory in society

BA III: Sociology Sem: V Paper: Social Research Method-I

CO 1	Introduce to various steps in conducting research	
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CO 2	Acquaintance with different types of research and issues in research.
CO 3	Understand the utility of social research for social development.

BA III: Sociology Sem: V Paper: Rural Sociology

CO 1	Understand the profile of rural community
CO 2	Introduce the basic concepts of Rural Community and Rural Development
CO 3	Understand Conceptual classification of Panchyat Raj System
CO 4	Create awareness among government schemes in rural developments

Sem: V

Paper: Industrial sociology

CO 1	Acquaintance with the structure of industry and industrial society	
CO 2	Introduction to the industrial organization and it's functioning	
CO 3	Understand the industrial management system	

BA III: Sociology Sem: V Paper: Social Anthropology

CO 1	Understand the terms and concepts of social welfare with its historical background.
CO 2	Introduce the function for various social departments.
CO 3	Use knowledge of social welfare and government policies

BA III: Sociology

Sem: VI

Paper: Sociological Thinkers

CO 1	Introduce the diversification in Indian society through the different ideologies given by various Indian Sociologists
CO 2	Understand the contemporary Indian issues at different levels and at various places
CO 3	Understand to Classical Sociological thinkers by the help of theories

BA III: Sociology

Sem: VI

Paper: Social Research Methods-II

CO 1	Impart the basic research skills
CO 2	Introduce the various steps in conducting social research
CO 3	Acquaintance with different types of research and issues in research



BA III: Sociology Sem: VI Paper: Rural Sociology

CO 1	Introduce the basic concepts of Rural Community and Rural Development
CO 2	Understand the profile of rural community
CO 3	Understand Conceptual classification of Panchayat Raj System.
CO 4	Create awareness among government schemes in rural developments
CO 5	Get introduction to the Indian Rural Social Structure
CO 6	Understand the nature of village studies conducted by different Indian sociologists
CO 7	Discuss the changing structure of rural community

Sem: VI

Paper: Industrial Sociology

CO 1	Acquaintance with the structure of industry and industrial society
CO 2	Introduction to the industrial organization and it's functioning
CO 3	Understand the industrial management system

Sem: VI

Paper: Social Anthropology

CO I	Understand the terms and concepts of social welfare with its historical background.
CO 2	Introduce the function for various social departments.
CO 3	Use knowledge of social welfare and government policies

## Department: Political Science Programme Specific Outcomes

PSO 1	To know about the Constitution of India and National, International political affairs
PSO2	Necessity Importance of study of competitive examinations of the thoughts of Indian Political Thinkers and Western Political Thinkers.
PSO3	Students write clearly and with purpose on issues of international and domestic politics and public policy
PSO4	Students analyse Students use internet and College library resources to research key local, state, national and international policy issues and present results political and policy problems and formulate policy options
PSO5	Distinguish between Unitary and Federal Systems
PSO6	Recognize key theories in International Relations



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Political Science (Old Syllabus) Course Outcomes

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**BA I: Political Science** 

Sem: I& II

Paper: Introduction to Political Science and Indian Constitution (Paper I, II)

CO 1	Getting Knowledge about Political Science and its sub discipline.
CO 2	Detailed study of state democracy and key concept of Political Science.
CO 3	To acquire the knowledge about Indian Constitution.

**BA II: Political Science** 

Sem: III & IV

Paper: Political Process of India and Local Self Government in Maharashtra (Paper III,V

CO 1	To get detailed information about Indian Federalism, Election Process, Party System and understand the problems and challenges in Indian Politics.	
CO 2	Getting the basic knowledge of Local Self Government including Rural and Urban.	
CO 3	To know the Constitution Amendments with features	

#### **BA II: Political Science**

Sem: III & IV

Paper: Indian Political Thinkers.

CO 1	Study of Indian Political Thinkers.
CO 2	Political thinkers in independent movement and importance of their thoughts in
	modern society.

**BA III: Political Science** 

Sem: V & VI

Paper: Modern Government and Political Concepts (Paper VII, XII)

CO 1	Getting knowledge about Organs of Government machinery.	
CO 2	To get details of Modern Concept of Feminism, Multiculturalism,	
	Environmentalism, Civil society etc.	

#### BA III: Political Science

Sem: V & VI

Paper: B.A.-III : Public Administration and Administrative Thinkers (Paper VIII, XIII)

CO 1	Study of the various concepts in Public Administration and Administrative
	System



CO 2	Theories General concept of public administration and bureaucracy.
CO 3	Knowing about the Administrative thinkers and their Administrative
CO 4	Understanding how administrative responsibility, accountability, efficiency, diversity, and teamwork within the context of government and non-profit public service programs

BA III: Political Science

Sem: V

Paper: International Politics (Paper IX)

CO 1	Study of Concepts and dimension of International Politics, Regional	
	Organizations and the New World Order	

BA III: Political Science

Sem: VI

Paper: Foreign Policy of India (Paper XIV)

CO 1	Focus on Foreign Policy of India, U.S.A., Russia and Neighbouring Countries and studies pre and post-cold war, current national and international political
	situation.

BA III: Political Science

Sem: V & VI

Paper: Constitution of United States of America, China, Sweden (Paper X, XV)

CO 1	Getting knowledge of U.S.A., China, Sweden and their historical background, comparative perspective and political process. Differences and similarities
	between various Constitutional arrangements

### **BA III: Political Science**

Sem: V

Paper: Classical Western Political Thinkers (Paper XI)

CO 1 Getting information of Classical traditions of thinkers and their historical aspects of state and society.

BA III: Political Science

Sem: VI

Paper: Modern Western Political Thinkers (XVI)

CO 1	Study of the views of Modern Western thinkers and contemporary emerging
Sectors of	various aspects of state and society



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Political Science (New Syllabus) Course Outcomes

#### **BA I: Political Science**

Sem: I& II

Paper: Introduction to Political Science and Indian Constitution (Paper I, II)

CO 1	Getting Knowledge about Political Science and its sub discipline.
CO 2	Detailed study of state democracy and key concept of Political Science.
CO 3	To acquire the knowledge about Indian Constitution.

BA II: Political Science

Sem: III & IV

Paper: Political Process of India and Local Self Government in Maharashtra (Paper III,V

CO 1	To get detailed information about Indian Federalism, Election Process, Party System and understand the problems and challenges in Indian Politics.	
CO 2	Getting the basic knowledge of Local Self Government including Rural and Urban.	
CO 3	To know the Constitution Amendments with features	_
CO 4		

**BA II: Political Science** 

Sem: III & IV

Paper: Indian Political Thinkers.

CO 1	Study of Indian Political Thinkers.
CO 2	Political thinkers in independent movement and importance of their thoughts in
	modern society.

BA III: Political Science

Sem: V & VI

Paper: Modern Government and Political Concepts (Paper VII, XII)

CO 1	Getting knowledge about Organs of Government machinery.	
CO 2	To get details of Modern Concept of Feminism, Multiculturalism,	
	Environmentalism, Civil society etc.	-

BA III: Political Science

Sem: V & VI

Paper: B.A.-III : Public Administration and Administrative Thinkers (Paper VIII, XIII)

CO 1	Study of the various concepts in Public Administration and Administrative System
CO 2	Theories General concept of public administration and bureaucracy.
CO 3	Knowing about the Administrative thinkers and their Administrative



CO 4	Understanding how administrative responsibility, accountability, efficiency,
	diversity, and teamwork within the context of government and non-profit public
	service programs

**BA III: Political Science** 

Sem: V

Paper: International Politics (Paper IX)

CO 1	Study of Concepts and dimension of International Politics, Regional	
	Organizations and the New World Order	

**BA III: Political Science** 

Sem: VI

Paper: Foreign Policy of India (Paper XIV)

CO 1	Focus on Foreign Policy of India, U.S.A., Russia and Neighbouring Countries and studies pre and post-cold war, current national and international political
	situation.

**BA III: Political Science** 

Sem: V & VI

Paper: Constitution of United States of America, China, Sweden (Paper X, XV)

CO 1	Getting knowledge of U.S.A., China, Sweden and their historical background, comparative perspective and political process. Differences and similarities
	between various Constitutional arrangements

**BA III: Political Science** 

Sem: V

Paper: Classical Western Political Thinkers (Paper XI)

CO 1	Getting information of Classical traditions of thinkers and their historical aspects	5
	of state and society.	

BA III: Political Science

Sem: VI

Paper: Modern Western Political Thinkers (XVI)

CO 1	Study of the views of Modern Western thinkers and contemporary emerging
	various aspects of state and society



## Department of Commerce Academic Year 2021-22 PO B.Com

	Programme Outcomes	
B. Com after the completion of three years graduation, student will be able to acquire the following attributes		
PO1	This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, warehousing etc., well trained professionals to meet the requirements.	
PO2	After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.	
PO3	Capability of the students to make decisions at personal & professional level will increase after completion of this course.	
PO4	Students can independently start up their own business.	
PO5	Students can get thorough knowledge of finance and commerce.	
PO6	The knowledge of different specializations in accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.	

## B. Com Program Specific Outcomes

	Program Specific Outcomes: After successful completion of three years graduate level degree program in Commerce a student should be able to	
A		
PSO1	Students will be able to go for higher education like M. Com, MBA and can pursue advanced research in the field of Commerce and finance.	
PSO2	Students will be able to prove their proficiency by registering themselves for professional courses like Chartered Accountant, Company Secretary, Cost and Work Accountant, Cost and Management Accountant, Bachelor of Law etc.	
PSO3	Students will be able to recognise features and roles of businessman, entrepreneur, managers, consultants, etc. which will help them to implement their knowledge and soft skills in the current scenario.	
PSO4	Students will acquire systematic and practical oriented skills in financial accounting, cost accounting, corporate accounting, management accounting, taxation, law, financial management etc. to apply in their future career.	
PSO5	Students will be able to demonstrate their practical knowledge in setting up of a computerized set of accounting books by learning the use of accounting software's.	
PSO6	Students will be able to acquire leadership skills like effective communication,	



	teamwork, decision making, problem solving etc. and its implication in their routine activities.
PSO7	Students will be able to select from electives offered by departments to prioritize their area of interest and to gain specialisation.
PSO8	Students are able to get benefitted by registering for different certificate courses offered by the various departments.
	Course Ontermore

#### **Course Outcomes**

### B.Com. I- Sem I and II

## 1. Management Principles & Application

CO1	To provide the student with an understanding of basic management concepts, principles and practices and detailed understanding of basic
	management functions.

## 2. Principles of Marketing

CO1	The objective of this course is to provide basic knowledge of concepts,	
	principles, tools and techniques of marketing.	

#### 3. Insurance

CO1	The objective of this course is to provide basic knowledge of principles and practice of insurance and life insurance.
	and practice of instrance and the instrance.

## 4. Financial Accounting

CO1	To enable the students to learn the basic accounting concepts and allied aspects
	of accounting such as Amalgamation of Partnership Firms, Consignment
	Accounts, preparation of Receipts and Expenditure Account and Balance sheet.

## B.Com. II - Sem III and IV

#### 1. Corporate Accounting

CO1	Explain the accounting entries of issue and forfeiture of shares and re- issue of forfeited shares, discuss accounting treatment for redemption of preference shares and buyback of shares.
CO2	Demonstrate accounting for issue of debentures and redemption of debentures.
CO3	Simulate practice of preparing financial statements as per the provisions of Indian Companies Act 2013.
CO4	Practice the fundamental accounting process on Tally ERP

## 2. Fundamentals of Entrepreneurship

CO1	To impart theoretical knowledge of Entrepreneurship.
CO2	To develop Entrepreneurship qualities and skills.
CO3	To acquaint students with Steps involved in the formation of Small Enterprises.
CO4	To enlighten students with Recent Trends and Concepts in



	Entrepreneurship.
CO5	To acquaint students with family business in India.
CO6	To impart conceptual knowledge of Service and agro Entrepreneurship.
CO7	To aware students about Business Plan and Project Report
CO8	To inspire the students through successful stories of Entrepreneurs

### B.Com. III - Sem V and VI

#### 5. Modern Management Practice

CO1	To impart knowledge of modern management.	
CO2	To understand concepts of CRM.	
CO3	To know the concepts of emotional and social intelligence.	
CO4	To understand the concept of lean and talent management.	
CO5	To impart knowledge of total quality management.	
CO6	To understand the Japanese and Chinese Management Practices.	
CO7	To know the concept of Event and Performance Management.	
CO8	To understand the concept of time and stress management.	

#### 6. Business Regulatory Framework

CO1 To inculcate knowledge on various laws relating to business such as Law of Contract- 1872, Labour Laws Sale of Goods Act, 1932 and Goods and Services Tax (GST), Indian Partnership Act-1932 and Limited Liability Partnership Act 2008., Company Act- 2013, Security Exchange Board of India Act-1992, Consumer Protection Act-1986 and Competition Act-2002, Business Transactions and Cyber Laws, Negotiable Instrument (Amendment) Act-2015.

#### 7. Cooperative Development

CO1	To study the meaning and principles of Co-operation.
CO2	To study the agricultural and Non-agricultural Credit Co-operative institutions.
CO3	To study the Co-operative credit system.
CO4	To Study the important cooperative organizations.
CO5	To study the cooperative legislations and fund management.
CO6	To understand the institutional arrangement for cooperative education and training.
<b>CO</b> 7	To understand the nature, registration, legislation and audit of housing cooperatives.
CO8	To understand the cooperative audit system and provisions.



#### 8. Business Environment

CO1	Student should able to understand the significance and position of Indian economy at the world level.
CO2	Students should study the scenario of agricultural and industrial sectors.
CO3	Student should able to understand the significance and position of Indian economy at the world level.
CO4	Student should understand the correlations between economic and social problems.
CO5	Students will understand the Indian and global economic environment.
CO6	Students will equip with proper knowledge of Indian economic planning.
CO7	Students will enable with the knowledge of the plans and strategies toward foreign capital and multinational corporations.
CO8	Students will get acquainted with the functions, mechanism and performance of international financial, trade and regional cooperation institutions.

#### 9. Advanced Accountancy-I

CO1	Practice the preparation of financial statements of banks.	
CO2	Demonstrate accounting for farms and hire purchase system.	
CO3	Simulate accounting situations of insurance claim.	
CO4	Explain the accounting process on Tally with GST.	

#### 10. Advanced Accountancy-II (Auditing & Taxation)

CO1	To understand the concept and types of audit.
CO2	To identify the residential status and its implication on tax liability.
CO3	To understand the concept of exemption from income.
CO4	To know the computation of income from various sources as well as total income.
CO5	To understand the basic concepts of income tax and basis of charge.
CO6	To understand the manner of computation of total income.
CO7	To know the basic concepts about GST

### 11. Industrial - I Management (Factory, Capital, Production Management)

CO1	To make students familiar with the subject industrial management.
CO2	To expose the students the importance and applicability of industry management.
12. Iı	ndustrial - II Management(HRM& Personal Management)

CO1	To make students familiar with the subject human resource management.	
CO2	To expose the students the importance and applicability of human resource	
	management	

#### 13. Rural Economics & Co-operation - I & II

CO1	Learners will be able to understand Rural Economy in India.
CO2	Learners will understand the correlation between Agriculture and Rural Development.
CO3	Learners will understand Agricultural productivity in India.
CO4	Learners will understand Role of Co-operation in Rural Development.
C05	Awareness among the students regarding Rural Industrialization in India.



CO6 Agro based industries and small scale industries in India.CO7 Non-credit co-operation and Rural Indebtedness in India.

#### Shivraj College of Arts, Commerce & D. S. Kadam Science College, Gadhinglaj. Programme Outcomes (POs)

	Programme Outcomes (POs) – B.Sc.	
	After the completion of three-year graduation, students will be able to acquire the following attributes.	
PO1	Domain Knowledge: Learn the concepts, models, and basic scientific principles and procedures.	
PO2	Application: Capable of using scientific principles, methods, procedures, and tools in novel circumstances.	
PO3	Analysis: Capable of solving issues by a scientific analysis of the difficulties.	
PO4	Project Management- Able to undertake projects/tasks, plan and implement effectively	
PO5	Ability to operate both individually and in teams made up of individuals from various socio-cultural backgrounds.	
PO6	Ability to apply effective communication techniques for interactions in both personal and professional settings.	
PO7	Social Awareness- Able to undertake activities informed by social values (such as social equity), social issues and cultural diversity.	
PO8	Environmental awareness is necessary to protect the planet's limited resources and strike a balance between human demands and the environment.	
PO9	Ethics and Human Values- Apply ethical principles and appreciate the importance of ethical practices in professional life and uphold human dignity	
PO10	Ability to gain new knowledge and skills and adjust to the shifting demands of the times through lifelong learning	

#### Programme Specific Outcomes (PSOs)

_	Program Specific Outcomes- Physics	
	After successful completion of three-year graduate level degree program in Physics a student should be able to	
PSO1	1. Understand the core theories and principles of Physics.	
PSO2	2. Learn the concepts of Physics through classical and quantum phenomena.	
PSO3	3. Think methodically, independently and draw a logical conclusion of scientific problem.	
PSO4	4. Use basic mathematics to describe and analyse physical phenomena.	
PSO5	5. Enhance the learning abilities through development of simple laboratory experiment	
PSO6	6. Develop the practical skills and techniques to tackle the scientific problems	

Shivraj College of Arts, Commerce & D. S. Kadam Science College, Gadhinglaj COURSE OUTCOMES (COs) DEPARTMENT OF PHYSICS (NEW)

B.Sc. I semester I

DSC A1 Mechanics-I



CO1	Students are able to understand and identify scalar and vector physical quantities in mechanics.
CO2	Students are able to understand and apply vector algebraic methods to elementary exercises in mechanics.
CO3	Students are able to understand and identify degree and order of given differential equations.
CO4	Students are able to solve second order, homogeneous ordinary differential equation in mechanics
CO5	Understand the conceptual evolution of conservation laws of momentum and energy for both single and system of particles
CO6	Understand apply basic concepts of rotational motion
CO7	Students are capable of correlating above concepts and methods in mechanics to both.

### DSC A1 Mechanics-I

CO1	Understand and apply newtons law of Gravitation to celestial objects
CO2	Understand geometry of planetary orbits under the action of central force
CO3	Solve numerical problems based on Kepler's laws of planetary motion
CO4	Understand simple concepts like weightlessness, Geosynchronous satellite and GPS
CO5	Able to setup differential equation for simple harmonic motion and its allied cases
CO6	Able to calculate time averages to KE, PE and TE
CO7	Able to revise basic concepts such as stress, strain and elastic constants of elasticity
CO8	Able to explain the phenomenon of surface tension on the basis of molecular forces
CO9	Able to derive the relation between surface tension and excess pressure
CO10	Able to perform an experiment to determines ST by jaeger's method.

semester II

DSC B1 Electricity and Magnetism-I

COI	Students are able to understand the physical significance of gradient, divergence and curl.
CO2	Able to apply concepts in vector calculus such as gradient, divergence and curl related to vector and scalar infields using Gauss, Stokes and green's theorem
CO3	Understand and apply concepts of electrostatic field, potential to point charges, electric dipole and geometrically regular charged bodies
CO4	Understand and apply concept of capacitor to isolated, parallel plates, cylindrical and spherical capacitors and allied modifications in it
CO5	Understand and apply concepts of energy density in electric field
CO6	Applying above concepts to solve numerical exercise in electrostatics
DSC I	B1 Electricity and Magnetism-I

CO1	Understand importance of complex numbers in analysis of AC circuits contacting Inductance(L) Capacitor(C) and Resistance(R) & their various configurations
CO2	
CO3	Reveal mastery in basic terminology in network analysis for further studies
CO4	State and apply network theorems to simple circuits
CO5	Understand basic working principle of Ballistic galvanometer
CO6	Applying above concepts in network analysis to both theoretical and experimental domains.



CO7	Able to state Biot-Savarts law and are capable to apply it to straight, circular wires	
	and solenoid	

#### B.Sc. II Semester III

P-V Thermal Physics and Statistical Mechanics-I (DSC-1-C)

CO1 A. Highlight of different velocities of gas molecules.

CO2 B. Knowledge of Maxwell's distribution of gas molecules.

CO3 C. Merits and drawbacks of thermometers.

CO4 D. Basic thermodynamic processes and application to heat engine.

#### P-VI Waves and Optics -I (DSC-2-C)

CO1	A. Knowledge of superposition of harmonic oscillators.	
CO2	B. Theory of coupled oscillations.	
CO3	C. Understanding the ultrasonic waves and their applications.	
CO4	D. Basics of sound in context of acoustics of buildings	

Semester IV

#### P-VII Thermal Physics and Statistical Mechanics-II (DSC-1-D)

CO1	A. Conceptual clarity of thermodynamic functions and Clausius-Clapeyron equation.
CO2	B. Understanding the black body radiation spectrum.
CO3	C. Planck's law of radiation.
1000000	and the second

CO4 D. Preliminary knowledge of classical and quantum statistical mechanics

#### P-VIII Waves and Optics -II (DSC-2-D)

CO1	A. Cardinal points and their graphical representation.	
CO2	B. Rayleigh criterion and resolving power of prism and grating.	
CO3	C. Qualitative study of polarization of light.	
CO4	D. Study of interference for determination of wavelength of light	

COT D. Study of interference of Land

#### B.Sc. III Semester V

Paper IX Mathematical Physics

	Students are able to understand and identify methods of separation in differential equation.
CO2	equation
CO3	Students are able to understand and identify special functions.
CO4	Students are able to understand types, square roots complex number
CO5	Students are able to derive Euler's formula.

Paper X Quantum Mechanics

CO1	Students are able to derive wavelength of matter wave derivation.
CO2	Students are able to understand and identify the relation between group and phase velocity.
CO3	Students are able to understand and identify the Schrodinger equation (time dependent & time independent)
CO4	them
CO5	Students are able to understand the application of one dimensional simple harmonic oscillator



Paper XI Classical Mechanics & Classical Electrodynamics

raper	AT Classical Mechanics & Classical Electrodynamics
COI	Students are able to understand the constraints, Degree of freedom & principle of virtual work.
CO2	Students are able to understand and derive Lagrange's equation from D'Alembert's principle
CO3	Students are able to understand the deduction of-Hamilton's & D'Alembert's Principle, Lagrange's equation from Hamilton's principle.
CO4	Students are able to understand and identify reference frame.
CO5	Students are able to understand the postulates of special theory of relativity
CO6	Students are able to understand motion of charged particle- magnetic and electric field.
Paper	XII Digital and Analog Circuits and Instrumentation
COI	Students are able to understand and identify the types of logic gate
CO2	Students are able to understand the identify flip flops
CO3	Students are able to understand and derive the single stage transistor CE amplifier.
CO4	Students are able to understand and identify types of the oscillator
CO5	Students are able to understand the CRO and their applications
CO6	Students are able to understand the types of Op- Amp and its applications.
CO7	Students are able to understand the blog diagram, pin configuration and applications of IC 555
	ster VI
Paper	XIII Nuclear and Particle Physics

1 uper	And indicated and i altere i hysics
CO1	Students are able to understand the properties of Nuclei.
CO2	Students are able to understand and derive the binding energy relation.
CO3	Students are able to understand and identify the construction, working of different types of particle accelerator
CO4	Students are able to understand and identify the construction, working of different types of nuclear detector
CO5	Students are able to understand and classification of elementary particles.

Paper XIV Solid State Physics

Faper	ATV Solid State Thysics
CO1	Students are able to understand the unit cell and types.
CO2	Students are able to understand and identify the crystal structures.
CO3	Students are able to understand experimental methods in X-ray diffraction.
CO4	Students are able to understand and derive the classical Langevin theory of Di and
	Para. Magnetic materials
CO5	Students are able to understand and distinction between metals.
CO6	Students are able to understand Hall effect
Paper	XV Atomic and Molecular Physics and Astrophysics
COI	Students are able to understand spectral notations and optical spectral series for
	doublet structure.
CO2	Students are able to understand and identify the - rotational and vibrational spectra,
	energy levels.
CO3	Students are able to understand and derive the classical and quantum theory of
	Raman effect.
CO4	Students are able to understand the difference between raman and infrared spectra
CO5	Students are able to understand the structure of universe.
CO6	Students are able to understand and identify the evolution of main sequences star-
	red giants and white drafts
CO7	Students are able to understand evolution of massive stars.
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Paper XVI Energy Studies and Material Science

COI	Students are able to understand and classification of energy sources.	
CO2	Students are able to understand and classification of energy spectrum (UV, IR and visible)	
CO3	Students are able to understand and classification of type I and type II superconductors	
CO4	Students are able to understand the application of magnetic levitation	
CO5	Students are able to understand the types of nanostructures	
CO6	Students are able to understand application nanotechnology	

#### DEPARTMENT OF PHYSICS

Course Outcomes (OLD)

#### B.Sc. I Sem I

P-I Mechanics I	(DSC-1-A)
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	A. Knowledge and applications of vector algebra in Physics.	
CO2	B. Understanding of basic ordinary differential equations.	
	C. Concept of Newton's laws of motion and their applications.	
CO4	D. Basic concept of rotational motion.	

#### P-II Mechanics II (DSC-2-A)

CO1	A. Understand law of Gravitation.	
CO2	B. Use of Satellite in Global Positioning System (GPS).	
CO3	C. Concept of elasticity and its use in day-to-day life.	_

CO4 D. Differentiation of hydrophilic and hydrophobic surfaces

B.Sc. I Sem II

P-III Electricity Magnetism I (DSC-1-B)

Cor recordence and apprications of rector carearas in the	CO1	A. Knowledge and applications of vector calculus in Physics.
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CO2 B. Understanding of vector integrals. SCG: Dept of Physics 2

CO3 C. Conceptual clarity of electrostatics.

- CO4 D. Concept of polarization in dielectrics.
- P-IV Electricity Magnetism II (DSC-2-B)

COI	A. Qualitative anal	ysis of AC circuits.
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CO2 B. Magnetism and magnetostatics.

CO3 C. Concept of electromagnetic induction.

CO4 D. Idea of Maxwell's equations of electromagnetic waves

#### Semester III

Paper V (General Physics, Sound and Acoustics)

- CO1 Students are able to understand Del operator, gradient, divergence and their significance
- CO2 Students are able to understand and identify different types of integral, line volume, surface and line
- CO3 Students are able to understand gyroscopic applications

CO4 Students are able to derive expression for y by using flat spiral spring

CO5 Students are able to derive viscosity of liquid by rotating cylinder method and viscosity of gases by Rankinels method



Paper VI (Electronics and Semiconductor Devices)

CO1	Students are able to understand working of CRT
CO2	Students are able to understand the block diagram of CRO and use
CO3	Students are able to understand and identify types of amplifiers
CO4	Students are able to understand the OP-AMP characteristics and different parameter
CO5	Students are able to understand demorgans theorem
CO6	Students are able to understand and identify different flip-flop
CO7	Students are able to understand and identify UJT and FET with its characteristics.

#### Semester IV

Paper VII (Optics and Lasers)

COI	Students are able to understand the graphical construction of image using cardinal points	
CO2	Students are able to understand the relation between lateral, axial and angular modifications	
CO3	Students are able to understand the michelron interferometer and its application	
CO4	O4 Students are able to understand principle structure and types of OFC with property.	
CO5	Students are able to understand the properties of different types of layers	
CO6	O6 Students are able to explain Huygens double refraction through uniaxial crystals	
CO7	Students are able to understand the polarimeter	

Paper VIII (Relativity and Modern Physics)

CO1	Students are able to understand and identify the inertial and non-inertial frame of reference	
CO2	Students are able to derive dorentz transformation, length contraction, time dilation and velocity addition theorem	
CO3	Students are able to understand and derive the wavelength of matter wave	
CO4	Students are able to understand wave packet, group velocity and phase velocity an relation between theorem	
CO5	Students are able to understand Zeeman effect and derive normal Zeeman effect using magnetic orbital quantum number	
CO6	Students are able to understand Bragglis law and Mosleyls experimental work	
CO7	Students are able to understand and identify the nuclear fission, nuclear fusion and vhain reaction	

B.Sc. III Semester V

P-IX Mathematical and Statistical Physics

CO1	Curvilinear coordinates and coordinate systems.
CO2	Understanding of basic partial differential equations.
CO3	Basic concepts in statistical mechanics
CO4	Idea of classical and quantum statistical mechanics



P-X Quantum Mechanics

COI	Study motion of particles in one- and three-dimensions	
CO2	Study quantum mechanical behaviour of the particle	
CO3	Differentiation between Classical and Quantum mechanics	
CO4	Study different operators in quantum mechanics	
P-XI	Classical Mechanics	
CO1	Understanding conservation laws of mechanics of system of particles.	
CO1 CO2	Understanding conservation laws of mechanics of system of particles. Lagrange's equations and their applications.	

### P-XII Atomic & Molecular Spectra, Astronomy & Astrophysics

COI	Optical spectral lines: selection and intensity rules.	
CO2	Understanding doublet fine structure.	
CO3	Concept of Raman Effect.	
CO4	Milky Way Galaxy and Solar system.	

Semester VI

P-XIII Nuclear and Particle Physics

CO1	Construction and working of different types of nuclear accelerators.	_
CO2	Construction and working of different types of nuclear detectors.	
CO3	Understanding basic nuclear reactions and models	
CO4	Introductory elementary particles	

### P-XIV Energy Studies and Material science

CO1	Knowledge on different types of renewable energy resources.	
CO2	Study of wind energy and its generation by wind turbine.	
CO3	Study of solar energy and its generation by solar panel.	
CO4	Synthesis of nanoparticles.	

#### P-XV Electrodynamics and Electromagnetic Waves

CO1	Motion of charged particles in fields.	
CO2	Understanding the basic laws in electrostatics and magnetostatics.	
CO3	Deriving the Maxwell's equations of electromagnetic waves.	
CO4	Propagation of electromagnetic waves in free space	

### P-XVI Solid State Physics

CO1	Models of different crystal structures	
CO2	Analysis of X-ray diffraction patterns	
CO3	Applications of IC-555 as different multivibrators	_
CO4	Difference between metals, semiconductors and insulators.	



## Program Specific Outcomes- Chemistry

	successful completion of three-year graduate level degree program in Chemistry a t should be able to
PSO1	Gain the knowledge of Chemistry through theory and practicals.
PSO2	To explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions.
PSO3	Use modern chemical tools, Models, Charts and Equipment's.
PSO4	Know the structure-activity relationship.
PSO5	Understand good laboratory practices and safety.
PSO6	Make aware and handle the sophisticated instruments/equipment.
PSO7	Achieve the skills required to succeed in graduate school, professional school and the chemical industry like cement industries, Argo product, Paint industries, Rubber industries, Petrochemical industries, Food processing industries, Fertilizer industries, etc.
PSO8	Also, they expand the knowledge available opportunities related to chemistry in the government services through public service commission particularly in the field of food safety, health inspector, pharmacist, etc.
PSO9	Learn the laboratory skills and safely to transfer and interpret knowledge entirely in the working environment.

#### DEPARTMENT OF CHEMISTRY COURSE OUTCOMES (COs) New

B.Sc	Semester-I
	Inorganic Chemistry
	Paper-I
	(DSC-3A)
CO1	To study the electrons filling rules in various orbitals i.e., a) Aufbau's principal b) Hund's rule of maximum multiplicity c) Pauli's exclusion principle.
CO2	To get the knowledge of electronic configuration of elements, stability of empty, half-filled and completely filled orbitals.
CO3	To study the s block elements a) electronic configuration b) atomic radii c) ionic radii d) ionization energy e) electron affinity f) electronegativity g) metallic characters h) reactivity i) oxidation state j) melting and boiling points, k) chemical properties.
CO4	To learn the LCAO method, formation of bonding, anti-bonding and nonbonding molecular orbitals, MO diagrams for homonuclear diatomic molecule.
CO5	To Obtain Concept of hybridization, different types of hybridization and geometry
	Organic Chemistry
	Paper-II
	(DSC-4A)
COI	To study the fundamentals of organic reaction mechanisms.
CO2	To study the Types of Stereoisomerism, Optical Isomerism: Concept of Chirality, Elements of Symmetry and Optical Isomerism.
CO3	To study the concept of aromatic, non-aromatic, antiaromatic, Pseudo aromatic, Structure of Benzene Kekule structure, Resonance structure, M.O. picture, Modern

	1 Alexandree and a second s
	theory of Aromaticity.
	theory of Aromaticity.
204	To study the cycloalkanes, cycloalkenes and alkadienes.
	Semester-II
	Physical Chemistry
	Paper-III
201	(DSC-3B)
201	To understand the basic concepts of thermodynamics, First law of thermodynamics, spontaneous and non-spontaneous process, second law of thermodynamics, Carnot's
	cycle and its efficiency, entropy, Physical Significance of entropy, Statement of
	Third Law of thermodynamics.
202	To study the chemical equilibrium Free energy change in a chemical reaction.
02	Thermodynamic derivation of the law of chemical equilibrium, Le-Chatelier's
	principle.
203	To get the knowledge about postulates of kinetic theory of gases and derivation Van
04	der Waals equation of state for real gases. To study the Rate of reaction, definition and units of rate constant, factors affecting
CO4	on rate of reaction like nature of reactant, concentration, pressure, temperature and
	catalyst with order and molecularity of reaction.
	Analytical Chemistry
	Paper-IV
	(DSC-4B)
01	To Study importance of analysis and analytical processes.
:02	To obtain knowledge about Sampling of solids, liquids and gases.
203	The physical analysis of water - pH, conductance, colour, odour, turbidity and taste.
CO4	Chemical analysis like total dissolved solids, hardness, salinity, alkalinity, acidity.
CO5	To understand acid-base indicators, theory of indicators w. r. t. Ostwald's ionization
	theory and quinoid theory.
CO6	To study the basic Principle of chromatography, Paper Chromatography, Thin layer
I	chromatography I Sem III Physical Chemistry
3.5c. 1	I Sem III Physical Chemistry Paper-V
	(DSC-C3)
201	To get the knowledge of number of the aqueous solutions with different applications.
CO2	Also, to know the knowledge about surface tension, viscosity and refractive index
	and surface phenomena at heterogeneous surfaces.
CO3	To measure of the nuclear radiations in the various nuclear phenomena.
CO4	The Learning and understanding of the knowledge about third order reaction and
	theories of reaction rates. Industrial Chemistry
	Paper-VI
	(DSC-C4)
COI	To learn the basic concepts and concentration terms and distinguish between classical
	and industrial chemistry and also between unit operations and unit processes.
CO2	To get knowledge of some unit operations
CO3	To understand the process of corrosion and Knowledge of prevention from corrosion
	and knowledge of Indian paper industry.
CO4	To get the sufficient knowledge about the chemical nature and cleansing action of soap.
	Semester-IV
	Inorganic Chemistry

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		ADHINGLAJ
		CIENCE COLL
201	(DSC-D3) To learn the basic concepts about coordination complexes and get knowledge about application of chelates in analytical chemistry.	
02	To get useful knowledge of the properties of P – block elements and the properties of 3d series elements.	
CO3	To learn the basic knowledge about the qualitative analysis of inorganic compounds.	1
_	Organic Chemistry	
	Paper-VIII (DSC-D4)	
CO1	To impart knowledge about the synthesis, reactivity and applications of carboxylic acids.	1
CO2	Get some knowledge about classification, preparation and applications of amines and diazonium salts.	]
CO3	To learn the basic knowledge conformational analysis of organic compounds.	
CO4	To Understand the classification, configuration and structure of carbohydrates and to understand the nomenclature and reactivity of aldehydes and ketones.	
	B.Sc.III Semester-V	
	Inorganic Chemistry Paper-IX	
	(DSE-E5)	4
CO1	The study of role of acids and bases is useful in industrial Chemistry.	
CO2	Non-aqueous solvents are playing important role to learn all chemical the research point of view.	n
CO3	Useful to understand geometry, stability and nature of bonding between metal ion and ligand in complexes	1
CO4	The topic deals with the synthesis and the applications of the semiconductors and Superconductors in electrical and electronic devices.	đ
CO5	The structure, method of preparation and the applications of organo metallic compound in various fields are used in research point of view.	đ
	Inorganic Chemistry Paper-X	
COI	The study of role of acids and bases is useful in industrial Chemistry.	1
CO2	Non-aqueous solvents are playing important role to learn all chemical the research poin of view.	t
CO3	Useful to understand geometry, stability and nature of bonding between metal ion and ligand in complexes.	d
CO4	The topic deals with the synthesis and the applications of the semiconductors and Superconductors in electrical and electronic devices.	d
CO5	The structure, method of preparation and the applications of organo metallic compoun in various fields are used in research point of view.	d
	Organic Chemistry	
	Paper-XI	
COI	The understanding of energy associated with electromagnetic radiation and its use i	n

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	analytical technique.
CO2	To get knowledge of chromophore, auxochrome and calculation of $\lambda$ max this plays an important role in advanced chemistry.
CO3	Knowledge of vibrational transitions, regions of IR spectrum, functional group recognition plays vital role in spectral analysis.
CO4	Understanding of magnetic-nonmagnetic nuclei, shielding-deshielding, chemical shift, splitting pattern with knowledge of molecular ion, fragmentation pattern and different types of ions
	produced useful in spectra understanding and analysis of unknown compound.
	Industrial Chemistry
	Paper-XII
CO1	To Understand the process of manufacture of sugar and by-products of sugar industry.
CO2	To study the physicochemical principles of production of ammonia, sulfuric acid, nitric acid and sodium carbonate along with its manufacturing plant and also synthesis and applications
	of various polymers.
CO3	To get the knowledge of petroleum Industries, fuels and need and use of eco-friendly fuels.
CO4	The understanding of very important branch nanotechnology including its classification, optical properties, synthesis routes, characterization techniques and applications of nano-materials.
	Semester-VI Physical Chemistry Paper-XIII
CO1	To gain the knowledge of phase rule, one component, Two component and three component systems phase diagrams.
CO2	To understand basic concept of thermodynamics, free energy, Gibbs-Helmholt: equation and its applications.
CO3	The understanding of Space lattice, lattice sites, Lattice planes, Unit cell. Laws o crystallography, Weiss indices and Miller indices, Cubic lattices and types of cubic lattice, planes or faces of a simple cubic system, Diffraction of X-rays, Derivation o Bragg's equation. Determination of crystal structure by Bragg's method. crystal structure of NaCl and KCl on the basis of Bragg's equation.
CO4	To learn the kinetics, Simultaneous reactions such as i) opposing reaction ii) sid reaction iii) consecutive reactions: iv) chain reaction v) explosive reaction.
005	
CO5	To obtain the knowledge of distribution law, its modifications, applications, process of extraction, determination of solubility, distribution indicators and molecular weights.



	Paper-XIV
COI	It is used to understand the thermodynamic and kinetic aspects of metal complexes.
CO2	To understand the generation of nuclear power with the help of nuclear reactions and also role of radio isotopes in medicinal, industrial and Archaeology fields.
CO3	It is very useful for the understanding of characteristics, properties and separation of lanthanides, actinides and synthesis and IUPAC Nomenclature of trans uranic elements.
CO4	The techniques involve in ore dressing and extractions of cast iron from its ore are well known in industries.
CO5	To understand the role of various metals and non-metals in our health.
	Organic Chemistry
	Paper-XV
CO1	The knowledge of reagents used in organic transformations and various reactions used in organic synthesis in chemical industries.
CO2	To Know the basic terms used in retrosynthetic analysis, retrosynthesis of some organic compounds.
CO3	It is helpful to learn the addition reaction across >C=C< bond w.r.t. hydrohalogenation, hydration hydroxylation, ozonolysis and addition of halogen, halogen acid, hydrogen, water, etc. across $-C=C$ -bond.
CO4	To get the knowledge of Natural products of terpenoids and alkaloids w.r.t. occurrence, isolation, characteristics and classification. With analytical and synthetic evidences of Citral and Nicotine.
CO5	For understanding the classification of drugs, Qualities of ideal drug and various synthesis and uses of some drugs and their action.
	Analytical Chemistry
	Paper-XVI
CO1	To learn and understand the techniques of gravimetric analysis used in detection of semi micro compounds in ionic form.
CO2	To obtain knowledge of instrumental analysis of alkali and alkaline earth elements.
CO3	To understand, working and applications of optical methods as an analytical tool and to understand theory and applications of potentiometric titrations.
CO4	To understand the basics knowledge of ion exchange and column adsorption chromatography, Quality control practices in analytical industries / laboratories.
	COURSE OUTCOMES (CO.) OL

## COURSE OUTCOMES (COs) Old

	B.Sc. I Semester-I
	Physical Chemistry
	Paper-I
CO1	To understand the basic concepts of thermodynamics, First law of thermodynamics, spontaneous and non-spontaneous process, second law of thermodynamics, Carnot's cycle and its efficiency. entropy, Physical Significance of entropy, Statement of Third Law of thermodynamics.
CO2	To study the chemical equilibrium Free energy change in a chemical reaction.

		Sources
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		GADHIN
	Thermodynamic derivation of the law of chemical equilibrium, Le-Chatelier's	GADHIN
	principle.	
CO3	To get the knowledge about postulates of kinetic theory of gases and derivation Van	1
	der Waals equation of state for real gases	
CO4	To study the Rate of reaction, definition and units of rate constant, factors affecting	
	on rate of reaction like nature of reactant, concentration, pressure, temperature and	
	catalyst with order and molecularity of reaction.	4
	Inorganic Chemistry	
201	Paper-II To study the electrons filling rules in various orbitals i.e., a) Aufbau's principal b)	-
201	Hund's rule of maximum multiplicity c) Pauli's exclusion principle.	
CO2	To get the knowledge of electronic configuration of elements, stability of empty,	1
202	half-filled and completely filled orbitals.	
CO3	To study the s block elements a) electronic configuration b) atomic radii c) ionic radii	1
005	d) ionization energy e) electron affinity f) electronegativity g) metallic characters h)	
	reactivity i) oxidation state j) melting and boiling points, k) chemical properties.	
CO4	To learn the LCAO method, formation of bonding, anti-bonding and nonbonding	1
	molecular orbitals, MO diagrams for homonuclear diatomic molecule.	
CO5	To Obtain Concept of hybridization, different types of hybridization and geometry.	
		4
	Semester-II Organic Chemistry	
	Paper-III	
		-
COI	To study the fundamentals of organic reaction mechanisms.	
CO2	To study the Types of Stereoisomerism, Optical Isomerism: Concept of Chirality,	1
02	Elements of Symmetry and Optical Isomerism.	
CO3	To study the concept of aromatic, non-aromatic, antiaromatic, Pseudo aromatic,	1
	Structure of Benzene Kekule structure, Resonance structure, M.O. picture, Modern	
	theory of Aromaticity	
CO4	To study the cycloalkanes, cycloalkenes and alkadienes.	
	B.Sc. II Semester-III	-
	Organic Chemistry	
	Paper-V	
CO1	To impart knowledge about the synthesis, reactivity and applications of carboxylic	
	acids.	
CO2	Get some knowledge about classification, preparation and applications of amines	
	and diazonium salts.	_
CO3	To Understand the classification, configuration and structure of carbohydrates and	
	to understand the nomenclature and reactivity of aldehydes and ketones.	-
CO4	To learn the basic knowledge conformational analysis of organic compound	
	Analytical Chemistry	
	Paper-VI	
COI	To Study importance of analysis and analytical processes.	
CO2	To obtain knowledge about Sampling of solids, liquids and gases.	1
CO3	The Physical analysis of water – pH, Conductance, Colour, odour, Turbidity and taste. Chemical analysis like total dissolved solids, hardness, salinity, alkalinity, acidity.	

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	SE
	To understand acid-base indicators, theory of indicators w. r. t. Ostwald's ionization
CO4	To understand acid-base indicators, theory of indicators w. r. t. Ostwald's ionization theory and quinoid theory.
CO5	To study the basic Principle of chromatography, Paper Chromatography, Thin layer chromatography
	Semester-IV
	Physical Chemistry
	Paper-VII
COI	To get the knowledge of number of the aqueous solutions with different applications.
CO2	Also, to know the knowledge about surface tension, viscosity and refractive index and surface phenomena at heterogeneous surfaces.
CO3	To measure of the nuclear radiations in the various nuclear phenomena.
CO4	The Learning and understanding of the knowledge about third order reaction and theories of reaction rates.
	Inorganic Chemistry Paper-VIII
CO1	To learn the basic concepts about coordination complexes and get knowledge about application of chelates in analytical chemistry.
CO2	To get useful knowledge of the properties of P – block elements and the properties of 3d series elements
CO3	To learn the basic knowledge about the qualitative analysis of inorganic compounds.
	B.Sc. III Semester-V
	Physical Chemistry
	Paper-IX
CO1	To learn and understand quantum chemistry, Heisenberg's uncertainty principle, concept of energy operators (Hamiltonian), learning of Schrodinger wave equation. Physical interpretation of the $\psi$ and $\psi^2$ . Particle in a one-dimensional box.
CO2	To gain knowledge about spectroscopy, Electromagnetic spectrum, Energy level diagram, Study of rotational spectra of diatomic molecules: Rigid rotor model, Microwave oven, vibrational spectra of diatomic molecules, simple Harmonic oscillator model, Raman spectra: Concept of polarizability, pure rotational and pure Vibrational Raman spectra of diatomic molecules.
CO3	To understand photochemical laws, reactions and various photochemical phenomena.
CO4	To Learn the various types of solutions, relations vapour pressure, temperature relations.
CO5	To get knowledge of emf measurements, types of electrodes, different types of cells, various applications of emf measurements.
	Inorganic Chemistry
	Paper-X
COI	The study of role of acids and bases is useful in industrial Chemistry.
CO2	Non-aqueous solvents are playing important role to learn all chemical the research point of view.
CO3	Useful to understand geometry, stability and nature of bonding between metal ion and ligand in complexes.

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	I A A A A A A A A A A A A A A A A A A A	K.V.R.S.S.S
	BSX	GADHINGLA
205	The structure, method of preparation and the applications of organo metallic compounds in various fields are used in research point of view.	a se
	in various fields are used in research point of view.	CIENCE
	Organic Chemistry	
	Paper-XI	
201	The understanding of energy associated with electromagnetic radiation and its use in analytical technique.	
CO2	To get knowledge of chromophore, auxochrome and calculation of $\lambda_{max}$ this plays an important role in advanced chemistry.	
CO3	Knowledge of vibrational transitions, regions of IR spectrum, functional group recognition plays vital role in spectral analysis.	
CO4	Understanding of magnetic-nonmagnetic nuclei, shielding-deshielding, chemical shift, splitting pattern with knowledge of molecular ion, fragmentation pattern and different types of ions produced useful in spectra understanding and analysis of unknown compound.	
	Industrial Chemistry Paper-XII	
	-	
CO1 CO2	To Understand the process of manufacture of sugar and byproducts of sugar industry. To study the physicochemical principles of production of ammonia, sulfuric acid,	
02	nitric acid and sodium carbonate along with its manufacturing plant and also synthesis and applications of various polymers.	
CO3	To get the knowledge of petroleum Industries, fuels and need and use of eco-friendly fuels.	
CO4	The understanding of very important branch nanotechnology including its classification, optical properties, synthesis routes, characterization techniques and applications of nano-materials.	
	Part-III Semester-VI	
	Physical Chemistry Paper-XIII	
CO1	To gain the knowledge of phase rule, one component, Two component and three component systems phase diagrams.	
CO2	To understand basic concept of thermodynamics, free energy, Gibbs-Helmholtz equation and its applications.	
CO3		
CO4	To learn the kinetics, Simultaneous reactions such as i) opposing reaction ii) side reaction iii) consecutive reactions: iv) chain reaction v) explosive reaction.	
CO5	To obtain the knowledge of distribution law, its modifications, applications, process of extraction, determination of solubility, distribution indicators and molecular	2
	weights. Inorganic Chemistry Paper-XIV	
-		
CO1	It is used to understand the thermodynamic and kinetic aspects of metal complexes. To understand the generation of nuclear power with the help of nuclear reactions	1



	and also role of radio isotopes in medicinal, industrial and Archaeology fields.
CO3	It is very useful for the understanding of characteristics, properties and separation of lanthanides, actinides and synthesis and IUPAC Nomenclature of trans uranic
001	elements. To understand the role of various metals and non-metals in our health.
CO4	
CO5	The techniques involve in ore dressing and extractions of cast iron from its ore are well known in industries.
	Organic Chemistry
	Paper-XV
COI	The knowledge of reagents used in organic transformations and various reactions used in organic synthesis in chemical industries.
CO2	To Know the basic terms used in retrosynthetic analysis, retrosynthesis of some organic compounds.
CO3	It is helpful to learn the addition reaction across $>C=C<$ bond w.r.t. hydrohalogenation, hydration hydroxylation, ozonolysis and addition of halogen, halogen acid, hydrogen, water, etc. across $-C=C$ -bond.
CO4	To get the knowledge of Natural products of terpenoids and alkaloids w.r.t. occurrence, isolation, characteristics and classification. With analytical and synthetic evidences of Citral and Nicotine.
CO5	For understanding the classification of drugs, Qualities of ideal drug and various synthesis and uses of some drugs and their action.
	Analytical Chemistry
	Paper-XVI
CO1	To learn and understand the techniques of gravimetric analysis used in detection of semi micro compounds in ionic form.
CO2	To obtain knowledge of instrumental analysis of alkali and alkaline earth elements.
CO3	To understand, working and applications of optical methods as an analytical tool and to understand theory and applications of potentiometric titrations.
CO4	To understand the basics knowledge of ion exchange and column adsorption chromatography, Quality control practices in analytical industries / laboratories.

#### **Program Specific Outcomes- Computer Science**

	riogram optenne outcomes computer strenet
	uccessful completion of three-year graduate level degree program in Computer a student should be able to
PSO1	Understand the basics of Computer Science.
PSO2	Learn, design and perform experiments in the labs to demonstrate the concepts, principles and the queries learned in the classrooms.
PSO3	Develop the ability to apply the knowledge acquired in the classroom and laboratories to specific problems in the experimental Computer Science.
PSO4	Identify the area of interest in academic, research and development.
PSO5	Perform job in various fields like IT, Science, engineering, education, banking, business and public service, etc. with precision, analytical mind, innovative thinking, clarity of thought, expression, and systematic approach.



Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj

Department: Computer Science (New)

Course Outcomes

#### B.Sc. Part -I

Course Code: DSC-11A

Computer Paper -I (Computer Science (Optional)

Problem solving using computer and C programming

CO 1	Explore algorithmic approaches to problem solving.
CO 2	Ability to analyze a problem and devise an algorithm to solve it.
CO 3	Able to formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
CO 4	Ability to implement algorithms in the 'C' language.
CO 5	Develop modular programs using control structures and arrays in 'C'.

#### Course Code : DSC-11B

**Computer Paper –III** 

Course Title : Programming Skills Using 'C'

CO 1	Develop advanced concepts of programming using C
CO 2	Develop modular programs using control structures, pointers, arrays, strings and structures.
CO 3	Design and develop solutions to real world problems using C
CO 4	Able to develop structured programming approach.



#### Course Code: DSC-12B

Computer Paper -IV

Course Title : Relational Database Management System

Students will able to-

CO 1	Able to acquire knowledge of data security and its importance.
CO 2	Design E-R Model for given requirements and convert the same into database tables.
CO 3	Able to use database techniques such as SQL & PL/SQL.
CO 4	Understand and able to implement concept of transactions.
CO 5	Use advanced database Programming concepts.

#### SEMESTER-III

B.Sc. Part -II Computer Science Optional (Semester-III)

### Course Code: DSC-11C Computer Paper –V

Course Title: PHP and MySQL

Students will able to-

CO 1	To understand basic concept of PHP.
CO 2	To Learn how to developing applications in PHP using MySQL
CO 3	To learn and develop various PHP technology applications that definitely meets the Current industry needs.

### Course Code: DSC-12C Computer Paper –VI

Course Title: Object Oriented Programming Using C++

Perform object oriented programming to develop solutions to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs. Students will be able

CO 1 To understand how C++ improves C with object-oriented features



CO 2	To learn syntax and semantics of C++ programming language
CO 3	To learn how to write inline functions for efficiency and performance
CO 4	To learn how to overload functions and operators in C++.
CO 5	To learn how to design C++ classes for code reuse.
CO 6	To learn how inheritance promote code reuse in C++.
CO 7	To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

### Sem: IV

# B.Sc. Part -II Computer Science Optional (Semester- IV)

### Course Code:DSC-11D Computer Paper –VII

### Course Title : Cyber Security Essentials-I

Students will be able to:

CO 1	Understand concept of information security management.	
CO 2	To Learn how to developing applications in PHP using MySQL.	
CO 3	Understand wireless network security.	
CO 4	Learn cyber security laws and importance of security audit.	

### Course Code:DSC-12D Computer Paper –VIII

#### Course Title: Data Structure Using C++

Students will be able to

CO 1	Understand the basic concepts such as Abstract Data Types, Linear and Non Linear
	Data structures
CO 2	Ability to choose appropriate data structures to represent data items in real world problems.
CO 3	Ability to analyze the time and space complexities of algorithms.

CO 4	Ability to design programs using a variety of data structures such as array, stacks,
	queues, linked list
CO 5	Able to analyze and implement various kinds of searching and sorting techniques.

## B.Sc. Part -III Computer Science Optional (Semester-V)

#### Course Code: DSE-21E

Paper IX

#### **Course Title: Core Java**

Students will be able to:

CO 1	Object oriented programming concepts using Java.
CO 2	Knowledgeof input, its processing and getting suitable output.
CO 3	Understand, design, implement and evaluate classes and applets
CO 4	Understand concept of Multiprogramming and Exception Handling.
ourse	Code: DSE-22E Computer Paper X

# Course Title: C# Programming

Students will be able to

CO 1	This course will cover the practical aspects C#.NET framework.
	The goal of this course is to introduce the students to the basics of OOPs and windows application program.

#### Course Code: DSE-23E

### **Computer Paper XI**

#### **Course Title: LINUX Part I**

Students will be able to

CO 1	Upon completion of this course, students should have a good working knowledge of
	Linux.
CO 2	Allowing them to easily use any Linux distribution.
CO 3	This course shall help student to learn advanced subjects in computer science practically.

Course Code: DSE-24E

**Computer Paper XII** 

#### **Course Title: Python Part I**

Students will be able to:



CO 1 To understand why Python is a useful scripting language for developers.

CO 2 To learn how to write loops and decision statements in Python

CO 3 To learn how to use lists, tuples, and dictionaries in Python programs

#### B.Sc. Part -III Computer Science Optional (Semester-VI)

#### Course Code: DSE-21F Computer Paper XIII

### Course Title: Advanced Java

Students will be able to:

The student will be able to develop distributed business applications, develop web pages Using advanced server-side programming through servlets and Java server pages.
Demonstrate approaches for performance and effective coding
To learn database programming using Java
To study web development concept using Servlet and JSP

## CourseCode:DSE-22F

### **Computer Paper XIV**

### Course Title: ASP.NET

Students will be able to:

This course will cover the practical aspects of multi-tier web based application
development using the .NET framework.
The goal of this course is to introduce the students to the basics of distributed Web application development.
I

CourseCode:DSE-23F

#### **Computer Paper XV**

### Course Title: Linux Part II

Students will be able to:

CO 1	This course covers design principles of Linux Operating System Memory management.
CO 2	Structure of File system and virtual file system is also elaborated.
CO 3	This course contains details of shell programming and introduces System administration



#### CourseCode:DSE-24F

**Computer Paper XVI** 

#### Course Title: Python Part II

Students will be able to:

CO 1	To learn how to write functions and pass arguments in Python
CO 2	To learn how to build and package Python modules for reusability
CO 3	To learn how to use exception handling in Python applications for error handling

## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Computer Science (Old Syllabus)

Course Outcomes

B. Sc. Part- I Computer Science Optional

Semester: I

Computer Paper- Introduction to Computers & Modern Operating Environments (I)

CO 1	Understand the concept of Computer and Basic
	Organization such as Evolutions, generations, classification Block diagram
CO 2	Understand the concept Computer Languages, Input devices, Output Devices and
	Storage Devices like primary and secondary storage.
CO 3	Student able to understand various gates ( Universal Gates ), Flip flops etc.
CO 4	Students able to apply various application like Word, Excel using Operating System

#### **Computer Paper-II**

### Course Title : Introduction to Programming in 'C'

CO 1	Understand the Programming Concepts and Introduction to 'C Algorithm, Characteristics.
	Notation of Algorithm • Flowcharts- Definition, Symbol, features etc.
CO 2	Studies the various Input-Output Statements such as getch(), getche(), getchar(), putchar() Formatted input- output - printf(), scanf()
CO 3	Understand the various Control Structures such as Conditional control statements- if, if else, nested if, switch Looping – for statements, nested for, while, do-while statements.
CO 4	Implementation of array in various application using 2 dimension and 3 three dimension arrays.

### B. Sc. Part- I Computer Science Optional (Semester II)

#### **Computer Paper-III**

#### **Course Title : Introduction to Database & HTML**

CO 1.	Students able to understand Basic Concept, Advantages of DBMS over file
	processing system and various components of Database Management system.
CO 2.	Students able to understand Data model and relational algebra.



CO 3.	Students able to understand concept of domain, tuple, Structure query Language.
CO 4.	Internet basics and HTML programming language Features and limitations, Essential
	Tags

#### **Computer Paper-IV**

#### Course Title : Programming techniques Using 'C'

CO 1	Students able to understand To develop the techniques for developing Programs
CO 2	Students able to understand Function & its definition declaration of variables.
CO 3	Students able to understand what is pointer and structure.
CO 4	Students able to understand file handling

### B. Sc. Part- II Computer Science Optional (Semester III)

#### **Computer Paper-V**

## Course Title : Fundamentals of Software Engineering

**Course Outcome :** 

CO 1	Able to design and conduct experiments, as well as to analyze and interpret data.
CO 2	Able to identify, formulate, and solve engineering problems
CO 3	Able to analyze, design, verify, validate, implement, apply, and maintain software systems.
CO <sub>4</sub>	Able to understand different phases of SDLC.

#### **Computer Paper-VI**

### Course Title : Object Oriented Programming Using C++

CO 1	Able to understand the concept of object oriented programming
CO 2	Use the benefits of object oriented design and understand when it is an appropriate methodology to use.
CO 3	Design object oriented solutions for small systems involving multiple objects

### B. Sc. Part- II Computer Science Optional (Semester IV)

#### **Computer Paper-VII**

### Course Title : Relational Database Management System

CO 1	Able to acquire knowledge of data security and its importance.
CO 2	Design E-R Model for given requirements and convert the same into database tables.
CO 3	Able to use database techniques such as SQL & PL/SQL.
CO 4	Understand and able to implement concept of transactions.
CO 5	Use advanced database Programming concepts.

#### **Computer Paper-VIII**

### Course Title : Advanced Object Oriented Programming Using C++

CO 1	Able to understand the concept of Advanced object oriented programming using
	C++.



CO 2	Study of inheritance : Definition, Concept of base and derived classes. defining derived classes, types of inheritance single, multilevel, multiple, mixed, etc. How to access private members in derived class, need of virtual
	base class, concept of abstract class.
CO 3	Polymorphism : Definition, Types of Polymorphism - compile time, run time, Pointer to object concept of function polymorphism, virtual functions, rules for virtual function, pure virtual function.
CO 4	File Handling : File handling concept. ,Reading and writing characters using – get() and put()
CO 5	An overview of UML, applications of UML in various domains, Different parts of UML, -Model elements, Different diagrams (Only type and its use). Extension mechanism, Views, relationships in the UML, Representation of classes and objects.

#### B. Sc. Part-III Computer Science Optional (Semester V) Computer Paper-IX Course Title : Computer Networks

CO 1	Understand basic computer network technology.
CO 2	Understand and explain Data Communications System and its components.
CO 3	Able to identify the different types of network topologies and protocols.
CO 4	Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.
CO 5	Identify the different types of network devices and their functions within a network
CO 6	Understand the basic protocols of computer networks, and how they can be used to assist in network design and implementation.

### Computer Paper-X Course Title : Visual Programming Using C#

CO 1	Introduction To C#
CO 2	Compiling and building projects, Compiling a C# program using command line utility, CSC.EXE, Different valid forms of main.
CO 3	Understanding role of WEB server and WEB browser, HTTP request and response structure. Introduction to ASP, Types of path, FORM tag Types of server controls
CO 4	Introduction to ADO.Net ADO.NET Architecture- Connection, command, data reader, data adapter, data set

### **Computer Paper-XI**

## Course Title : Linux Operating System.

#### **Course Outcome :**

CO 1	Introduction To Linux Operating System.
CO 2	Linux History and architecture of Linux system, shell, Types of shell's, Operating system services, Kernel, Kernel shell relationship, Login, Logout,
CO 3	Buffer, headers, structure of the buffer pool, scenarios for retrieval of a buffer,



	advantage and disadvantage of the buffer cache, inodes, structure of regular file,
CO 4	System calls and Process : Open, read, write, process states and transitions, process creation, signals, process termination, a waiting process termination, process management
	kill, background processing, no hang up, job scheduling using at command.
CO 5	Use and features of vi, modes of operation- a) Command mode- text management, repeat factor. b) Insert mode- insert, append, replace text. c) Ex mode- saving the text, global substitution etc.

### **Computer Paper-XII**

Course Title : PHP and MySQL.

CO 1	Fundamental of PHP
CO 2	Concept of PHP, Constants, variables declaration, Comments Data types Operators
	Command line arguments
CO 3	Conditional statements : If-else, Switch, Ternary operators, Looping statements, For
	loop, While loop, Do-while loop
CO 4	Creating arrays, Inserting elements in arrays, Retrieving elements from array,
	Displaying arrays Sorting array elements
CO 5	Introduction to Databases ,Creating database, Creating tables, Inserting values in
	table Displaying, changing, searching, deleting records from the table

### B. Sc. Part-III Computer Science Optional (Semester VI) Computer Paper-XIII Course Title : Network Technology and Windows Server 2008

CO 1	Understand basic computer network technology
CO 2	Understand and explain Data Communications System and its components.
CO 3	Able to identify the different types of network topologies and protocols.
CO 4	Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer. Identify the different types of network devices and their functions within a network
CO 5	Understand the basic protocols of computer networks, and how they can be used to assist in network design and implementation.

### **Computer Paper-XIV**

### **Course Title : Java Programming**

CO 1	Understand to implement object oriented programming concepts
CO 2	Understand how to design graphical user interface in Java programs
CO 3	Understand how to design and develop applets
CO <sub>4</sub>	Able to design User Interface using Swing and AWT
CO 5	Understand concept of packages and study how to implement them



### **Computer Paper-XV**

### **Course Title : Advanced Linux Applications**

CO 1	Introduction To Advanced Linux Applications.
CO 2	Memory management- swapping, demand paging, deleting and moving text (d, p and P), yanking text (y), filtering the text (!), Ex mode- handling multiple files, inserting file and command outputs, moving text from one file to another.
CO 3	Sed – syntax, line addressing, multiple instructions (-ef) context addressing, internal commands used by sed –i, a, d, p, r, w, q, s etc., gawk- syntax, field level operations, formatted outputs, use of variables and expressions, BEGIN and END section, built-in variables, arrays, built-in functions- system, length, substr, split etc., types of meta characters.
CO 4	Login with root, su, communicate with users-wall, news, booting and shutdown process, mangibg disk space- df, du, ulimit, find, backup- cpio, printer management-lpsched, lpstat, lpadmin, lpmove, reject, disable etc., mounting a file system, unmounting a file system.

### Computer Paper-XVI Course Title : E-Commerce

CO 1	E-Commerce- Concept, Definition, Goals, Components and functions
CO 2	Advantages and Limitations, Challenges and opportunities
CO 3	E-Commerce models-B2B, C2C, C2B, C2G, B2C, B2B
CO 4	Electronic payment System Concept of e-payment Difference between traditional and electronics payment system Digital cash, cyber cash, e-wallet Credit and Debit card system, Smart Card Prepaid, post paid and instant payment system Electronic funds transfer, NEFT, RTGS

	Program Specific Outcomes- Microbiology
	uccessful completion of three-year graduate level degree program in Microbiology a should be able to:
PSO1	To make the students knowledgeable with respect to the subject and its practicable applicability.
PSO2	To promote understanding of basic and advanced concepts in microbiology.
PSO3	To expose the students to various emerging areas of Microbiology.
PSO4	To prepare students for further studies helping in their bright career in the subject.
PSO5	To expose the students to different processes used in industries and in research field.
PSO6	To develop their ability to apply the knowledge of microbiology in day today life.
PSO7	To prepare the students to accept the challenges in life sciences.
PSO8	To develop skills required in various industries, research labs and in the field of human health.



#### Shivraj College of Arts, Commerce and D.S. Kadam Science College, Gadhinglaj Dept of Microbiology Course Outcomes

	B.Sc I
introd	uction to Microbiology - I (DSE- 25 A)
CO 1	Acquisition of knowledge of historical events in Microbiology and applied branches of Microbiology.
CO 2	Aptitude for identification of taxonomic classification of microorganisms.
CO 3	Acquisition of knowledge of different microscopes and their uses along with stains used in microbial staining procedures.
Basic	Techniques in Microbiology – II (DSE- 26 A)
CO 1	To study the staining techniques for the observation of bacteria and bacterial cell components
CO 2	To study the working principle, handling and use of microscopes for the study of microorganisms
CO 3	To understand the principles of sterilization and disinfection of culture media,glassware and plastic ware and other objects to be used for microbiological work.
Bacter	riology - III (DSE- 25 B)
CO 1	Acquisition of knowledge of cytology and morphology of microorganisms.
CO 2	Isolation and preservation techniques of microorganisms
	bial Biochemistry – IV (DSE- 26 B)
CO 1	Acquisition of knowledge of biomolecules like protein, carbohydrates, lipids, enzymes and nucleic acid.
CO 2	Aptitude for identification of different pathways of microbial metabolism like EMP, TCA and ETC
	B.Sc II
Micro	bial Physiology and metabolism - V (DSE- 25 C)
CO I	Acquisition of knowledge about growth phases of bacteria, effect of environmental factors on microbial growth and transport systems of microorganisms.
CO 2	Aptitude for identification of microbial metabolism by different pathways like EMP, HMP, ED, TCA etc. and Fermentation
Applie	d Microbiology - VI (DSE- 26 C)
CO 1	Acquisition of knowledge of applied branches of Microbiology like Air, Water and Milk Microbiology.
CO 2	Acquisition of knowledge of types of fermentations, fermenters and detailed fermentation process under industrial Microbiology.
Microt	bial Genetics and Molecular Biology-VII (DSE- 25 D)
incrot	
CO 1	Acquisition of knowledge of microbial genetics and types of mutations.
	Acquisition of knowledge of microbial genetics and types of mutations. Operon concept and gene transfer mechanisms in bacteria.



CO 1	Aptitude for identification of different terminologies in medical microbiology along with types of diseases.
CO 2	Acquisition of knowledge for basic concepts in immunology antigen, antibody, innate and acquired immune response as well as non-specific.
Progra	m specific outcomes- Statistics
	uccessful completion of three-year graduate level degree program in Statistics a should be able to
PSO1	Be statistically and numerically literate.
PSO2	Develop probability models for studying real life phenomenon in diverse disciplines.
PSO3	Efficiently interpret and translate the outcomes obtained from analysis of probability models to an environment understandable to a layman.
PSO4	Effectively use necessary statistical software and computing environment including R, MS-EXCEL among others
PSO5	Apply statistical techniques to optimize and monitor real life phenomena related to industry and business analytics etc.
PSO6	Be able to independently read statistical literature including survey articles, scholarly books, and online sources;

### Department of Statistics Course Outcomes (NEW)

#### Semester I

Paper I (Descriptive Statistics-I)

CO1	Meaning and scope of Statistics, various statistical organizations,	_
CO2	Data and types of data, various data presenting methods,	
CO3	Population, sample and various methods of sampling,	
CO4	Various measures of central tendencies and dispersion,	
CO5	Moments, skewness and kurtosis.	

### Paper II (Elementary Probability Theory)

CO1	Distinguish between random and non-random experiments
CO2	Acquire knowledge of concepts of probability
CO3	Use the basic probability rules, including additive and multiplicative laws
CO4	Understand concept of conditional probability and independence of events.
CO5	Understand concept of univariate random variable and its probability distributions
CO6	Acquire knowledge of mathematical expectation of univariate random variable.



#### Semester II

### Paper III (Descriptive Statistics-II)

COI	Correlation coefficient and interpret its value.		
CO2	Regression coefficients, interpret its value and use in regression analysis.		
CO3	Qualitative data including concept of independence and association between two attributes		
CO4	Vital statistics and concept of mortality and fertility and growth rates.		

### Paper IV (Discrete Probability Distributions)

CO1	Bivariate discrete distributions, independence of bivariate r.vs., Mathematical
	Expectation of bivariate discrete random variable.
CO2	One point distribution, two point distribution, Bernoulli distribution,
CO3	Uniform distribution, Binomial distribution, Hypergeometric distribution,
CO4	Poisson distribution, Geometric distribution and Negative binomial distribution.

#### Semester III

Paper V (Probability Distributions-I)

CO1	Understand concept of discrete and continuous probability distributions with real life situations.
CO2	Distinguish between discrete and continuous distributions.
CO3	Find the various measures of random variable and probabilities using its probability distribution.
CO4	Know the relations among the different distributions.
CO5	Understand the concept of transformation of univariate and bivariate continuous random variable.

### Paper VI (Statistical Methods-I)

CO1	Understand the concept of Multiple Linear Regression.
CO2	Understand the concept of Multiple Correlations and Partial Correlation.
CO3	Know the concept of sampling theory.
CO4	Understand the need of vital statistics and concept of mortality and fertility.

#### Semester IV

Paper VII (Probability Distributions-II)

CO1	Know some standard continuous probability distributions with real life situations.	
CO2	Distinguish between various continuous distributions.	

CO3	Find the various measures of continuous random variable and probabilities using probability distribution.
CO4	Understand the relations among the different distributions.
CO5	Understand the Chi-Square, t and F distributions with their applications and inter relations.

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### Paper VIII (Statistical Methods-II)

CO1	Know the concept and use of time series.	
CO2	Understand the meaning, purpose and use of Statistical Quality Control, construction and	
	working of control charts for variables and attributes.	
CO3	Apply the small sample tests and large sample tests in various situations.	

#### Semester V

Paper IX (Probability Distributions)

CO1	Knowledge of important univariate distributions such as Laplace, Cauchy,
CO2	Lognormal, Weibull, Logistic, Pareto, Power Series Distribution.
CO3	Knowledge of Multinomial and Bivariate Normal Distribution.
CO4	Knowledge of Truncated Distributions.
CO5	Information of various measures of these probability distributions.
CO6	Acumen to apply standard continuous probability distributions to different Situations.

### Paper X (Statistical Inference-I)

CO1	Knowledge about important inferential aspect of point estimation.
CO2	Concept of random sample from a distribution, sampling distribution of a statistic,
CO3	standard error of important estimates such as mean and proportions.
CO4	Knowledge of various important properties of estimator
CO5	Knowledge about inference of parameters of standard discrete and continuous distributions.
CO6	Concept of Fisher information and CR inequality.
CO7	Knowledge of different methods of estimation.

### Paper XI (Design of Experiments)

COI	Knowledge of basic terms used in design of experiments
CO2	Concept of one-way and two-way analysis of variance.
CO3	Knowledge of various designs of experiments such as CRD, RBD, LSD and factorial

		GADHINGLAJ
	experiments.	STU SCIENCE CO
CO4	Knowledge of using an appropriate experimental design	gience

.R.S.S.

# Paper XII (R-Programming and Quality Management)

CO1	Importance of R- programming	
CO2	Knowledge of identifiers and operators used in R	
CO3	Knowledge of conditional statements and Loops used in R.	
CO4	Knowledge of quality tools used in Quality management	
CO5	Knowledge of process and product control used in Quality management.	

### Semester VI

Paper XIII (Probability Theory and Applications)

CO1	Knowledge about order statistics and associated distributions.
CO2	Concept of convergence and Chebychevs inequality and its uses
CO3	Concept of law large numbers and central limit theorem and its uses.
CO4	Knowledge of terms involved in reliability theory as well as concepts and measures

### Paper XIV (Statistical Inference-II)

CO1	Concept of interval estimation.
CO2	Knowledge of interval estimation of mean, variance and population proportion.
CO3	Knowledge of important aspect of test of hypothesis and associated concept.
CO4	Concept about parametric and non-parametric methods.
CO5	Knowledge of some important parametric as well as non-parametric tests.

### Paper XV (Sampling Theory)

CO1	Basic knowledge of complete enumeration and sample, sampling frame sampling distribution, sampling and non-sampling errors, principle steps in sample surveys, sample size determination, limitations of sampling etc.
CO2	Concept of various sampling methods such as simple random sampling, stratified random sampling, systematic sampling and cluster sampling.
CO3	An idea of conducting sample surveys and selecting appropriate sampling techniques.
CO4	Knowledge of comparing various sampling techniques.
CO5	Knowledge of ratio and regression estimators.



### Paper XVI (Operations Research)

Concept of Linear programming problem.
Knowledge of solving LPP by graphical and Simplex method
Knowledge of Transportation, Assignment and Sequencing problems.
Concept of queuing theory.
Knowledge of simulation technique and Monte Carlo technique of simulation.

### **Course Outcomes (Old)**

#### Semester I

Paper I (Descriptive Statistics-I)

CO1	Knowledge of Statistics and its scope and importance in various areas such as Medical, Engineering, Agricultural and Social Sciences etc.
CO2	Knowledge of various types of data, variables and attributes. Their organization and evaluation of summary measures such as measures of central tendency, measures of dispersion, skewness and kurtosisetc.and to interpret them.
CO3	Insights into preliminary exploration of different types of data.
CO4	Knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes and to interpret the results.

Paper II (Elementary Probability Theory)

CO1	Ability to distinguish between random and non-random experiments.
CO2	Knowledge to conceptualize the probabilities of events including frequents and axiomatic approach.
CO3	Basic terminologies of probability.
CO4	Simultaneously, they will learn the notion of conditional probability including the concept of Bayes' Theorem
CO5	Concept of independence of events.

### Semester II

Paper III (Descriptive Statistics-II)

CO1	To have knowledge of correlation, to compute correlation coefficient and interpret of its value.
CO2	To acquire concept of regression analysis, to compute regression coefficient and to interpret its value.

CO3	Understand the concept of Multiple Linear Regression.	
CO4	Understand the concept of Multiple Correlations and Partial Correlation.	_

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### Paper IV (Discrete Probability Distributions)

COI	To apply discrete probability distributions studied in this course in different situations.
CO2	Distinguish between discrete variables and study of their distributions.
CO3	Knowledge related to concept of discrete random variables and their probability distributions including expectation and moments.
CO4	Know some standard discrete probability distributions such as Bernoulli, Binomial and Hyper-geometric with real life situations.
CO5	Understand concept of bivariate distributions and computation of related probabilities.

### Semester I

Paper I (Descriptive Statistics-I)

CO1	Knowledge of Statistics and its scope and importance in various areas such as Medical, Engineering, Agricultural and Social Sciences etc.
CO2	Knowledge of various types of data, variables and attributes. Their organization and evaluation of summary measures such as measures of central tendency, measures of dispersion, skewness and kurtosisetc.and to interpret them.
CO3	Insights into preliminary exploration of different types of data.
CO4	Knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes and to interpret the results.

Paper II (Elementary Probability Theory)

CO1	Ability to distinguish between random and non-random experiments.
CO2	Knowledge to conceptualize the probabilities of events including frequents and axiomatic approach.
CO3	Basic terminologies of probability.
CO4	Simultaneously, they will learn the notion of conditional probability including the concept of Bayes' Theorem
CO5	Concept of independence of events.



#### Semester II

### Paper III (Descriptive Statistics-II)

CO1	To have knowledge of correlation, to compute correlation coefficient and interpret of its value.
CO2	To acquire concept of regression analysis, to compute regression coefficient and to interpret its value.
CO3	To study Meaning and utility of index numbers, to compute various index numbers.
CO4	To acquire knowledge related to different type of test for index number.

### Paper IV (Discrete Probability Distributions)

CO1	To apply discrete probability distributions studied in this course in different situations.
CO2	Distinguish between discrete variables and study of their distributions.
CO3	Know some standard discrete probability distributions such as Bernoulli, Binomial and Hyper-geometric with real life situations.
CO4	Understand concept of bivariate distributions and computation of related probabilities.

### Semester III

Paper V (Probability Distributions-I)

CO1	Understand concept of discrete and continuous probability distributions with real life situations.
CO2	Distinguish between discrete and continuous distributions.
CO3	Find the various measures of random variable and probabilities using its probability distribution.
CO4	Know the relations among the different distributions.
CO5	Understand the concept of transformation of univariate and bivariate continuous random variable.

### Paper VI (Statistical Methods-I)

CO1	Know the concept and use of time series
CO2	Study meaning and utility of Index Number, Compare various Index Numbers
CO3	Understand the meaning, purpose and use of Statistical Quality Control, construction and working of control charts for variables and attributes.
CO4	Understand the need of vital statistics and concept of mortality and fertility.



#### Semester IV

Paper VII (Probability Distributions-II)

Know some standard continuous probability distributions with real life situations.
Distinguish between various continuous distributions.
Find the various measures of continuous random variable and probabilities using its probability distribution.
Understand the relations among the different distributions.
Understand the Chi-Square, t and F distributions with their applications and inter relations.

### Paper VIII (Statistical Methods-II)

CO1	Concept of convergence and Chebychev's inequality and its uses.
CO2	Knowledge of terms involved in reliability theory as well as concepts and measures.
CO3	Apply the small sample tests and large sample tests in various situations.

	Program Specific Outcomes- Mathematics
After	successful completion of three-year graduate level degree program in Mathematics a student should be able to
PSO1	Students gain a sound knowledge in foundational subjects related to pure and appliedmathematics
PSO2	Acquire various skills related to computational techniques and related software's.
PSO3	Learn to identify various areas of science, technology, industry etc. where the knowledgeand skill imparted to them can be useful
PSO4	To be able to select a specific problem from real life scenario as per liking of a student andhis/ger skill sets and knowledge
PSO5	Being able to analyze the problem and propose a solution method and finalise the solution and the process of solution in consultation with the peer group and faculty.

## Department of Mathematics Course Outcome (New)

B.Sc. Part - I Semester – I Theory paper: Differential Calculus

CO1	Students aquaint themselves with the idea of complex numbers.
CO2.	Learn algebraic and geometric properties of complex numbers.
	Understand Meaning and significance of Hyperbolic functions and their relation withcircular functions
CO4.	Learn the process of successive differentiation of standard functions.
CO5.	Get to know the significance of Leibnitz's theorem.
CO6.	Understand the concept of partial differentiation and learn to apply it for various problems inscience and engineering



### Theory paper: Calculus

CO1	Students grasp the concept of mean value theorems and its significance.
CO2.	Acquire the skill of applying Taylor's theorem for computation of power series expansions of functions.
CO3	Study the special case of Taylor's expansion viz. Maclaurin Series and its practical use in computing values of standard transcendental functions.
CO4.	Learn the meaning and significance of Indeterminate forms and learn to apply it for various indeterminate limiting cases.

#### Semester - II

## **Theory paper: Differential Equations**

CO1	Understand the meaning, motivation and significance of differential equations.
CO2.	Learn the classification of differential equations.
CO3	Concept of order and degree is studied with examples.
CO4.	Learn how to form and solve first order first degree ordinary differential equations.
CO5.	Learn the methods of solving equations of first order and higher degree.

# Theory paper: Higher order Ordinary Differential Equations and Partial Differential equations.

CO1	Study the method of solution of general second order differential equation with variable coefficients.
CO2.	Understand the concept, formation, and method of solution of ordinary simultaneous equations.
CO3	Understand the concept of total differential equation, learn the method of formation and method of solution of total differential equations.
CO4.	Study the motivation and concept of partial differential equations. Learn methods of solvingLagrange's equation and Charpit's method.

#### B.Sc. Part-II



## Semester -II

Theory	Paper:	Real Analysis – I		

COI	Learning basic concepts of set theory.
CO2.	To learn the concept of relation and function and apply it to specific problems.
CO3	Study the principle of mathematical induction and apply it for proving results.
CO4.	Acquire the concept of countability and determine countable and uncountable sets.
CO5.	Learn the fundamental properties of real numbers

#### Theory Paper: Algebra - I

CO1	Understanding of the concept of Hermitian and Skew-Hermitian Matrix and their properties.
CO2.	Grasp the concept of normal form and convert given matric to Normal form.
CO3	Learn the concept of Eigen value and Eigen vector. To find Eigen values and Eigen vectors.
CO4.	Grasp Cayley – Hamilton theorem and use it for finding inverse of a matrix.
CO5.	Learn elements of group theory and be able to determine if given set with given operation is group or not.

#### Semester -IV

#### Theory Paper: Real Analysis - II

Learn fundamental concept of sequence of real numbers with examples.	
Study the concept of monotonic and bounded sequences.	
Understand Epsilon-Delta concept of convergence of a sequence.	
Learn the concept of series and its convergence.	
Study the methods of testing convergence of series	
	Study the concept of monotonic and bounded sequences. Understand Epsilon-Delta concept of convergence of a sequence. Learn the concept of series and its convergence.

#### Theory Paper: Algebra – II

COI	Understand the concept of Cosets.
CO2.	Learn the meaning of Normal subgroups of a group with examples.
CO3	Study the concept of a Permutation group with examples.
CO4.	Learn the concept of a Ring struture with examples.

#### Semester V

#### Theory Paper: Paper – IX (Real Analysis)

CO1	Learn the elements of sets, relations and functions.	

CO2.	Learn the properties of real numbers, algebra of intervals, infimum and supremum concept.
CO3	Study the concept of sequence, sub-sequence, convergence of a sequence and tests of convergence.
CO4.	Study the concept of series and various tests of convergence of series.
CO5.	To understand the concept of real valued functions of a single reavariable and tests of limits, continuity and differentiability of functions.

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Theory Paper: Pa	nper – X (N	Iodern Algebra)
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COI	Learn the elements of group theory with examples.
CO2.	Learn the concepts homomorphism, automorphism, commutator element, Kernel of a group.
	Study various types of groups like cyclic groups, permutation groups, normal subgroups, quotient groups.
CO4.	Learn the concept of ring and examples of ring including a Boolean ring.

## Theory Paper: Paper - XI (Partial Differential Equations)

COI	Study the classification of partial differential equations.
CO2.	Learn the formation process of partial differential equations.
CO3	Study the method of solving Lagrange's partial differential equation and apply it to solveproblems.
CO4.	Study the charpit's method and apply it to solve the problems.
CO5.	Learn the method of solution of homogeneous partial differential equations and apply it tosolve problems

## Theory Paper: Paper - XII (Numerical Methods - I)

	Study and apply the methods of root finding viz. Newton Raphson method, Bisection method, Secant method, Regula falsi method.
CO2.	Study and apply methods of solving linear system of equations viz. Gauss-Elimination, Gauss-Jordan, Gauss-Jacobi and Gauss-Seidel method.
CO3	Study and apply the methods of finding Eigen values and Eigen vectors.

#### Semester -VI

Theory Paper: Paper - XIII (Metric

#### Spaces)

CO1 Understanding the concept of a metric on non-empty set and its properties with examples.



CO2.	Grasping the concept of "closeness" and limit in terms of a given metric.
CO3	Limit of a function in terms of a metric space.
CO4.	Understanding and applying concept of connectedness, completeness and compactness.
	To study the properties of continuous functions in the sense of metric spaces.

## Theory Paper: Paper - XIV (Linear Algebra)

co	To grasp the concept of a vector space with examples. Understand subspaces, homomorphism, span, basis, dimension, linear dependence and independence.
	Study the linear transformations. Rank and nullity concepts, Matrix of transformation.
CO3	Study inner product of vectors, Cauchy-Schwartz, Triangle and parallelogram inequalities.
CO4	To learn the concept of Eigen – values and Eigen vector in view of vector spaces and solve examples based on it.

## Theory Paper: Paper - XV (Complex Analysis)

CO1	Understand the concept of complex variable and a complex valued function.
CO2.	Learning the significance and applications of harmonic functions.
CO3.	Know the meaning of analytic function and Cauchy-Riemann equations.
CO4.	To derive Cauchy's integral formula for simply and multiply connected domains.
CO5.	To study the development of Laurent series and expansion of functions.
CO6.	Learn about zeros and poles, calculation of residues.
C07.	Imbibe the concept of Entire and Meromorphic functions

## Theory Paper: Paper - XVI (Numerical Methods - II)

CO1	Understand the meaning of interpolation. Learn the methods of interpolation for equal and unequal intervals.
	Study and apply the concept of numerical differentiation and to be able to solve the problems of differentiation.
CO3	Learn the methods of solving ordinary differential equations and apply them to given problems



	Program Specific Outcomes- Botany
After su student s	accessful completion of three-year graduate level degree program in Botany a should be able to
PSO 1	Student interacts with the social activist in relation with maximum usefulness of biofertilizers.
PSO 2	Students are made aware of pollution problems and waste management and the importance of green environment.
PSO 3	Apply ethical principles and count to environmental ethics and responsibilities and norms of the biodiversity conservation.
PSO 4	The course highlighted to conserve and study the suitable development.
PSO 5	They could get knowledge about the different groups of plants
PSO 6	They could understand the anatomical and reproductive growth in plants
PSO 7	Students could be familiar with different methods used to study the plants
PSO 8	They can understand correlation between plants and environment
PSO 9	Collect knowledge about applications of plants in daily use
<b>PSO 10</b>	They can understand metabolism in plants and their role in plant productivity.
PSO 11	They could learn different technology and their applications in Agriculture.

#### Department of Botany <u>Old Syllabus</u> Course Outcome (COs)

#### B.Sc. I SEM. I

## Paper I -DSC-13A- Biodiversity of Non-Vascular Plants

CO 1	Understand biodiversity of plants with respect to habit, form, nutrition and Ecological role.
CO 2	Students will be understood General characters and some important algae.
CO 3	Knowledge of Fungal classification and diseases.
CO 4	Skill development in study of Bryophytes.

## Paper II -DSC-14A - Plant Biochemistry, Physiology and Ecology

CO 1	Knowledge will be gathered on Cell biology includes Bond formation, Water, pH, Buffer and ATP.
CO 2	Learn different metabolic path ways in plants
CO 3	They will knowledge about enzymes and its mechanism of action
CO 4	Learn the process of water and plant relation.
CO 5	They could differentiate role abiotic and biotic factors in Ecology

#### B.Sc. I SEM. II

#### Paper III -DSC-13B- Diversity of Vascular Plants

CO 1	Knowledge will be gathered on general characters and classification of
	Pteridophytes and Gymnosperms.
CO 2	To understand functions of taxonomy



CO 3	To know general morphology of Root, Stem and leaf.
CO 4	They will be trained in plant classification
CO 5	Understand anatomical structures in plants
CO 6	Learn merstmatic tissue, Permanent tissue and Types of Vascular bundles

#### Paper IV -DSC-14B - Cytology, Genetics and Utilization of Plants

CO 1	Study concept of cell and cell cycle.
CO 2	Understand Apoptosis and cell division.
CO 3	Study of basic terminology in genetics.
CO <sub>4</sub>	Understand mendel's law of inheritance and back cross, test cross.
CO 5	Knowing gene interaction and Epistasis.
CO 6	To study the origin, botanical name, morphology, sources, economic importance of cereals, Legumes, Oil crops.
CO 7	To study Plant perfumes, Cosmetics and Ornamental plants.

#### B.Sc. II SEM. III

#### Paper V -DSC-C13 -Algae, Fungi, Bryophytes and Industrial Application

CO 1	Understand different groups of organisms in kingdom plante.	
CO 2	To know evolution in lower plants.	
CO 3	To study techniques of cultivation and storage of mushroom.	
CO 4	Get knowledge of values of mushroom in various fields.	
CO 5	Learn different type of biofertilizers	

#### Paper VI -DSC-C14 -Plant physiology, Ecology and Horticulture

CO 1	Learn plant growth process
CO 2	Study different types of plant growth regulators and their practical use
CO 3	Student will get knowledge about plant indicators and phytogeography of India.
CO 4	The students can understand the process of plant succession and Adaptation.
CO 5	Learn importance and divisions of Horticulture.
CO 6	To understand sexual and vegetative method of propagation of practices.

#### B.Sc. II, SEM. IV

#### Paper VII, DSC-D13 –Pteridophytes, Gymnosperms, Angiosperms and Anatomy

CO 1	Knowledge will be gathered on general characters and classification of Pteridophytes and Gymnosperms.
CO 2	To know general characters of Inflorescence, Flower and Fruits.
CO 3	They could collect information about Botanical Gardens and their importance
CO 4	They will be trained in plant classification
CO 5	Understand anatomical structures in plants
CO 6	Learn about anatomical growth and abnormality

#### Paper VIII –DSC-D14 –Cytogenetics and Utilization of Plant Resources

CO 1	Get basic knowledge of cell organelles like Nucleus, Mitochondria, Chloroplast
	and Ribosomes.



CO 2	To know subcellular structures and cell membrane
CO 3	Understand Linkage, Recombination and Mutation.
CO 4	To study the origin, botanical name, morphology, sources, economic importance of Rubber, Neem, Tobacco, Turmeric, Butea, Anattoo.
CO 5	To get knowledge of Medicinal plants with their chief consitutents used in indigenous and allopatic system and their uses.
CO 7	To know subcellular structures and cell membrane
CO 8	Understand Linkage, Recombination and Mutation.

## B.Sc. III, Sem. - V

## Paper -IX, Biology of vascular pants and paleobotany

CO 1	Learn life cycles of different algae.
CO 2	Get knowledge about reproduction and economic importance in Fungi
CO 3	Learn occurance, morphology, reproduction and economic importance in Bryophytes
CO <sub>4</sub>	Study process of fossilization
CO 5	Study geological time scale and applications of paleobotany

#### Paper -X, Genetics and analytical techniques in plant science

CO 1	Study concept of sex determination
CO 2	Learn quantitative inheritance
CO 3	Get knowledge about population genetics
CO 4	Study extrachromosomal inheritance
CO 5	Understand chromosomal variations and its effect
CO 6	Be trained different analytical techniques such as microscopy, chromatography, micrometry and so on.

#### Paper -XI, Fundamentals of plant physiology and ecology

CO 1	Get knowledge about mineral nutrients and nutrition
CO 2	Study nitrogen metabolism in plants
CO 3	Study mechanism of photosynthesis and respiration
CO 4	Understand concept of population ecology
CO 5	Study of ecosystem and interrelationship between different components

#### Paper -XII, Plant Biochemistry

CO 1	Study carbohydrate metabolism and significance	
CO 2	Learn lipid metabolism	
CO 3	Understand the process of protein synthesis and its metabolism	
CO 4	Study different nucleic acids	

## <u>B.Sc. III, Sem. - VI</u> Paper –XIII, Biology of Vascular Plants

CO 1	Study of characteristics and economic importance of Pteridophytes.
CO 2	Get knowledge about Evolutionary significance and Evolutionary significance.
CO 3	Study Phylogeny of angiosperms, classification and Modern Taxonomy.
CO 4	Understand concept of flower as a modified shoot.
CO 5	Study mechanism of pollination and fertilization.
CO 6	Get knowledge about plat Anatomy, theories and tissue system.



#### Paper - XIV, Microbiology and Plant Pathology

CO 1	Study Methods in Microbiology, industrial application.	
CO 2	Get knowledge about Bacterial genome, DNA and RNA viruses.	
CO 3	Study classification, Prevention and control of plant diseases.	
CO 4	Get knowledge about Role of quarantine.	
CO 5	Study of Plant diseases on the basis of pathogen.	

#### Paper -XV, Plant breeding, Biostatistics, Ethnobotany and Horticulture

CO 1	Study aims, objectives and methods of plant breeding.	
CO 2	Study scope, objective, methodology of Ethnobotany.	
CO 3	Get knowledge about Role of Ethnobotany in modern medicine.	_
CO 4	Study Biostatistics, test of significance	
CO 5	Get knowledge about gardening and ornamental plants.	
CO 6	Be trained in Plant Nursery Management.	

#### Paper -XVI, Molecular Biology and Biotechnology

CO 1	Study historic perspective, Replication of DNA and Operon Model.	
CO 2	Learn recombinant DNA technology.	
CO 3	Know the practical applications of tissue culture.	
CO 4	Understand methodology of plant tissue culture	

#### Course Outcome (COs) New

#### B.Sc. I SEM. I Paper I –DSC-13A, Diversity of microbes, Algae and fungi

CO 1	Understand different groups of organisms
CO 2	Students will be well versed with morphology and reproduction in lower organisms
CO 3	Learn use of lower organisms in daily life
CO 4	Skill development in the methods of study of lower organisms

# Paper II –DSC-14A - Biodiversity of archegoniate- Bryophytes, Pteridophytes and Gymnosperms

CO I	Knowledge will be gathered on general characters and classification of Bryophytes
CO 2	Diversity and distribution of Archegoniates
CO 3	Understand role of archegoniates in ecosystem
CO 4	Knowledge will be gathered on general characters and classification of Bryophytes
CO 5	They will understand life cycles of archegoniates



#### B.Sc. I SEM. II

#### Paper III -DSC-13B, Plant Ecology

CO 1	Understanding various concept of Ecology
CO 2	They could differentiate role abiotic and biotic factors in Ecology
CO 3	The students can understand the process of plant succession
CO <sub>4</sub>	They could study the working mechanism of Ecosystem
CO 5	They get the knowledge of interaction between living and nonliving things

#### Paper IV -DSC-14B - Plant Taxonomy

CO 1	They will understand concept of Taxonomy and plant nomenclature.
CO 2	Students will understand about ICNB
CO 3	They can acquire the Knowledge about herbarium techniques
CO 4	They could collect information about Botanical Gardens and their importance
CO 5	They will be trained in plant classification

#### B.Sc. II SEM. III

## Paper V -DSC-C13 -Embryology of Angiosperms

CO 1	Understand reproductive structures in plants
CO 2	They could learn process of gametogenesis in plants
CO 3	Learn pathway of embryo and endosperm development
CO <sub>4</sub>	Study different modes of embryo development and their role in plant propagation
CO 5	Understand reproductive structures in plants

#### Paper VI -DSC-C14 -Plant physiology

CO I	Learn the process of water and plant relation
CO 2	They will understand plant nutrients and their role in plants
CO 3	Learn plant growth process
CO 4	Study different types of plant growth regulators and their practical use
CO 5	They get knowledge about process of photosynthesis and its use in agriculture

#### B.Sc. II SEM. IV

#### Paper VII, DSC-D13 -Plant anatomy

CO 1	Understand anatomical structures in plants	
CO 2	They could learn methods of anatomical study of plants	
CO 3	Learn about anatomical growth and abnormality	
CO 4	Gather knowledge of tissue systems and their role in plant	

## Paper VIII – DSC-D14 – Plant Metabolism

CO 1	Learn different metabolic path ways in plants
CO 2	They will knowledge about enzymes and its mechanism of action
	Learn mechanism of nitrogen fixation in plants 4. Understand mechanism of



	respiration in plant
CO 4	They get knowledge about process of seed germination and its use in agriculture

#### B.Sc. III Sem. - V

#### Paper -IX- DSC- E25-Genetics and Plant Breeding

CO 1	Study of Concept of Mendelism and Gene interaction.
CO 2	Understand Linkage, Recombination and Mutation.
CO 3	Get knowledge of Polygene inheritance.
CO 4	Understand chromosomal inheritance.
CO 5	Study chromosomal variations and its effect.
CO6	Study aim, objective and methods of Plant breeding

#### Paper -X- DSC-E26-Microbiology, Plant Pathology and Mushroom Culture Technology

CO 1	Study methods of microbiology and recombination of bacteria.	
CO 2	Get knowledge of industrial microbiology and Bio-pesticides.	
CO 3	Learn plant pathology and its prevention.	
CO 4	Understand plant disease management.	
CO 5	To study techniques of cultivation and storage of mushroom.	
CO 6	Get knowledge of values of mushroom in various fields.	

#### Paper -XI- DSC- E27- Cytology and Research Techniques in Biology

CO 1	Study concept of cell and cell cycle.
CO 2	Understand Apoptosis and cell division.
CO 3	Get basic knowledge of cell organelles like Nucleus, Mitochondria, Chloroplast and Ribosomes.
CO 4	To know subcellular structures and cell membrane.
CO 5	Be trained different analytical techniques such as microscopy, calorimetry, Spectrophtometry, micrometry and so on.

#### Paper -XII-DSC-E28- Horticulture and Gardening

CO 1	Learn importance and divisions of Horticulture.
CO 2	Study concept of floriculture and disease management of some important cut flowers.
CO 3	Study physical and chemical fruit preservation technology.
CO 4	Get knowledge of Nursery management.
CO5	To understand sexual and vegetative method of propagation of practices.
CO6	Understand landscape gardening.
CO7	Study indoor gardening and outdoor gardening.
CO8	To know about some important aesthetic gardens of India.



#### B.Sc. III, Sem. - VI

Paper	-XIII-DSC-F25-Plant Biochemistry and Molecular Biology
CO 1	Study classification, structure and properties of carbohydrates.
CO 2	To know significance of carbohydrate.
CO 3	Study the structure of saturated and unsaturated fatty acids.
CO 4	Understand general structure, properties, classification and significance of lipids.
CO 5	To study nature, properties, characteristics, classification and biosynthesis of amino acid.
CO 6	Learn protein biosynthesis of eukaryotes.
CO 7	Study structure and chemical composition of DNA, RNA.
CO 8	Get knowledge of Replication of eukaryotes and gene regulation mechanism.

#### Paper - XIV-DSC-F26- Bioinformatics, Biostatics and Economic Botany

CO 1	To study aim, scopes, branches and application of bioinformatics.
CO <sub>2</sub>	Get knowledge of biological database and PIR.
CO 3	Learn biostatics.
CO <sub>4</sub>	To study the measures of central tendency and dispersion.
CO 5	Understand statistical methods for testing and hypothesis.
CO 6	To Know origin of cultivated of plant.
CO 7	To study the origin, botanical name, morphology, sources, economic importance of wheat, gram, soybean and groundnut.
CO 8	To study the origin, botanical name, morphology, sources, economic importance of clove, black pepper, tea and Cotton.

#### Paper -XV-DSC-F27-Plant Biotechnology and Paleobotany

CO 1	Study the scopes and importance of biotechnology.
CO 2	Get knowledge of recombinant DNA technology.
CO 3	Understand blotting techniques, DNA fingerprinting techniques, PCR and more.
CO 4	Know the practical applications of plant tissue culture.
CO 5	Understand methodology of plant tissue culture.
CO 6	Study the geological time scale, fossilization process and types of fossils.
CO 7	Know role of microfossils in oil and coal exploration.

## Paper -XVI-DSC-F28-Biofertilizers and Herbal drug technology

CO 1	Learn different type of biofertilizers.	
CO 2	Know importance of different organic manure.	
CO 3	Understand importance of herbal medicines.	
CO 4	To learn method of herbal medicines extraction.	
CO 5	Get training of herbal cosmetics products production.	
CO 6	Study pharmacognosy.	
CO 7	Understand the adulteration of drugs.	
CO 8	Know the plant antioxidants.	

#### Course Outcomes (COs) New



#### Department Of Zoology

#### B. Sc. I, SEM- I

#### Paper I - DSC 15A: Animal Diversity- I

CO1	Application of knowledge in Zoology for nutrition, agriculture & live stock.
	The students are expected to acquire the knowledge of animal science, natural phenomenon, manipulation of nature & environment by man.
CO3	Learn use of Lower organism in daily life.
CO4	Skill development in the methods of study of lower organism

#### Paper II- DSC 16A: Animal Physiology

CO1	They will understand internal anatomy of Human being
CO2	Understand all the systems in human being
CO3	To develop scientific attitude this is the major objective. This makes the students open minded, critical observations, curiosity, thinking etc.

#### B. Sc. I, SEM- II

## Paper III- 15B: Cell Biology & Evolutionary biology

CO1	Students can understand the process of cell functions
CO2	They get knowledge of interaction between living things and functions
CO3	They could study the working mechanism of cells.

## Paper IV- 16 B: Genetics

CO1	Abilities to apply scientific methods, collection of scientific data, problem solving, organize science exhibitions, clubs etc.
CO2	Appreciation of the subject, contributions of scientists, scientific methods, scientific programs etc.
CO3	Study of gene interaction, linkage, recombination, mutation etc
CO4	Get knowledge of genetic disorders

B. Sc. II, SEM- III

Paper V: Animal Diversity II

CO1	Application of knowledge in Zoology for nutrition, agriculture & amp; live stock.
CO2	The students are expected to acquire the knowledge of animal science, natural phenomenon, manipulation of nature & amp; environment by man.
CO3	Learn use of hugher organism in daily life.
CO4	Skill development in the methods of study of higher organism



#### Paper VI: Biochemistry

CO1	Study of Classification, structure, and propeites of Carbohydrates, proteins and Lipids
CO2	Study of metabolism of all food stuff
	To Study enzyme types, kinetics and classification
CO4	Biosynthesis of lipid and urea formation in protein metabolism

SEM-IV

Paper V	VII: Reproductive Biology	
CO1	To study Human reproductive system	
CO2	To study advance pregnancy techniques - IVF	
CO3	Get knowledge about reproductive system	_

#### Paper VIII: Applied Zoology

CO1	Application of knowledge in Zoology for nutrition, agriculture & amp; live stock.
CO2	To provide practical experiences which form a part of their learning processes
CO3	To develop skills in practical work, experiments & amp; laboratory materials, instruments
CO4	To get knowledge about Epidemiology of diseases, insect pests, vectors etc
CO5	To get knowledge about poultry farming

## B.Sc. I Zoology Course outcome old syllabus Animal Diversity –Invertebrates Sem I Ecology, Zoogeography and Animal Behaviour

CO1	Distribution of fauna in different realms interaction
CO2	Understand Animal behaviour and response of animals to different instincts
CO3	Interaction of biota abiota
CO4	Various kinds of Animal adaptations

CO1	CO1	Imparts	conceptual	knowledge	of	vertebrates,	their	adaptations	and
	assoc	iations in	relation to the	eir environmo	ent				
CO2	Class	ify phylur	n Protochord	ates to Mamr	nalia	L.	_		

Cell Biology, Genetics and Evolution

COI	Structural and functional aspects of basic unit of life i.e. cell concepts			
CO2	Mendelian and non mendielian inheritance			
CO3	Concept behind genetic disorder, gene mutations-various causes associated with			



	inborn errors of metabolism
CO4	Theories of Evolution
CO5	Knowledge of eras and evolution of species
Physi	ology and Biochemistry
COI	CO1 Seeks to understand the mechanisms that work to keep the human body alive and functioning
CO2	Physiological and biochemical understanding through scientific enquiry into the nature of mechanical, physical, and biochemical functions of humans, their organs, and the cells of which they are composed
CO3	Interactions and interdependence of physiological and biochemical processes

## Animal physiology

CO1	Students are taught the detailed concepts of digestion respiration excretion the functioning of nerves and muscles
CO2	Students gain fundamental knowledge of animal physiology
CO3	Students will gain skill to execute the roles of a biology teacher or medical lab technicians with training as they have basic fundamentals

## Animal physiology genetics and evolution

COI	Students learn the concepts of endocrine systems and homeostasis a brief account of genetics and organic evolution.
CO2	This course helps students to gain fundamental knowledge in these topics
CO3	Students gain fundamental knowledge of physiology and endocrine systems
CO4	Students gain fundamental knowledge of physiology of homeostasis
CO5	Understanding of basic concepts of genetics, laws of inheritance and central dogma of biology
CO6	Understanding of genetic basis of evolution, human karyotyping and speciation.

## Sericulture

COI	Gives knowledge of silk worm rearing	
CO2	Mulberry cultivation	
CO3	Pests and diseases associated with silk worm and mulberry	
CO4	various process involved in silk production	

## Immunology

CO1 Imparts in depth knowledge of tissues, cells and molecules involved in host de Mechanisms	
CO2	Understanding of types of immunity
CO3	Interactions of antigens, antibodies, complements and other immune components
CO4	Understanding of immune mechanisms in disease control, vaccination, process of immune interaction



## Structural Biology

CO1	CO1 allows the students to gain basic knowledge about various bio molecules and
	their role in metabolism
CO2	Classification of enzymes, enzyme kinetics
CO3	Metabolism of carbohydrates, nucleic acids and metabolic disorders
CO4	Gains understanding of cellular organization and functional biology nucleic acids
	Program Outcomes (PO):
After	completing the BBA, the students would be able to :
PO 1	Identify the different functional aspects of business world & recognize different opportunities of business.
PO 2	Acquire the different Employability Skills, Entrepreneurial skills, necessary for the professional attitudes.
PO 3	Recognize & solve business problems in an ethical manner
PO 4	Demonstrate a global outlook with the ability to identify aspects of the global
	business & cross cultural understanding.
PO 5	Identify the problems & challenges and inculcate the capability to cope with the spontaneous changes.
PO 6	Analyze the importance of innovation & research , tackle the contemporary needs
	& accordingly grab the opportunities.
PO 7	Develop effective & oral communication especially in business application, with the use of appropriate technology.
Progra	amme Specific Outcomes (PSO) (B.B.A)
	completing the BBA course, the students would be able to
PSO 1	Acquire the managerial professional attributes & be capable of decision making by applying the knowledge of management discipline.
PSO 2	Acquire certain basic skills & aptitudes to be helpful for taking up any particular activity for a business.
PSO 3	Explore the entrepreneurial quality, aptitude, & start new business venture with innovative ideas.
PSO 4	Become knowledgeful in specialized area of management like Human Resource, Finance, Marketing, Business analytics, computer application, etc.
PSO 5	To inculcate global view of the industrial & organization establishment & their functions which support the business system.
PSO6	Demonstrate competency in the business disciplines.
PSO 7	Prepare students to undertake post graduation management programme

## **BBA I Semester II**

## Paper No 1 Accounting for Managers CC-A4

#### **Course Outcomes:**

CO1	Understand the concepts in accountancy.	
CO2	Prepare ledger accounts, subsidiary books and trial balance	
CO3	Demonstrate calculations of depreciation.	
CO4	Prepare statements of accounts	



## Paper No 2 Human Resource Management, Paper - II CC-A5

#### **Course Outcomes:**

COI	Describe human resource planning process	
CO2	Describe selection procedure in detail	
CO3	Describe the methods of management development	
CO4	Describe different methods of training	

Paper No 3 Macro Economics CC-A6

#### **Course Outcomes:**

CO1 Learners will be able to understand concepts of national income and demand of sup money	
CO2	Learners will apply the principles and theories of inflation and business cycle
CO3	Learners will understand different concepts of public finance

## Paper No 4 Management Information System GEC-G2

#### **Course Outcomes:**

Students who complete this course should be able to:

COI	Understand basics Information System.	
CO2	Understand working and applications of different information systems,	
CO3	Study system development lifecycle. 4. Analyze the system requirement	

## Paper No 5 Business Communication, Paper - II AECC-C2

#### **Course outcomes**

After the completion of the course, students will be able to

CO1	Understand the nature of effective oral communication	
CO2	Face the interview confidently and participate in the group discussion	
CO3	Develop presentation skills	
CO4	Understand different modern office communication tools	

#### **BBA II Semester IV**

#### Paper No 1 Entrepreneurship and Project Management CC-B4

#### **Course outcomes**

COI	Understand the process of project identification	
CO2	have a fair idea about different institutions and schemes	
CO3	Understand different methods of project appraisal	
CO4	Understand the process of preparation of business plan	

#### Paper No 2 Management Accounting CC-B5

#### **Course Outcomes :**

COI	Understand Management Accounting and Reporting to management	
CO2	Understand tools and techniques of Management Accounting	
CO3	Understand Financial Statement Analysis	



#### Paper No 3 RURAL AND RETAIL MARKETING CC-B6

#### **Course Outcomes**

COI	Develop understanding of concepts of rural and retail marketing.
CO2	Understand the current situation of rural marketing.
CO3	Analyze the marketing of agricultural inputs and products.
CO4	Understand retail formats, retail buying behavior and retail marketing mix.

#### **Course outcomes**

COI	Define various terms used in research process	
CO2	Describe research design, sample design and sampling methods	
CO3	Apply appropriate methods for data collection for research work	
CO4	Use appropriate statistical tools for data analysis and interpretation	

## Paper No 5 STATISTICS FOR DECISION MAKING (AECC-C4)

#### Course Outcomes:

COI	Define tools Statistics used for decision making	
CO2	Describe applications of statistics for decision making.	
CO3	Apply suitable statistical formula and estimate trend.	
CO4	Construct control charts	

#### **BBA III Semester VI**

#### Paper No 1 Fundamental of Taxation (Semester-VI) CC-C4

#### **Course Outcome:**

CO1	To understand the basic concepts in Taxation
CO2	To demonstrate the computation of income and tax liability
CO3	To understand concept of GST and its mechanism

#### Paper No 2 BUSINESS ETHICS CC C5

#### **Course outcomes**

CO1	To familiarize students with values and ethics in business.	_
CO2	To motivate students to think and behave ethically in all situations of life.	
Paper	No 3 ORGANIZATIONAL BEHAVIOUR CC-C6	

#### **Course outcomes**

COI	Understand the basic concepts of OB
CO2	Understand the principles of learning
CO3	Describe the importance of attitude and values
CO4	Implement the theories of Motivation and Personality.
CO5	Understand and implement causes of stress and coping strategiesse Outcomes:

#### Paper No 4 International Marketing DSE A3

#### **Course Outcomes**

	Understand basics of international marketing.
CO2	To provide students with a perspective of International Marketing management, its
	environment and complexities.



CO3	Study international marketing strategies.	
CO4	Study functions of international trade	

#### **Business Finance (Semester-VI) DSE-B3**

#### **Course Outcomes :**

COI	To understand the basic concepts Business Finance
CO2	To recognize Financial Markets, Mutual Funds, Portfolio Management and Micro Finance
CO3	To understand Corporate Restructuring and its ways.

#### Human Resource Development DSE - C3

#### **Course outcomes**

After Completion of the course students will be able to:

COI	Understand the basic concepts of OB
CO2	Understand the principles of learning
CO3	Describe the importance of attitude and values
CO4	Implement the theories of Motivation and Personality.
CO5	Understand and implement causes of stress and coping strategiesse Outcomes:

#### **BBA I Semester I**

## Paper No 1 Fundamentals of Business Management

**Course Outcomes** 

CO1	Students should be able to know, comprehend, apply, analyze, synthesize and evaluate the basic fundamentals of managing organizations. Students will complete specific activities, as identified in the syllabus, related to each of the four functions of management: planning, organizing, leading and controlling.
CO2	Have developed a working knowledge of fundamental terminology and frameworks in the four functions of management: Planning, Organizing, Leading and Controlling;
CO3	Be able to analyze organizational case situations in each of the functions of management;
CO4	Be able to identify and apply appropriate management techniques for managing contemporary organizations; and
CO5	Have an understanding of the skills, abilities, and tools needed to obtain a job on a management track in an organization of their choice

#### Paper No 2 Principles of Marketing

Course Outcomes

COI	Understand the fundamentals of marketing.	
CO2	Aware of the 4P's & 4C's of marketing mix.	
CO3	Understand the consumer behavior and importance of market segmentation	



#### Paper No 3 Micro Economics

Course Outcomes:

COI	Learners will be able to explain meaning and scope of business economics
CO2	Learners will apply the concept and theories of demand and consumer behaviors'
CO3	Learners will apply concepts of factor pricing and production function in business practices
CO4	Learners will understand different markets and its pricing practices

## Paper No 4 Information Technology in Business Management

Course Outcomes:

COI	Understand basics of computer technology.
CO2	Identify software and networking technology for business.
CO3	Prepare documents, files and folders with the help of Ms-Words
CO4	Prepare power point presentations. 5. Analyze Business data using MS - Office.

#### Paper No 5 Business Communication, Paper -I

Course outcomes

COI	Understand business communication	
CO2	Develop vocabulary	
CO3	Develop effective writing skills	
CO4	Develop effective reading skill	

#### **BBA II Semester III**

## Paper No 1 Fundamentals of Entrepreneurship

Course outcomes

COI	Have a fair idea about aspects of entrepreneurship development
CO2	Understand the role of entrepreneurs, and the importance of entrepreneurship with the challenges and opportunities.
CO3	Get acquainted with different theories of entrepreneurship
CO4	Understand the concept and role of woman entrepreneurs
CO5	Understand the concept of rural and social entrepreneurship

## Paper No 2 COST ACCOUNTANCY

Course Outcomes :

CO1	Describe concepts in Cost Accountancy
CO2	Analyze methods of Costing, Cost Levels and methods of pricing material issues, Inventory Control Techniques
CO3	Define application of Marginal Costing Technique in decision making
CO4	Discuss Cost Audit and Cost Control Technique.



#### Paper No 3 SERVICES MARKETING

#### **Course Outcomes**

COI	Illustrate Services- it's concept, classification and importance	
CO2	Compare goods and services	
CO3	Demonstrate 7 P's of service marketing	
CO4	Application of 7 P's for various service organizations	
CO5	Develop 7 P's of marketing for a service organization	

#### Paper No 4 Forms of Business Organization

Course Outcomes:

COI	Understand different forms of business organization.
CO2	Classify different sources of finance available & its influence on business decisions.
CO3	Illustrate different combinations of business.
CO4	Understand new trends in management

#### Paper No 5 STATISTICAL TECHNIQUES

Course Outcomes:

COI	Define descriptive Statistical techniques
CO2	Describe applications of statistical techniques.
CO3	Apply suitable statistical formula and calculate result.
CO4	Conclude degree of relationship of two variables and estimate unknown variable.

#### **BBA III Semester IV**

#### Paper No 1 Fundamentals of Business laws

Course Outcome:

COI	Have a fair idea about aspects of different business laws in India
CO2	Understand the salient features and importance of different business laws.
CO3	Get acquainted with different provisions of business laws.

#### Paper No 2 Human Skills

Course outcomes

COI	Develop different human skills among students
CO2	Enhance quality behavior.
CO3	To increase Emotional Quotient by learning values.
CO4	Understand about conflict management and stress management
CO5	Beneficial to cultivate professional skills among the management students and make them persons with empathy.
CO6	Understand about Career Management and career opportunities in Management

#### Paper No 3 Management Historians

Course Outcomes:

On Completion of this course students will be able to:



100		
CO3	Evaluate role of historian in developing science of management	
CO2	Understand contribution of management historians	
COI	Understand evolutionary phases of management approaches	_

#### Paper No 4

#### **Digital Marketing**

Course Outcomes (Cos): At the end of the course the student should be able to:

COI	Learn the applications of Digital Marketing	
CO2	Analyze the different digital marketingavenues.	
CO3	Examine digital marketingtools	
CO4	Build real life problems in the domain of digitalmarketing	

#### **Financial Management**

Course Outcomes :

CO3	To understand Capital Structure ,Cost of Capital and Leverage	
CO2	To know about components of Working Capital Management	
COI	To understand the basic concepts Financial Management	

#### **Human Resource Planning**

Course outcomes After completion of the course students will be able to :

COI	Understand the various functions of HRM.	
CO2	Describe the Human Resource Planning Process.	
CO3	Understand the Recruitment function in detail.	
CO4	Describe the Selection process	
CO5	Analyze the employee separation method.	

### **BBA I Semester II**

#### Paper No 1 Accounting for Managers CC-A4

#### **Course Outcomes:**

CO1	Understand the concepts in accountancy.	
CO2	Prepare ledger accounts, subsidiary books and trial balance	
CO3	Demonstrate calculations of depreciation.	
CO4	Prepare statements of accounts	

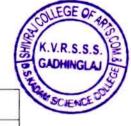
#### Paper No 2 Human Resource Management, Paper - II CC-A5

#### **Course Outcomes:**

COI	Describe human resource planning process	
CO2	Describe selection procedure in detail	
CO3	Describe the methods of management development	
CO4	Describe different methods of training	

Paper No 3 Macro Economics CC-A6

#### **Course Outcomes:**



COI	Learners will be able to understand concepts of national income and demand of supply of money	
CO2	Learners will apply the principles and theories of inflation and business cycle	
CO3	Learners will understand different concepts of public finance	

#### Paper No 4 Management Information System GEC-G2

#### Course Outcomes:

Students who complete this course should be able to:

COI	Understand basics Information System.	
CO2	Understand working and applications of different information systems.	
CO3	Study system development lifecycle. 4. Analyze the system requirement	

#### Paper No 5 Business Communication, Paper – II AECC-C2

#### **Course outcomes**

After the completion of the course, students will be able to

COI	Understand the nature of effective oral communication	
CO2	Face the interview confidently and participate in the group discussion	
CO3	Develop presentation skills	
CO3 CO4	Understand different modern office communication tools	

#### **BBA II Semester IV**

#### Paper No 1 Entrepreneurship and Project Management CC-B4

#### **Course outcomes**

COI	Understand the process of project identification	
CO2	have a fair idea about different institutions and schemes	
CO3	Understand different methods of project appraisal	
CO4	Understand the process of preparation of business plan	

#### Paper No 2 Management Accounting CC-B5

#### **Course Outcomes :**

CO1	Understand Management Accounting and Reporting to management	
CO2	Understand tools and techniques of Management Accounting	
CO3	Understand Financial Statement Analysis	

#### Paper No 3 RURAL AND RETAIL MARKETING CC-B6

#### **Course Outcomes**

COI	Develop understanding of concepts of rural and retail marketing.
CO2	Understand the current situation of rural marketing.



Analyze the marketing of agricultural inputs and products.
Understand retail formats, retail buying behavior and retail marketing mix.

#### Paper No 4 Research Methodology GEC-G4

#### **Course outcomes**

CO1	Define various terms used in research process	
CO2	Describe research design, sample design and sampling methods	
CO3	Apply appropriate methods for data collection for research work	
CO4	Use appropriate statistical tools for data analysis and interpretation	

## Paper No 5 STATISTICS FOR DECISION MAKING (AECC-C4)

#### **Course Outcomes:**

COI	Define tools Statistics used for decision making	
CO2	Describe applications of statistics for decision making.	
CO3	Apply suitable statistical formula and estimate trend.	-
CO4	Construct control charts	

#### **BBA III Semester VI**

## Paper No 1 Fundamental of Taxation (Semester-VI) CC-C4

#### **Course Outcome:**

COI	To understand the basic concepts in Taxation	
CO2	To demonstrate the computation of income and tax liability	
CO3	To understand concept of GST and its mechanism	

#### Paper No 2 BUSINESS ETHICS CC C5

#### **Course outcomes**

COI	To familiarize students with values and ethics in business.	
CO2	To motivate students to think and behave ethically in all situations of life.	

#### Paper No 3 ORGANIZATIONAL BEHAVIOUR CC-C6

#### **Course outcomes**

Understand the basic concepts of OB
Understand the principles of learning
Describe the importance of attitude and values
Implement the theories of Motivation and Personality.
Understand and implement causes of stress and coping strategiesse Outcomes:

#### Paper No 4 International Marketing DSE A3

#### **Course Outcomes**

CO1	Understand basics of international marketing.
CO2	To provide students with a perspective of International Marketing management, its environment and complexities.
CO3	Study international marketing strategies.
CO4	Study functions of international trade

**Business Finance (Semester-VI) DSE-B3** 



#### **Course Outcomes :**

CO1	To understand the basic concepts Business Finance
CO2	To recognize Financial Markets, Mutual Funds, Portfolio Management and Micro Finance
CO3	To understand Corporate Restructuring and its ways.

#### Human Resource Development DSE - C3

#### **Course outcomes**

After Completion of the course students will be able to:

COI	Understand the basic concepts of OB
CO2	Understand the principles of learning
CO3	Describe the importance of attitude and values
CO4	Implement the theories of Motivation and Personality.
CO5	Understand and implement causes of stress and coping strategiesse Outcomes:

#### **BBA I Semester I**

#### Paper No 1 Fundamentals of Business Management

Course Outcomes

CO1	Students should be able to know, comprehend, apply, analyze, synthesize and evaluate the basic fundamentals of managing organizations. Students will complete specific activities, as identified in the syllabus, related to each of the four functions of management: planning, organizing, leading and controlling.
CO2	Have developed a working knowledge of fundamental terminology and frameworks in the four functions of management: Planning, Organizing, Leading and Controlling;
CO3	Be able to analyze organizational case situations in each of the functions of management;
CO4	Be able to identify and apply appropriate management techniques for managing contemporary organizations; and
CO5	Have an understanding of the skills, abilities, and tools needed to obtain a job on a management track in an organization of their choice

#### Paper No 2 Principles of Marketing

Course Outcomes

CO1	Understand the fundamentals of marketing.	
CO2	Aware of the 4P's & 4C's of marketing mix.	_
CO3	Understand the consumer behavior and importance of market segmentation	

#### Paper No 3 Micro Economics

Course Outcomes:

CO1	Learners will be able to explain meaning and scope of business economics
CO2	Learners will apply the concept and theories of demand and consumer behaviors'
CO3	Learners will apply concepts of factor pricing and production function in business practices
CO4	Learners will understand different markets and its pricing practices



#### Paper No 4 Information Technology in Business Management

Course Outcomes:

CO1	Understand basics of computer technology.
CO2	Identify software and networking technology for business.
CO3	Prepare documents, files and folders with the help of Ms-Words
CO4	Prepare power point presentations. 5. Analyze Business data using MS - Office.

#### Course outcomes

COI	Understand business communication
CO2	Develop vocabulary
CO3	Develop effective writing skills
CO4	Develop effective reading skill

#### **BBA II Semester III**

#### Paper No 1 Fundamentals of Entrepreneurship

Course outcomes

COI	Have a fair idea about aspects of entrepreneurship development
CO2	Understand the role of entrepreneurs, and the importance of entrepreneurship with the challenges and opportunities.
CO3	Get acquainted with different theories of entrepreneurship
CO4	Understand the concept and role of woman entrepreneurs
CO5	Understand the concept of rural and social entrepreneurship

## Paper No 2 COST ACCOUNTANCY

Course Outcomes :

CO1	Describe concepts in Cost Accountancy
CO2	Analyze methods of Costing, Cost Levels and methods of pricing material issues, Inventory Control Techniques
CO3	Define application of Marginal Costing Technique in decision making
CO4	Discuss Cost Audit and Cost Control Technique.

## Paper No 3 SERVICES MARKETING

Course Outcomes

COI	Illustrate Services- it's concept, classification and importance	
CO2	Compare goods and services	
CO3	Demonstrate 7 P's of service marketing	
CO4	Application of 7 P's for various service organizations	
CO5	Develop 7 P's of marketing for a service organization	



#### Paper No 4 Forms of Business Organization

Course Outcomes:

COI	Understand different forms of business organization.
CO2	Classify different sources of finance available & its influence on business decisions.
CO3	Illustrate different combinations of business.
CO4	Understand new trends in management

## Paper No 5 STATISTICAL TECHNIQUES

Course Outcomes:

COI	Define descriptive Statistical techniques
CO2	Describe applications of statistical techniques.
CO3	Apply suitable statistical formula and calculate result.
CO4	Conclude degree of relationship of two variables and estimate unknown variable.

#### **BBA III Semester IV**

#### Paper No 1 Fundamentals of Business laws

Course Outcome:

COI	Have a fair idea about aspects of different business laws in India
CO2	Understand the salient features and importance of different business laws.
	Get acquainted with different provisions of business laws.

## Paper No 2 Human Skills

Course outcomes

CO1	Develop different human skills among students	
CO2	Enhance quality behavior.	
CO3	To increase Emotional Quotient by learning values.	
CO4		
CO5		
CO6	Understand about Career Management and career opportunities in Management	

#### Paper No 3 Management Historians

Course Outcomes:

On Completion of this course students will be able to:

COI	Understand evolutionary phases of management approaches	
CO2	Understand contribution of management historians	
CO3	Evaluate role of historian in developing science of management	



#### Paper No 4

#### **Digital Marketing**

Course Outcomes (Cos): At the end of the course the student should be able to:

COI	Learn the applications of Digital Marketing	
CO2	Analyze the different digital marketingavenues.	
CO3	Examine digital marketingtools	
CO4	Build real life problems in the domain of digitalmarketing	

#### **Financial Management**

Course Outcomes :

7.775	n Desource Planning	
CO3	To understand Capital Structure, Cost of Capital and Leverage	
CO2	To know about components of Working Capital Management	
CO1	To understand the basic concepts Financial Management	

Human Resource Planning

Course outcomes After completion of the course students will be able to :

COI	Understand the various functions of HRM.	
CO2	Describe the Human Resource Planning Process.	
CO3	Understand the Recruitment function in detail.	
CO4	Describe the Selection process	
CO5	Analyze the employee separation method.	

#### PROGRAMME SPECIFIC OUTCOMES (PSOs) Bachelor of Computer Applications (BCA)

After successful completion of three years graduate level degree program in Bachelor of Computer Applications (BCA) a student should be able to:

PSO 1	Develop & implement solution-based system that will improve existing systems in IT industry.	
PSO 2	Develop & implement solution-based system that will improve existing systems in IT industry.	
PSO 3	Students will be proficient in applying IT in business.	
PSO 4	SO 4 Students will be familiarity with desktop publishing system.	
PSO 5	Students can develop ability of designing database.	
PSO 6	Student can develop structure of any system using tools like DFD, ERD.	
PSO 7	Students will able to identify & describe network technology/security threads.	
PSO 8	Students can develop skill of system analysis	
PSO 9	Students can work as analysis's	
<b>PSO 10</b>	Students can be good DBA	



#### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: <u>BCA</u> (New Syllabus) Course Outcomes

#### BCA I Semester I

#### Course Code:- C 101 Sub- Fundamentals of computer

COI	Understand basic concepts of computer.	
CO2	Describe peripheral devices and number systems.	
CO3	Understand operating environment.	
CO4	Demonstrate the use of Linux operating systems commands.	

#### Course Code-CC 102 Sub- Introduction to programming using 'C'

CO1	Able to implement the algorithm and draw flow charts for solving mathematical problem.
CO2	Ability to design and develop computer programs, analyzes and interprets the concept of pointers, declarations, initialization, operations on pointer and their uses.
CO3	Able to define data types and use them in simple processing applications and to use the concept of array of structure and file handling.
CO4	Develop confidence for self-education and ability for lifelong learning needed for computer language

#### Course Code: - AEC 103 Sub- Principles of Management

CO1	To know the nature, scope and functions of management.
CO2	To explain the nature, importance, methods and types of planning.
CO3	To understand motivation theories in management.
CO4	Develop confidence for self education and ability for lifelong learning needed for computer language
CO5	To illustrate the communication in management.

#### Course Code:- AEC 104 Sub- Financial Accounting

CO1	Understand the basic concepts of depreciation.	
CO2	Be able to develop an idea of investment accounts.	
CO3	Develop basic idea of hire purchase and installment accounting.	



CO4	Understand the procedure followed in branch of business organization	_
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#### Course Code-AEC 105 Sub- Office Management and Communication

Understand the concepts of office Management Perform operations of classification of communication.
Perform E-communication tools-benefits and limitations
Understand and discuss about the use of E-communication in daily life

#### Course Code-CC 201 Subject-MS-Office

CO1	Understand the components of office automation
CO2	Perform operations using MS Word and PowerPoint
CO3	Surf details through Internet
CO4	Understand and discuss about the use of Office Package and internet in daily life

#### Course Code-CC 202 Subject-Programming In 'C'- Part-II

CO1	Ability to design and develop Computer programs, analyzes, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage.
CO2	Able to define data types and use them in simple data processing applications also he/she must be able to use the concept of array of structures and file Handling.
CO3	Develop confidence for self education and ability for life-long learning needed for computer language.

## Course Code-CC 203 Subject-Bank Management

CO1	Understand the Basic Accounting concepts and Preparation of cash book.
	Summarize the final accounts
CO3	Determine the Bank reconciliation statement and Rectification of Errors.
CO4	Apply different methods of Calculation of Depreciation and Insurance claims.
CO5	Compute single entry system under various methods

## Course Code-AEC 204 Sub-Financial Accounting with Tally

CO1	Understand the basic concepts of depreciation
CO2	Summarize the final accounts Be able to develop an idea of investment accounts.
	Determine the Bank reconciliation statement and Rectification of Errors.
CO4	Apply different methods of Calculation of Depreciation and Insurance claims.

## Course Code-AEC 205 Sub- Principle of Marketing

CO1	To know the nature, scope and functions of management.	_
CO2	To explain the nature, importance, methods and types of planning.	



CO3	To describe the process, principles and structures of organization
CO4	To understand motivation theories in management
	To illustrate the communication in management

#### BCA II Semester III

#### **Course Code-301 Sub-Cost Accounting**

CO1	To know the concept ,scope & classification of cost accounting.	
CO2	To understand the operate costing& contract costing.	
CO3	Write up the process costing.	
CO4	Detailed on material control & method issues	

#### Course Code-302 Sub-Human Resource Management

CO1	To acquire knowledge of HRM	
CO2	Role and functions of human resources.	_
CO3	Manpower planning and job description in the organization	
	Labor welfare and social security.	

#### Course Code-303 Sub- System analysis and design

CO1	Introducing and understanding concept of system, characteristics, SDLC.
CO2	System analysis Role and traits, preliminary analysis, fact finding, feasibility study
CO3	System Design input design, output design, file design.
CO4	Testing and maintenance software testing strategies, system testing, debugging, maintenance.

#### Course Code-304 Sub-Object Oriented Programming with C++

CO1	To know the proper lines of c++, Encapsulation, Inheritance & polymorphism
CO2	To explain the various datatypes, operators and functions of c++.
CO3	To know the concept of constructors & destructors
CO4	.To explain the concept of inheritance, types of inheritance and polymorphism, virtual function.

#### Course Code-305 Sub-Computer Oriented Statistical Methods

CO1	To know what is statistics and real life applications of it, To represent the data
CO2	To calculate different measures of central tendency and dispersion
CO3	How to handle bivariate-data using correlation and regression concepts

#### BCA II Semester IV

## Course Code-401 Sub-Entrepreneurship Development

CO1	To impact theoretical knowledge and entrepreneurship.	
CO2	To develop entrepreneurship qualities and skills.	
CO3	To understand institutional support for entrepreneurship	
CO4	To understand the project management of business organization.	



#### **Course Code-402 Sub-Organizational Behavior**

CO1	To enable the students to acquire knowledge of organization behavior and human psychology
CO2	To know about motivation and teams
CO3	To understand the concept of conflict and conflict management strategies.

## Course Code-403 Sub-DBMS Using MS-Access

CO1	Describe the basic concepts of DBMS and various data bases used in real life applications.
CO2	Demonsrate the principles behind systematic database designs approaches.
CO3	Design the database structure by applying the concepts of Entity-relational model and normalization.
CO4	Learn MS-Asses for database creation and handling transactions.

#### Course Code-404 Sub-Web Technology

CO1	To understand the concept of internet and web development
CO2	Describe and explain the all basic tags in HTML.
CO3	To describe the concept of Style-sheet and Java-Script.
CO4	To understand the concept of server side scripting and client side scripting.

#### **Course Code-405 Sub-Mathematical Foundation For Computer Application**

CO1	Basic knowledge of set theory, functions and relations concepts, matrix needed for designing and solving problems
CO2	Construct simple mathematical proofs & posses the ability to verify them.
CO3	Write an argument using logocal notation and determine if the argument is valid or is not valid.
CO4	Use graph algorithms to solve problems.

#### **BCA III Semester V**

#### **Course Code-501 Sub- Management Accounting**

CO1	To explain the management accounting objective & scope.
CO2	To illustrate an analysis of liquidity, solvency & profitability ratio.
CO3	To compute working capital, fund flow and cash flow analysis.
CO4	To know the classification of budgets & its computation
Cours	e Code-502 Sub-E-commerce
CO1	To define about E-commerce, types and components
CO2	To explain electronic data interchange and its working mechanism.
CO3	To define electronic payment systems and smart cards, credit card & debit card.
CO4	To define E-security and concept of network fireball security and client server security



#### **Course Code-503 Sub- Computer Network**

CO1	Understand the concept of OSI and the TCP-IP reference models.	
CO2	Learn the concept of error detection and correction methods.	
CO3	Describe protocols like DNS,SMTP,SNMP,FTP,HTTP etc.	
	Students will get the concept of security	

#### Course Code-504 Sub- RDBMS with oracle

CO1	The basic concept of SQL and appreciate the application of database system.
CO2	
CO3	Describe protocols like DNS, SMTP, SNMP, FTP, HTTP etc.
CO4	3Be familiar with the commercial relational database system(oracle) by writing SQL using the system.
CO5	The basics of PL/SQL composite data types like procedure, functions, packages& triggers

#### **Course Code-505 Sub-Visual Programming**

CO1	Knowing knowledge of .net framework,.net IDE and compiler
CO2	To develop programs using c#, concepts of type casting, memory management.
	Concepts of Asp.net management, types of validator& life cycle
	Basic knowledge of database connected & database disconnected

#### **BCA III Semester VI**

#### **Course Code-601 Sub-Strategic Management**

CO1	To know the core concepts in Strategic Management.	
CO2	To understand Strategic Management process.	
CO3	To know the tactics in Strategic Management.	

#### Course Code-602 Sub-Data Mining And Data Warehousing

COI	Understand the principles of data mining
CO2	Understand various clustering techniques for categorizing data
CO3	Understand the software for data mining and application of data mining

#### Course Code-603 Sub-Linux Operating System

CO1	Learn operating system Linux.
CO2	Describe Directory & file command in Linux
CO3	To learn the important Linux library function and system calls.
CO4	Explain securing files in Linux with access permissions and uses of conditional execution in shell scripts

#### **Course Code-604 Sub-Java Programming**

CO1 Implement OOP concepts(class, constructor, overloading, Inheritance, overriding)



	in java
CO2	Explain the fundamental concepts and features of java programming language.
CO3	Use and create packages and interfaces in java programming.
CO4	Implement multithreading and exception handling in java and java to implement applet and AWT.

## B Com (IT)

## PEOGRAMME SPECIFIC OUTCOMES

PSO 1	Students can get through knowledge of information technology.
PSO 2	The knowledge of different subjects like Management, Marketing, Accountancy Statistics, Mathematics, Information technology, DBMS, Computer languages etc with the Practical exposure help the students to stand in organization.
PSO 3	This Programme provides opportunities in Industries, Banking sector, Insurance companies, Financial companies, I.T. Sector, Transport agencies, Software developer companies etc. well trained professionals to meet the requirements.
PSO 4	After completing graduation students can get skills regarding various aspects like marketing manager, Sales manager, Software developer, Data entry etc.
PSO 5	Capability of the students to make decisions at personal and professional level will increase after completion of this course.
PSO 6	Students can independently start up their own business like Computer Institute, Computer sales and service etc.

#### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: B Com (IT) (New Syllabus) Course Outcomes

PAPER: ACCOUNTANCY (101)

CO 1	To know Financial Accounting principles and Practice as applicable to Information Technology.
CO 2	To understand the basic accounting terms.
CO 3	To know the procedure for recording and posting of trans actions- Balancing of Ledger-Preparation of Trial Balance and final Accounts for sole Trader & Partnership Firm
CO 4	To encourage the students about maintaining the books of accounts for further reference.



## Paper: PRINCIPLES OF BUSINESS MANAGEMENT (102)

CO 1	To understand the concept & functions and importance of management and its application.
CO 2	To make the student understand principles, functions and different management theories.
CO 3	To help the students to understand the concepts & principles of Management and their applications.

#### **BUSINESS ECONOMICS (103)**

CO 1	To familiarize the students with the basic concept of business economics and its application.
CO 2	To aware students about Micro and Macro economics and its importance.
CO 3	To apply economic reasoning to solve the problems of the economy.
CO 4	To Study the concept of Demand, Demand function and elasticity of demand.

## **IMPRESSION MANAGEMENT (104)**

CO 1	To make students familiar with the concept and techniques of impression management.
CO 2	To give the knowledge to the students about different types of personalities.
	To improve different types of skills among the students like soft skills, communication skill etc.
CO 4	To espouse the students to acquire the skills of impression management required to improve their employability

## FUNDAMENTAL OF INFORMATION TECHNOLOGY (105)

CO 1	To give the basic knowledge about computers among the students.
CO 2	To introduce the computer software and hardware to the students
CO 3	To develop the skills in handling of application software's to the students.
CO 4	To enable the students to get a basic and proper knowledge in the field of Information Technology.

## LAB COURSE 106

CO 1	To give practical knowledge to the students about the MS-Word, MS -Excel, MS-
	Power Point etc



### SEMESTER II

## ACCOUNTANCY (201)

CO 1	To make familiar to the students in accounts of non trading concern.
CO 2	To prepare the students in financial statement analysis by giving the knowledge of ratio analysis.
CO 3	To know Financial Accounting principles and Practice as applicable to Information Technology.
CO 4	To create employability of students by giving the practical knowledge of TALLY software.

## PRINCIPLES OF MARKETING (202)

CO 1	To know the knowledge to the students about the market segmentation.
CO 2	To help the students to understand the concept & functions and importance of marketing and its application.
CO 3	To make aware to the students about marketing information system, concept & forms of E-Marketing MIS-meaning, definition, Importance, Components of MIS

## **BUSINESS ECONOMICS (203)**

CO 1	To familiarize the students with the basic concept of business economics and its application.
CO 2	To aware students about Micro and Macro economics and its importance.
CO 3	To Study the concept of product pricing and factor pricing.
CO 4	To apply economic reasoning to solve the problems of the economy.

#### **IMPRESSION MANAGEMENT 204**

CO 1	To acquaint the students with the concept and techniques of self-presentation skills
CO 2	To espouse the students to acquire the various soft skills required to improve their employability
CO 3	To give courage to the students by giving knowledge about presentation, interview techniques, Group discussion etc.



## DATABASE MANAGEMENT SYSTEM (DBMS) (205)

CO 1	To give the basic knowledge about computers among the students.
CO 2	To introduce the computer software and hardware to the students
CO 3	To know and create awareness about Database management Concepts.
CO 4	To store, retrieve & process the data with the help of MS-ACCESS

## LAB COURSE (206)

CO 1	To give practical knowledge to the students about Pay roll system, Library
	system, Hospital management system, student management system, Billing
	system, railway reservation system, Inventory management system, store
	Management system etc.

# Program specific outcomes- food science

uccessful completion of three-year graduate level degree program in Food Science a should be able to
To impart knowledge in various aspects of Food Technology through Theory and Practical knowledge.
To impart the knowledge about various compounds such as protein, carbohydrates, lipids amino acids, minerals, vitamins etc associated with the chemical compositions of food, their structures and functions.
The students can gain knowledge about some very essential topic of nutrition and its metabolism balance inside the body
To make the students familiar with the technologies of food processing and preservation of plant and animal foods, cereals, pulses, oilseeds, fruits vegetables, spices, meat, fish, poultry, sea food, milk and dairy products.
To development students understanding and communication skills through various assignments which will enable them to develop skills in writing and effective's interpersonal skills. A presentation in different topics enhances their confidence, ability to express themselves & presentation skills

#### Department Food Science (New) Course Outcomes (COs)

B.Sc. I

## Semester I

#### **Fundamentals of Food Science**

CO1	Students will understand the basic concepts in food science and will get knowledge of the different food preparation methods.
CO2	They will understand the requirement of food with respect to energy, food and consumer safety, nutrients and their impact on health.
CO3	They will get the knowledge of nutritive value of cereals, pulses, nuts, fruits and vegetables, ant nutritional factors, germination of pulses, factors affecting cooking
CO4	Students will acquire the knowledge of structure and nutritive value and chemical composition of various foods

## Food Chemistry



CO1	Students will get introduced to Food chemistry and nutrition concept
CO2	Explain properties & reactions of carbohydrates, lipids and proteins during storage and processing of food.
CO3	Explain the importance of water for stability and quality of foods
CO4	Give an overview of the main classes of compounds influencing colour and flavor of food and have knowledge on important sources of vitamins and minerals in food and how these affect other quality aspects of food

## Food Microbiology

CO1	Students will understand the basic concepts in microbiology, principle and working of different instruments used in lab along with its application.
CO2	They will get the knowledge about the how bacteria grows, different factors which affect their growth, different requirements for bacterial growth, different isolation and purification methods used for bacteria
CO3	They will understand the principle and importance of different staining methods used for bacteria.
CO4	They will gain knowledge on different sources, types of bacteria that cause spoilage in food, various changes that occur during spoilage in food depending on their nutrient content.

## Principle of Food Preservation

CO1	They will understand importance of preservatives different methods and its importance.
CO2	Explain the basic principles of food preservation processes: heating, chilling, freezing, control of water activity, acidification, chemical preservatives, packaging, etc.
CO3	Explain the range of processing operations used for food preservation including thermal processing, chilling and freezing, dehydration, irradiation, nonthermal methods, etc
CO4	Explain effects of processing and storage conditions on shelf life of foods

## Semester II

## Fundamental of Food Analysis

CO1	Understand the principles of food analysis by conducting various analytical techniques; learn various physical, chemical and biochemical analyses of foods
CO2	To understand how to validate a method to monitor microbiological and/or chemical hazards in food
CO3	They will gain knowledge about panel members, their selection, types and tasks to implement a sampling plan to monitor chemical and microbiological hazards in food.
CO4	They will acquire knowledge about sensory attributes, facilities for sensory evaluation sensory evaluation methods of food.
Huma	In Nutrition
COI	They will acquire knowledge about basics of nutrition, balanced diet, vitamins and minerals-
CO2	Educate others about holistic Nutrition, life style, wellness and healthy living Familiarize nutritional assessment, RDA and Recommendations & Guidelines



CO3	Gain knowledge on changes during various stages of growth and development throughout life cycle
CO4	Understand the basic principles of diet and diet therapy, acquire the knowledge of modifications of normal diet for therapeutic purposes.

## Food Biochemistry

CO1	Understand the concepts of metabolism
CO2	Describe the Metabolism of carbohydrates, lipids and its regulation
CO3	Describe the metabolism of amino acids, nucleic acids and its regulation
CO4	Describe the metabolism of secondary metabolites
Food	Biotechnology
CO1	To understand the steps involved in recombinant DNA technology.
CO2	To understand principles of animal culture, media preparation
CO3	The objectives of this course are to introduce students to the principles, practices and applications of plant biotechnology, plant tissue culture, plant genomics, genetic transformation and molecular breeding of plants.
CO4	To get insight in Primary and Secondary organs of Immune system, learn about structural features of components of immune system as well as their function, development of immune system and mechanisms by which our body elicits immune response.

## Semister III

## **Cereal and Bakery Product Processing**

CO1	Able to recognize the parts and structures of cereal grains. Capable of converting cereal grains into ingredients for baking goods
CO2	Recognize the crucial cereal quality traits and quality indicators. Have a working knowledge of how a cereal mill and quality lab work.
CO3	Capable of converting cereals into bakery goods
	List the typical issues and their root causes in bakery products.

## Legume and oilseed processing

<b>CO1</b>	To understand how to prepare items using pulses and various aspects of processing pulses	
CO2	Gain knowledge of various oil seeds, expeller-milled oils, solvent extraction of oils, oil refining, and the usage of oil seed meals for various food applications.	
CO3	The student will get knowledge of how the main grains and pulses are processed a learn more about grain handling and storage equipment.	
CO4	Students will learn about value-added products made from all grains as well as be exposed to various processing techniques and equipment	

## Fruits and Vegetables Processing

CO1	To become familiar with the fundamentals of fruit and vegetable processing
CO2	Describe the spoiled fruits and vegetables and give the cause, taking safety precautions as necessary
CO3	To get a fundamental understanding of the processes used to process fruits and vegetables
CO4	To evaluate the student's produce in each lab and to put the methods and techniques of fruit and vegetable processing into practise



#### Semester IV

Milk	and Milk Processing
CO1	Students will acquire knowledge about basic dairy processing
CO2	Students will be able to describe how milk is made and what goes into it, the ingredients in milk and can explains milk's sensory and physical characteristics.
CO3	To describe the process of making milk and , lists the milk pretreatments and explains the significance of the pasteurisation and UHT procedures.
CO4	To describe the terms pasteurised milk and sterilised milk, as well as the processes involved in making yoghurt, butter, cheese, milk powder, ice cream, and other fermented milk products

# Meat, Fish and Poultry Processing

COI	To impart fundamental knowledge regarding the nature and use of meat, poultry, and fish technology.
	CO2- CO3- CO4-
CO2	To give a fundamental grasp of how Meat, Poultry & Fish Technology is used in the food sector.
CO3	To describe the modifications that animal flesh undergoes after being slaughtered post- harvest, and describes the key characteristics of meat quality, how they are measured and the procedures used to ensure quality.
CO4	Learn how to properly handle and store meat, fish, and poultry products.

## Spices and Condiments Processing

CO1	To provide information about different kinds of spices and condiments, how they are categorized, the significance of each spice, where it is produced
CO2	Student will be able to describe how spices are processed in detail by applying numerous chemical principles to preservation and processing is possible.
CO3	To improve their knowledge of spices and condiments and learn more about the evaluation of spice quality, safety, and enlivening components.
CO4	Students will also be able to examine how different processing methods affect the flavor and consistency of spices and condiments.

# Program specific outcomes- Animation

	uccessful completion of three-year graduate level degree program in Animation a should be able to:
PSO1	The student will graduate with proficiency in the subject of their choice.
PSO2	The student will be eligible to continue higher studies in their subject.
PSO3	The student will be eligible to pursue higher studies abroad.
PSO4	The student will be eligible to appear for the examinations for jobs in government organizations.
PSO5	The student will be eligible to apply for jobs with a minimum requirement of B.Sc. Programme.



## **Course Outcomes**

#### B.Sc. Part I: Semester -I Animation Science (Entire)

#### **BAST -101: Fundamentals of computer**

After completion of the unit, Students are able to:

CO 1	Understand the evaluation of computer	
CO 2	Understand the Classification of Computer	
CO 3	Learn the Computer Software"s( System and Application)	
CO 4	Learn the Operating system"s	
CO 5	Understand the Computer Codes	
CO 6	Learn the Computer Languages	
CO 7	Understand the Basic services of Internet	
CO 8	Learn What is Multimedia? Multimedia	

## BAST-102: Drawing and Sketching

ompletion of the unit, Students are able to:
Understand ability of synthesize the use of drawing, two-dimensional design, and color, beginning with basic studies and continuing throughout the degree program toward the development of advanced capabilities.
Knowledge and skills in the use of basic tools, techniques, and processes sufficient to work from concept to finished product, including knowledge of paints and surfaces.
Explore the expressive possibilities of various media, and the diverse conceptual modes available to the painter.
maydeal with direct painting from nature or with alternative approaches to the making of traditional or innovative two- and, at times, three-dimensional images.
Progresstoward developing a consistent, personal direction and style.
Learn abilityto work independently

## **BAST -103: Color Theory**

After co	ompletion of the unit, Students are able to:
CO 1	Understand the history of Color.
CO 2	color rays and its different conditions
CO 3	introduction of material and purpose for magnificent knowledge of color
CO4	knows about analogous, triadic, and Complementary colors.

a section of



## **BAST -104 : Multimedia and Computer Graphics**

After c	ompletion of the Paper, Students are able to:
CO 1	Know and understand the structure and technologies needed in a multimedia system and be able to discriminate which technology may be more useful in order to best achieve the expected end result
CO2	Know and understand effectively use advanced techniques in animation, modeling, visualization and graphics animation.
CO 3	Know and understand the different kinds of user interfaces in order to be able to decide which one will be more efficient and ergonomic according to the required specifications of the application to be developed.
CO 4	. Know and understand the main kinematic models (such as rigid solids and articulated objects), widely used in computer animation techniques
CO 5	Be capable of using OpenGL to create interactive computer graphics.
CO 6	Study fundamentals of animation, virtual reality and its related technologies.
CO 7	Know and understand the different kinds of user interfaces in order to decide which one will be more efficient and ergonomic according to the required specifications of the application to be developed.
CO 8	Know and understand the main kinematic models (such as rigid solids and articulated objects), widely used in computer animation techniques

## BAST -105: Computer graphics -I

know about designing software and its types	
Interface of various old and versions new versions of software"s	_
Understanding software generated graphics Color cades	
Printing issues and regarding satisfactions	
Study raster format pictures	
create and manage simply database	
apply elements and shape commands,	
apply basic shape commands and image effects in processing	
	Interface of various old and versions new versions of software"s Understanding software generated graphics Color cades Printing issues and regarding satisfactions Study raster format pictures create and manage simply database apply elements and shape commands,

## BAST -106: Classical Animation - I

ompletion of the Paper, Students are able to:	
Study Basic terms used in study of classical Animation	
Understand relationship between 2d classical and 2d digital animation	
Understand the functions of classical animation	
Psychological and social impact of classical animation	
	Understand relationship between 2d classical and 2d digital animation Understand the functions of classical animation



CO 5	classical animation trick and Techniques	
CO 6	Know history and evolution of classical Animation	
CO 7	Demonstrate the usage of the concept of query and summary.	

# BAST -107: Computational Mathematics – I

After c	ompletion of the Paper, Students are able to:
COI	Demonstrate algebraic facility with algebraic topics including linear, quadratic, exponential, logarithmic, and trigonometric functions
CO 2	Equip with skills to analyze problems, formulate an hypothesis, evaluate and validate results, and draw reasonable conclusions thereof.
CO 3	Produce and interpret graphs of basic functions of these types
CO 4	Prepare students for pursuing research or careers in industry in mathematical sciences and allied field
CO 5	Solve equations and inequalities, both algebraically and graphically, and Solving and model applied problems.
CO 6	Continue to acquire relevant knowledge and skills appropriate to professional activities and demonstrate highest standards of ethical issues in mathematical sciences.

# BAST -108: Programming -I (C)

After completion of the Paper, Students are able to:	
Develop conditional statements to solve problems.	
Develop C programs Formatted functions	
Develop C programs using functions	
Develop programs to solve mathematical problems.	
Develop iterative statements to solve problems.	
Develop programs to solve complex conditional problems.	
	Develop conditional statements to solve problems.         Develop C programs Formatted functions         Develop C programs using functions         Develop programs to solve mathematical problems.         Develop iterative statements to solve problems.

# BAST -201: Computer Graphics-II

After c	ompletion of the Paper, Students are able to:	
CO1	Develop conditional statements to solve problems.	
CO 2	Develop C programs Formatted functions	

CO 3	Develop C programs using functions	
CO 4	Develop programs to solve mathematical problems.	
CO 5	Develop iterative statements to solve problems.	
CO 6	Develop programs to solve complex conditional problems.	
CO 7	Understand the elements that make up the Illustrator workspace	
CO 8	Learn the basic and essential techniques to work with objects	
DACT	-201: Computer Crankies II	

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## BAST -201: Computer Graphics-II

After c	ompletion of the Paper, Students are able to:
CO 1	Understand how to set up a new document
CO 2	Draw basic shapes using the shape tools
CO 3	Understand color and apply color to object fills and strokes.
CO 4	Use basic selection tools and edge refinement to isolate and edit parts of an image.
CO 5	Transform and distort objects using the Transform and Liquefy tools on the Tools panel.
CO 6	Manipulate layers through ordering, positioning, scaling, rotation, and adjustments

# BAST 202: Computer Graphics-III (ADOBE ILLUSTRATOR)

After c	ompletion of the Paper, Students are able to:
CO 1	Understand the elements that make up the Illustrator workspace.
CO 2	Learn the basic and essential techniques to work with objects.
CO 3	Understand how to set up a new document.
CO 4	Draw basic shapes using the shape tools.
CO 5	Transform and distort objects using the Transform and Liquefy tools on the Tools panel
CO 6	Create an illustration with the drawing tools
CO 7	Understand color and apply color to object fills and strokes

## BAST-203: Sound Editing

After c	ompletion of the Paper, Students are able to:
CO 1	Understand the Create digital composite motion graphic products that incorporate elements of multimedia design, typography and layout
CO 2	Learn the Digital imaging / photography, digital video and audio editing, and 3D animation.
CO 3	Understand how to create Optimize motion graphic projects for multiple delivery options.
CO 4	Evaluate motion graphic projects, identify items for improvement, and implement changes.



	ompletion of the Paper, Students are able to:
CO I	Understand the Develop conditional and iterative statements to write C programs
CO 2	Exercise user defined functions to solve real time problems
CO 3	Understand the Inscribe C programs using pointers and to allocate memory using dynamic memory management functions.
CO 4	Learn how to design C++ classes for code reuse.
CO 5	Learn how to implement copy constructors and class member functions.
CO 6	learn how to overload functions and operators in C++
CO 7	learn how containment and inheritance promote code reuse in C++

# BAST-205: Mass Communication, culture & Media literacy (Credits-02)

After c	ompletion of the Paper, Students are able to:
CO I	Know critical thinking skill that enables audiences to develop independent judgments about media content.
CO 2	Know and understand of the process of mass communication
CO 3	Know and understand awareness of the impact of the media on the individual and society
CO 4	Know and understand development of strategies with which to analyse and discuss media messages.
CO 5	Know and understand awareness of media content as a "text" providing insight into our contemporary culture and ourselves
CO 6	Know and understand cultivation of an enhanced enjoyment, understanding, and appreciation of media content in the case of media communicators: the ability to produce effective and responsible media messages.

## BAST-206: Database Management System (Credits-02)

After c	ompletion of the Paper, Students are able to:
CO 1	Have a broad understanding of the database and database management system software.
CO 2	Have a high level understanding of major DBMS components and their function .
CO 3	Study the model an applications data requirements using conceptual modeling tools like ER diagrams and designs and design Database.
CO 4	Write SQL commands to create tables and indexes, inserts /updates/delete data, and query data in a relational DBMS.

## BAST-207: Web Development-I (HTML) (Credits-02)

After c	ompletion of the Paper, Students are able to:
CO 1	Know and understand about background coding in modern web sites with HTML and CSS.
CO 2	Know and understand best practice in tagging text and other content



CO 3	Know and understand about theories and conventions in web design, e.g. Balance, color, lines
CO 4	Know and understand about famous web designers.
CO 5	Know and understand about different ways to convey a given content to specific user groups

## BAST-208: Programming-II (PHP and using Dreamweaver cc) (Credits-02)

After o	ompletion of the Paper, Students are able to:
CO 1	Create PHP scripts that Demonstrate the basics of PHP programming
CO 2	know how to Use object-oriented PHP
CO 3	Create and deploy a portable web- BASTd system.
CO 4	Test and debug PHP scripts.
CO 5	Know and understand about different ways to convey a given content to specific user groups

	गगातील एम ए १ व भाग २ या वर्गामध्ये मराठी विषयाचे अध्यापन केले जाते. मराठी विषय मुलांना खालील प्रमाणे विविध संधी उपलब्ध होण्यास मदत होते
PSO 1	एक सर्जनशील लेखन कविता, कथा, कादंबरी लेखन करण्याची प्रेरणा मिळाली.
PSO 2	वेगवेगळ्या साहित्यकृतींच्या आधारे साहित्यिकांचा परिचय झाला.
PSO 3	नैतिक मूल्य रुजली व त्यामुळे ते समाजात वावरताना एक सुजाण नागरिक म्हणून नावारुपाला आले .
PSO 4	विद्यार्थ्यांना वेगवेगळ्या नोकरीच्या संधी उपलब्ध झाल्या. ( आकाशवाणी, दूरदर्शन, पत्रकारिता,शिक्षक, निवेदन ,सूत्रसंचालन अनुवादक लेखक कवी इत्यादी)
PSO 5	विद्यार्थ्यांना ग्रंथ वाचनाची आवड निर्माण झाली. नोकरीच्या संधी कोठे आहेत हे समजून आले.
PSO 6	विदयार्थ्यांमध्ये भाषिक कौशल्याची रुजवात झाली.

#### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Marathi Course Outcomes

एम ए भाग 1 पेपर 1 आणि 5 'भाषिक आविष्काराची रूपे एक'

After co	ompletion of the Paper, Students are able to:	
CO 1	वाङ्मय प्रकारातील कथन प्रक्रिया समजली.	
CO 2	साहित्य प्रकारची संकल्पना समजली.	
CO 3	भाषा आणि साहित्यप्रकार यातील अनुबंध विद्यार्थ्यांना समजला.	
CO 4	भाषेची सर्जनशील प्रक्रिया काय व कशी असते याचा उलगडा झाला	
CO 5	भाषिक आविष्काराची स्वरूप वैशिष्ट्ये विद्यार्थ्यांना समजली.	

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पेपर क्रमांक 2.2 आणि 6.2 'विशेष साहित्य कृतींचा अभ्यास'

After co	ompletion of the Paper, Students are able to:
CO 1	लेखकाच्या अभ्यास पद्धतीचा उपयोग कसा करावा हे विद्यार्थ्यांना समजले.
CO 2	लेखकाचे वाङ्मयीन व्यक्तिमत्व, लेखकाचा समकाल विद्यार्थ्यांना समजला .
CO 3	मराठी साहित्यातील एकूण वाङ्मयीन परंपरेत लेखकाचे असलेले योगदान विद्यार्थ्यांना समजले.
CO 4	लेखकाच्या इतर साहित्य कृती विचारात घेऊन लेखकाच्या वाङ्मय जडणघडनीच परिचय विद्यार्थ्यांना झाला .
CO 5	साहित्यकृतीतून लेखकाच्या समकालाचे प्रतिबिंब कसे पडलेले आहे . याची जाणीव विद्यार्थ्यांना झाली.

पेपर नं. 3 आणि 7 'आधुनिक मराठी वाङ्मयाचा इतिहास'

विद्यार्थ्यांना साहित्य प्रकारांची जाणीव व संकल्पना समजली.
वाइमयाचा प्रकारातील कथनांचा तुलनात्मक दृष्ट्या विचार विद्यार्थ्यांना समजला.
स्वातंत्र्यपूर्व काळातील महाराष्ट्रातील सामाजिक, राजकीय, सांस्कृतिक पार्श्वभूमी समजली
या कालखंडातील साहित्यप्रकार व त्यांचे स्वरूप वैशिष्ट्ये विद्यार्थ्यांना समजली.
विविध वाङ्मय प्रकारातील कथन रूप समजले .
इतर समांतर साहित्य प्रवाहांची ओळख झाली

After co	mpletion of the Paper, Students are able to:	
CO 1	मराठी लोककलांची ओळख झाली.	
CO 2	मराठी लोक जीवनातील प्रयोगरूप लोककलांची ओळख झाली	
CO 3	मराठी साहित्यकृर्तीचा प्रयोग लोककलांच्या कसा करायचा यांची जाणीव झाली.	
CO 4	लोकसाहित्य आणि लोकसंस्कृती यांचा परस्पर संबंध समजून आला.	
CO 5	लोकसाहित्याची संकल्पना अधिक समजली.	
CO 6	लोकसाहित्याचा उगम व व्याप्ती यांचे सखोल असे ज्ञान प्राप्त झाले.	

MA II: Marathi

Sem: III

Paper: समाज भाषाविज्ञान (अभ्यास पत्रिका क्रमांक 9)

	भाषा शिक्षणाचे स्वरूप आणि भाषा शिक्षणाच्या विविध बाजूंचा विद्यार्थ्यांना अधिक परिचय
CO 1	झाला.
CO 2	बहुभाषिक देशातील भाषिक प्रश्नांचा विद्यार्थ्यांना अधिक परिचय झाला.
CO 3	भाषिक नियोजनाची उद्दिष्ट विद्यार्थ्यांनी अधिक जाणून घेतली .



CO 4	भाषिक नियोजन म्हणजे काय याविषयी विद्यार्थ्यांना सखोल ज्ञान प्राप्त झाले.
CO 5	समाज भाषा विज्ञानाचे स्वरूप विद्यार्थ्यांना समजून आले.
CO 6	समाजभाषाविज्ञानातील विविध सिद्धांत संकल्पनांचा परिचय झाला.
CO 7	समाज, संस्कृती आणि भाषा यामधील परस्पर संबंध विद्यार्थ्यांना समजून आला.
CO 8	समाजभाषाविज्ञानाची व्याप्ती समजून आली
CO 9	भाषा व्यवहाराची विविधता विद्यार्थ्यांनी समजून घेतली.
CO 10	भाषा संपर्काचे स्वरूप कसे आहे हे विद्यार्थ्यांनी जाणून घेतले

#### MA II: Marathi

#### Sem: III

Paper: वाङ्मयीन संस्कृती (अभ्यास पत्रिका क्रमांक 10.1)

CO 1	वाड्मयीन संस्कृती ही संकल्पना विद्यार्थ्यांना अधिक समजून आली.
CO 2	समाज आणि संस्कृती यातील अनुबंध काय आहे याविषयी विद्यार्थ्यांना अधिक जाणीव झाली.
CO 3	मौखिक आणि लिखित परंपरेत वाड्मयीन परंपरेला संघटित करणाऱ्या घटकांचा विद्यार्थ्यांना अधिक परिचय झाला.
CO 4	वाङ्मयीन संस्कृतीचे स्वरूप नेमके कसे आहे याविषयी विद्यार्थ्यांना अधिक माहिती मिळाली.

#### MA II: Marathi

Sem: III

Paper: समीक्षा सिद्वांत आणि उपयोजन (अभ्यास पत्रिका क्रमांक 11)

CO 1	उपयोजित समीक्षेतील समीक्षेचे स्वरूप विद्यार्थ्यांना अधिक समजून आले.
CO 2	समाजशास्त्रीय अतिबंधात्मक समीक्षा या समीक्षा प्रवाहांचा विचार विद्यार्थ्यांच्या अधिक लक्षात आला.
CO 3	प्रत्यक्ष उपयोजित समीक्षेचे उपयोजन म्हणून निवडक साहित्य कृतींचा अभ्यास केला असता, विद्यार्थ्यांना त्या साहित्यकृतींच्या दृष्टिकोनातून उपयोजित समीक्षेचे कसे उपयोजन करायचे याविषयी विद्यार्थ्यांना अधिक तंत्रे विकसित झाली.



MA II: Marathi

#### Sem: III

Paper: बोलीअभ्यास (अभ्यास पत्रिका क्रमांक 12 .3)

CO 1	प्रमाणभाषा आणि बोली भाषा यांचे स्वरूप विशेष विद्यार्थ्यांना अधिक समजून आले.
CO 2	बोलीभाषांची निर्मिती प्रक्रिया नेमकी कशी आहे. याविषयी विद्यार्थ्यांना अधिक माहिती मिळाली.
CO 3	बोलीच्या अभ्यासाचे महत्त्व विद्यार्थ्यांच्या अधिक लक्षात आले

	After successful completion of three years graduate level degree program in Hindi a student should be able to	
PSO 1	हिंदी भाषा के उद्भव विकास तथा विभिन्न रूपों का ज्ञान प्राप्त होगा।	
PSO 2	सरकारी कार्यालयों में प्रयुक्त कार्यालयीन हिंदी का परिचय प्राप्त होगा।	
PSO 3	हिंदी भाषा के अध्ययन से अनुवादक, राजभाषा अधिकारी ,निवेदक गीतकार, पटकथा लेखक, संवाददाता,विज्ञापन लेखक,संपादक, प्रकाशक आदि पदों पर रोजगारों के अवसरों का परिचय होगा ।	
PSO 4	हिंदी भाषा एवं साहित्य के अध्ययन से विभिन्न भाषा एवं साहित्य में एकता एवं समन्वय की भावना की स्थापना होगी ।	
PSO 5	हिंदी साहित्य के अध्ययन से सामाजिक, राजनीतिक, धार्मिक, साहित्यिक एवं सांस्कृतिक पृष्टभूमि का ज्ञान प्राप्त होगा ।	
PSO 6	हिंदी साहित्य के अध्ययन से मानवीय,नैतिक, राष्ट्रीय मुल्यों एवं संवे दनाओं का निर्माण हुआ।	

## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: Hindi Course Outcomes

एम. ए. प्रथम	वर्ष (हिंदी)
प्राचीन तथा	निर्गुण भक्ति काव्य - Paper No. I & V
CO 1	प्राचीन तथा मध्य युगीन कवियों एवं उनकी काव्य कृतियों से परिचित कराना।
CO 2	प्राचीन तथा मध्य युगीन कवियों की काव्य कृतियों का सूक्ष्म अध्ययन कराना।
CO 3	मध्य युगीन परिवेश तथा काव्य प्रवृत्तियों से परिचित कराना।
हिंदी साहित्य	। का इतिहास - Paper No. I & VI
CO 1	मध्यकालीन विविध काव्य धाराओं का अध्ययन करना।
CO 2	आधुनिक साहित्य की प्रवृतियों का अध्ययन करना।
CO 3	प्राचीन साहित्य की प्रवृतियों का अध्ययन करना।



भाषा विज्ञा	r - Paper No. III & VII	
CO 1	हिंदी भाषा तथा देवनागरी लिपि से परिचित कराना।	
CO 2	छात्रों को हिंदी भाषा अभिव्यक्ति के लिए प्रेरित करना।	
CO 3	व्याकरणिक कौशल से परिचित कराना।	
हिंदी कथा CO 1	साहित्य Paper No. VI & VIII उपन्यासकार तथा उनके उपन्यासों से परिचित कराना।	
CO 2	उपन्यासों का सूक्ष्म अध्ययन करना।	
CO 3	कहानियों का सूक्ष्म अध्ययन करना।	
CO 4	नाटक साहित्य का सूक्ष्म अध्ययन करना।	

	एम. ए. द्वितीय वर्ष (हिंदी)	
COURSE O	DUTCOMES आधुनिक हिंदी कविता - Paper No. IX & XIII	
CO 1	छात्रों को आधुनिक कविता की प्रवृतियों से परिचित कराना।	
CO 2	आधुनिक युग के काव्य प्रकारों के विकासक्रम का परिचय देना।	
CO 3	छात्रों को काव्य के गद्य और पद्यात्मक काव्य शैली से परिचित कराना।	
COURSE O	OUTCOMES - भारतीय काव्यशास्त्र तथा हिंदी आलोचना - Paper No. X & XIV	
CO 1	छात्रों को भारतीय तथा पाश्चात्य काव्यशास्त्र से परिचित कराना।	
CO 2	छात्रों को आधुनिक हिंदी आलोचकों से परिचित कराना।	
CO 3	छात्रों की सृजनशीलता तथा समीक्षात्मक वृत्ति को विकसित करना।	
COURSE O	OUTCOMES - प्रयोजनमूलक हिंदी - Paper No. XI & XV	
CO 1	छात्रों को प्रयोजनमूलक हिंदी की संकल्पना, स्वरूप एवं उपयोगिता से अवगत कराना।	
CO 2	रोजगार अर्जन के अवसर से परिचित कराना।	
CO 3	जनसंचार माध्यम के स्वरूप से परिचित कराना।	
CO 4	हिंदी के विभिन्न रूपों से परिचित कराना।	
CO 5	हिंदी के विविध रूपों से ज्ञात कराना।	and the
COURSE O	outcomes - कथेतर साहित्य - Paper No. XII & XVI	
COP 1	कथेतर साहित्य के उद्भव तथा विकास से परिचित कराना।	
CO 2	कथेतर साहित्य के विभिन्न रूपों से परिचित कराना।	
CO 3	कथेतर साहित्य के प्रमुख रचनाकारों तथा उनकी रचनाओं का सूक्ष्म अध्ययन कराना।	
CO 4	वर्तमान कालीन साहित्य का महत्व एवं प्रासंगिकता से परिचित कराना।	

## Program Specific Outcomes MA (English)

After the completion of two-year post-graduate degree programme in English, students will be able to: PSO 1 To understand major literary trends and movements in World Literature.



PSO 2	To develop acumen to appreciate, interpret and critically evaluate literary texts
PSO 3	To learn and apply various theoretical approaches in literary studies.
PSO 4	To interpret, analyse and evaluate different varieties of written and spoken English.
PSO 5	To analyse unseen poems and prose texts stylistically.
PSO 6	To develop employability skills.
PSO 7	To enhance interpretative and argumentative skills.

Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: English Course Outcomes

# M. A. English (New)

## M. A.: I Semester: I & II C- V Literature in English-I & II Novel

At the	end of the course, students will be able to	
CO 1	To understand the prescribed literary texts.	
CO 2	To gain knowledge about socio-cultural ethos across cultures.	
CO 3	To interpret and aesthetically appreciate novels.	
CO 4	To learn novelistic devices.	

## **C- VI Basic Concepts in Linguistics**

At the	end of the course, students will be able to
CO 1	To acquire knowledge of major concepts, theories and branches of linguistics.
CO 2	To learn cohesive devices and discource analysis.
CO 3	To apply knowledge of linguistics in the analysis of prose and poetry.
CO 4	To communicate with enhanced linguistic competence.

#### E-3 Paper IX & X Indian English Novel- I & II

	At the end of the course, students will be able to
CO 1	To comprehend plot structures, themes and characters in the prescribed texts.
CO 2	To understand the distinctiveness of Indian English novelists.
CO 3	To appreciate the contemporary issues in the novels.
CO 4	To learn the style of novelistic writing.

#### M.A.II

#### Semester III & IV

#### C-XIII Literature in English Drama: I & II

At the e	end of the course, students will be able to
CO 1	To understand plot structures, themes and characters in the prescribed texts.
CO 2	To understand world drama.
CO 3	To appreciate the socio-cultural contexts.
CO <sub>4</sub>	To acquire skills of dramatics.



#### C-XIV Critical Theories: I & II

At the o	end of the course, students will be able to	
CO 1	To understand different approaches and theories in literary studies.	
CO 2	To comprehend differences between various approaches and theories.	
CO 3	To apply theoretical knowledge in the analysis of literary texts.	
CO 4	To develop critical thinking abilities.	_

## E-3 XII & XVI Indian English Prose and Drama

At the	end of the course, students will be able to
CO 1	To comprehend plot structures, themes and characters in the prescribed texts.
CO 2	To understand the distinctiveness of Indian English writers.
CO 3	To understand Indian dramatic theories.
CO 4	To develop critical and creative aptitude.

#### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: English

#### Course Outcomes (Old)

#### M. A. English

#### M. A.: I Semester: I & II C- V Literature in English-I & II Novel

CO 1	To understand the prescribed literary texts.	
CO 2	To gain knowledge about socio-cultural ethos across cultures.	
CO 3	To interpret and aesthetically appreciate novels.	
CO 4	To learn novelistic devices.	

#### C- VI Basic Concepts in Linguistics

At the e	end of the course, students will be able to
CO 1	To acquire knowledge of major concepts, theories and branches of linguistics.
CO 2	To learn cohesive devices and discource analysis.
CO 3	To apply knowledge of linguistics in the analysis of prose and poetry.
CO <sub>4</sub>	To communicate with enhanced linguistic competence.

#### E-3 Paper IX & X Indian English Novel- I & II

	At the end of the course, students will be able to	
CO 1	To comprehend plot structures, themes and characters in the prescribed texts.	
CO 2	To understand the distinctiveness of Indian English novelists.	
CO 3	To appreciate the contemporary issues in the novels.	
CO <sub>4</sub>	To learn the style of novelistic writing.	

#### M.A.II

#### Semester III & IV

#### C-XIII Literature in English Drama: I & II

CO 1	To understand plot structures, themes and characters in the prescribed texts.
CO 2	To understand world drama.
CO 3	To appreciate the socio-cultural contexts.
CO 4	To acquire skills of dramatics.



#### C-XIV Critical Theories: I & II

At the	end of the course, students will be able to
CO 1	To understand different approaches and theories in literary studies.
CO 2	To comprehend differences between various approaches and theories.
CO 3	To apply theoretical knowledge in the analysis of literary texts.
CO <sub>4</sub>	To develop critical thinking abilities.

#### E-3 XII & XVI Indian English Prose and Drama

At the er	nd of the course, students will be able to
CO 1	To comprehend plot structures, themes and characters in the prescribed texts.
CO 2	To understand the distinctiveness of Indian English writers.
CO 3	To understand Indian dramatic theories.
CO 4	To develop critical and creative aptitude.

#### PROGRAMME SPECIFIC OUTCOMES (PSOs) MA (Economics)

	After the completion of two-year post-graduate degree programme in Economics, students vill be able to:	
PSO 1	The students after completion of M.A. programme in economics will develop understanding of the major concepts and principles in economics.	
PSO 2	They secure employment in various services of economics, statistics and banking	
PSO 3	The students are able to use modern library, searching and retrieval methods to obtain information about topics/subjects relating to economics from various sources	
PSO 4	They will have an ability to work efficiently in diverse field statistics, economics and banking	
PSO 5	They have effective oral communication and writing skills for clearly expressing economic point of view.	
PSO 6	They will be able to analyse economic behaviour in practice.	
PSO 7	Student will be able to think critically following the economic way of thinking	

### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: MA Economics (New Syllabus) **Course Outcomes**

M.A. I: Economics

Sem: I

Paper: Micro Economics Analysis

CO 1	Students will be able to study and learn about important micro-economics concepts
CO 2	Students will be able to understand the functioning of different types of markets
CO 3	Students will be able to Get acquainted with pricing strategies
CO 4	Students will be able to acquire the required skills to make economic decisions



#### M.A.: Economics

#### Sem: I

Paper: Monetary Economics

CO 1	Students will Provide essential and thorough knowledge relating to the theoretical aspects of money
CO 2	To understand Keynesian and post-Keynesian
CO 3	To analyse the significant role of money in the economy
CO 4	To analyse the new concepts as well as monetary forces, real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international level

## M.A I: Economics

Sem: I

Paper: Agricultural Economics

Students will To understand agriculture economics and theories of agriculture development etc.
To understand the economics of agricultural production analysis the factors – product and product relationship
To understand the economics of farm management
To analyses the economics of agricultural risk management

## M.A I: Economics

Sem: I

Paper: Principles & Practice of Co-Operation

CO 1	Students will To get know the meaning, principles of co-operation, co-operative credit structure, case study on co-operative banks
CO 2	To learn about co-operative consumer, housing, labours societies
CO 3	To get to know about



CO 4	get to know about agri cooperative marketing, dairy and sugar cooperatives
CO 5	get to know various cooperative institutes in India

## M.A.I:Economics

Sem: II

Paper: Public Economics

CO 1	Students will Demonstrate tax systems, expenditure programs, budgetary procedures, stabilization instruments, debt issues, levels of government, etc.
CO 2	To understand the basic problems of use of resources, distribution of income
CO 3	To understand fiscal institutions with a careful practical analysis of the issues which underline budgetary policies
CO 4	To analyse the theory of public choice and public policy

## M.A I: Economics

Sem: II

Paper: Ecological and Resources Economics

CO 1	Students will To learn the important of environment
CO 2	To develop a sense responsibility towards environment
CO 3	Be made aware about the methods of properly utilizing the natural resources

## M.A I: Economics

Sem: II

Paper: Agriculture Development of India

CO 1	Students will To understand the concept of agriculture and economic development
CO 2	To analyse the problem of agriculture technology and irrigation
CO 3	To understand the agriculture finance and trade
CO 3	To understand the agriculture finance and trade



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#### M.A I: Economics

Sem: II

CO4

Paper: Financial Markets and Institution

CO I	Students will get to know the structure of financial system, intermediaries in financial markets, All India financial institutions
CO 2	become aware about money market, capital market, stock exchange
CO 3	To learn about risk management in financial markets
CO 4	Get to know various international financial markets and institutions.

To understand the concept of agriculture marketing and price

M.A. II: Economics

Sem: III

Paper: Statistical Economics Analysis

CO I	Students will Be trained in use of statistical tools in economic analysis
CO 2	To acquire the skills of quantifying the relationship between economic variable
CO 3	Be able to make prediction about economic variables and phenomenon

#### M.A. II: Economics

Sem: III

Paper: Macro Economics Analysis

Students will To understand systematic facts and latest theoretical developments of macro economics
To learn national income accounting system
Get knowledge of inflation and business cycles

#### M.A. II: Economics

Sem: III

Paper: Economics of Labour



CO 1	Students will Demonstrate the labour market and macro- economics	C
CO 2	To understand micro and macro approaches in labour markets	
CO 3	To learn discrimination, unemployment and labour contracts	

#### M.A. I: Economics

Sem: III

Paper: Indian Public Finance

CO 1	Students will 1. To analyse the issues related with tax system, expenditure programmes and debt issues
CO 2	To understand deficit financing, federal finance and stabilization instruments

M.A. II: Economics

Sem: IV

Paper: International Economics

CO 1	Students will To train about the various issues of trade and likely consequences on income, employment and social standards
CO 2	To learn theories of international trade
CO 3	To understand theory of balance of payments and economic integration

#### M.A. I: Economics

Sem: IV

Paper: Economics of Growth and Development

CO 1	Students will To acquire knowledge of economics of growth and development
CO 2	Get knowledge about issues related to development.
CO 3	To understand social and sectoral aspects of development

#### M.A. II: Economics

Sem: IV

Paper: Co-operative Thoughts and Administration



CO 1	Students will To understand co-operative thoughts and administration	
CO 2	To learn leadership and human resource development	
CO 3	To analyse role of state in cooperatives	

#### M.A.II: Economics

Sem: IV

Paper: Advanced Banking

CO 1	Students will To provide the opportunity to achieve as specific skills which are required for working banking sector
CO 2	To learn banking technology
CO 3	To understand banking and cyber laws

# Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: MA Economics (Old Syllabus)

Course Outcomes

M.A. I: Economics

Sem: I

Paper: Micro Economics Analysis

CO 1	Students will To study and learn about important micro-economics concepts	
CO 2	To understand the functioning of different types of markets	
CO 3	Get acquainted with pricing strategies	
CO 4	To acquire the required skills to make economic decisions	

#### M.A.: Economics

Sem: I

Paper: Monetary Economics



CO 1	Students will Provide essential and thorough knowledge relating to the theoretical aspects of money
CO 2	To understand Keynesian and post-Keynesian
CO 3	To analyse the significant role of money in the economy
CO 4	To analyse the new concepts as well as monetary forces, real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international level

## M.A I: Economics

Sem: I

Paper: Agricultural Economics

CO 1	Students will To understand agriculture economics and theories of agriculture development etc.
CO 2	To understand the economics of agricultural production analysis the factors – product and product relationship
CO 3	To understand the economics of farm management
CO 4	To analyses the economics of agricultural risk management

M.A I: Economics

Sem: I

Paper: Principles & Practice of Co-Operation

Students will To get know the meaning, principles of co-operation, co-operative credit structure, case study on co-operative banks
To learn about co-operative consumer, housing, labours societies
To get to know about
get to know about agri cooperative marketing, dairy and sugar cooperatives
get to know various cooperative institutes in India

## M.A.I:Economics

Sem: II

Paper: Public Economics



CO 1	Students will Demonstrate tax systems, expenditure programs, budgetary procedures, stabilization instruments, debt issues, levels of government, etc.
CO 2	To understand the basic problems of use of resources, distribution of income
CO 3	To understand fiscal institutions with a careful practical analysis of the issues which underline budgetary policies
CO 4	To analyse the theory of public choice and public policy

## M.A I: Economics

Sem: II

Paper: Ecological and Resources Economics

CO 1	Students will
	To learn the important of environment
CO 2	To develop a sense responsibility towards environment
CO 3	Be made aware about the methods of properly utilizing the natural resources

#### M.A I: Economics

Sem: II

Paper: Agriculture Development of India

CO 1	Students will
	To understand the concept of agriculture and economic development
CO 2	To analyse the problem of agriculture technology and irrigation
CO 3	To understand the agriculture finance and trade
CO 4	To understand the concept of agriculture marketing and price

M.A I: Economics

Sem: II

Paper: Financial Markets and Institution

CO 1	Students will get to know the structure of financial system, intermediaries in financial markets, All India financial institutions
CO 2	become aware about money market, capital market, stock exchange
CO 3	To learn about risk management in financial markets
CO 4	Get to know various international financial markets and institutions.



## M.A. II: Economics

## Sem: III

Paper: Statistical Economics Analysis

CO 1	Students will Be trained in use of statistical tools in economic analysis
CO 2	To acquire the skills of quantifying the relationship between economic variable
CO 3	Be able to make prediction about economic variables and phenomenon

M.A. II: Economics

Sem: III

Paper: Macro Economics Analysis

CO 1	Students will To understand systematic facts and latest theoretical developments of macro economics
CO 2	To learn national income accounting system
CO 3	Get knowledge of inflation and business cycles

#### M.A. II: Economics

Sem: III

#### Paper: Economics of Labour

CO I	Students will Demonstrate the labour market and macro- economics	
CO 2	To understand micro and macro approaches in labour markets	
CO 3	To learn discrimination, unemployment and labour contracts	

#### M.A. I: Economics

Sem: III

Paper: Indian Public Finance

CO 1	Students will 1. To analyse the issues related with tax system, expenditure programmes and debt issues
CO 2	To understand deficit financing, federal finance and stabilization instruments



## M.A. II: Economics

Sem: IV

Paper: International Economics

CO 1	Students will To train about the various issues of trade and likely consequences on income, employment and social standards
CO 2	To learn theories of international trade
CO 3	To understand theory of balance of payments and economic integration

## M.A. I: Economics

Sem: IV

Paper: Economics of Growth and Development

CO 1	Students will To acquire knowledge of economics of growth and development
CO 2	Get knowledge about issues related to development.
CO 3	To understand social and sectoral aspects of development

## M.A. II: Economics

Sem: IV

Paper: Co-operative Thoughts and Administration

CO 1	Students will To understand co-operative thoughts and administration	
CO 2	To learn leadership and human resource development	
CO 3	To analyse role of state in cooperatives	

M.A.II: Economics

Sem: IV

Paper: Advanced Banking

CO 1	Students will To provide the opportunity to achieve as specific skills which are required for working banking sector
CO 2	To learn banking technology
CO 3	To understand banking and cyber laws



#### PROGRAMME SPECIFIC OUTCOMES (PSOs) MA (Sociology)

	accessful completion of Two years Post Graduate program in Sociology a student be able to:
PSO 1	Students will be developed innovative approach about the sociology.
PSO 2	Theoretical knowledge will be Enhance in students for understanding the public sphere
PSO 3	Enhance the participation in local, state, national and international NGOs
PSO 4	Emerge as a successful researcher
PSO 5	Develop the perspective among the students about gender equality
PSO 6	Become a responsible human being well informed in social values and norms
PSO 7	Students will be able to better understanding for eradication of caste system

# Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: MA Sociology (Old Syllabus)

Course Outcomes

#### Sem: I

Paper: Classical Sociological Traditions

	lassical Sociological Trautions
CO I	Students will introduce with latest sociological knowledge pertaining to various sub-fields within the discipline of sociology.
CO 2	Students will be orient for comprehending, analysing and critically assessing the social reality among the sociological perspective.
CO 3	Students will be develop with various abilities for their social and professional life, such as- analytical ability, research aptitude and relevant skills.
CO 4	Students will be prepare for undertaking research, jobs in various colleges/Universities/ Research Institutions, Governmental Departments and Non-governmental organizations as well as competitive examinations.

Sem: I & II

Subject: Understanding of Indian Society

CO 1	Students will be able to understand the Indian Social System.	
CO 2	Students will be able to diversities in Indian Society.	
CO 3	Students will be able to Social Change in Indian Society.	
CO 4	Students will be able to Indian Sociological Perspectives.	

MA I: Sociology

Sem: I

Paper: Social movements in India

CO 1	Understand the social movements in India.	
CO 2	Understand the importance of social movements	
CO 3	Understand the varieties of ideas and debates about India.	



MA I: Sociology

Sem: I

Paper: Rural Sociology

CO 1	Understand the profile of rural community
CO 2	Introduce the basic concepts of Rural Community and Rural Development

Sem: II

Subject: Understanding of Indian Society

CO 1	Students will be able to understand the Indian Social System.	
CO 2	Students will be able to diversities in Indian Society.	
CO 3	Students will be able to Social Change in Indian Society.	
CO 4	Students will be able to Indian Sociological Perspectives.	

MA I: Sociology

Sem: II

Paper: Sociology of Tribal Society

CO 1	Students will be able to conceptual understanding about anthropology	
CO 2	Students will be understanding the social aspects of tribal's in India.	
CO 3	Students will be reciprocal of tribals issues and problems.	

MA I: Sociology

Sem: II

Paper: Sociology of Tribal Society

CO 1	Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion.
CO 2	Students will be able to make a link between texts and paraphrase their rguments and use these to communicate their ideas in research papers, projects and presentations.
CO 3	By encompassing contemporary developments, the course enables students to think about linkages between religion and society at various levels.
CO 4	Students will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.

Sem: III

Paper: Modern Sociological Theories

CO 1	To acquaint the students with the concept of theory and relationship between theory and research.
CO	To introduce the students to the schools of thought that dominated sociology in the later
2	half of the 20th century.



#### Sem: III Paper: METHODOLOGY OF SOCIAL RESEARCH

1	To impart knowledge to the students regarding the fundamentals of methodology of social research.
CO 2	To give practical training in use of research techniques by assigning project work.

#### Sem: III

# Paper: SOCIOLOGY OF KINSHIP, MARRIAGE AND FAMILY

CO 1	To equip the students with an understanding of family, kinship and marriage system.
CO	To make the students understand the kinship organization in India as well as the Indian
2	family in transition

#### Sem: III

Paper: Sociology of Health

CO 1	Create awareness of social health.
CO 2	Understand socio-medical aspects of society.
CO 3	Introduce the basic concept in sociology of health.
CO 4	Understand the policies regarding health declared by Government of India

#### Sem: IV

Paper: Recent Trends in Sociological Theory

CO 1	To acquaint the students with some of the recent theoretical perspectives in sociology.
CO 2	To develop analytical skills among the students through the study of theoretical perspectives.

#### Sem: IV

Paper: Data Collection and Analytical Procedures

CO 1	To give knowledge to the students regarding techniques of data collection.
CO 2	To give practical training regarding use of techniques of data collection, analytical
	procedures, statistical measures and computers.

## Sem: IV

Paper: Rural Development in India

CO 1	To enrich students' understanding about the changing nature of rural development in India.
CO 2	To study critically the impact of various developmental schemes/ programmes introduced for rural development.



## Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: MA Sociology (Old Syllabus) Course Outcomes

#### Sem: I

Paper: Classical Sociological Traditions

CO 1	Students will introduce with latest sociological knowledge pertaining to various sub- fields within the discipline of sociology.
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CO 2	Students will be able to understand the Indian Social System	
CO 3	Students will be able to Social Change in Indian Society.	
CO 4	Students will be able to Indian Sociological Perspectives.	

MAI: Sociology

Sem: I

Paper: Social movements in India

CO 1	Understand the social movements in India.
CO 2	Understand the importance of social movements
CO 3	Understand the varieties of ideas and debates about India.
CO 4	Understand the multiple socio- political forces, ideologist with shape the nations

MA I: Sociology

Sem: I

Paper: Rural Sociology

CO 1	Understand the profile of rural community
CO 2	Introduce the basic concepts of Rural Community and Rural Development
CO 3	Understand Conceptual classification of Panchyat Raj System
CO 4	Create awareness among government schemes in rural developments



Sem: II Paper: Classical Sociological Traditions

CO 1	Students will introduce with latest sociological knowledge pertaining to various sub- fields within the discipline of sociology.
CO 2	Students will be orient for comprehending, analysing and critically assessing the social reality among the sociological perspective.
CO 3	Students will be develop with various abilities for their social and professional life, such as- analytical ability, research aptitude and relevant skills.
CO 4	Students will be prepare for undertaking research, jobs in various colleges/Universities/ Research Institutions, Governmental Departments and Non-governmental organizations as well as competitive examinations.

## Sem: II

Subject: Understanding of Indian Society

CO 1	Students will be able to understand the Indian Social System.	
CO 2	Students will be able to diversities in Indian Society.	
CO 3	Students will be able to Social Change in Indian Society.	
CO 4	Students will be able to Indian Sociological Perspectives.	

## MA I: Sociology

Sem: II

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CO 4	Students will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.



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СО	To introduce the students to the schools of thought that dominated sociology in the later
2	half of the 20th century.

Sem: III

## Paper: METHODOLOGY OF SOCIAL RESEARCH

CO 1	To impart knowledge to the students regarding the fundamentals of methodology of social research.
CO 2	To give practical training in use of research techniques by assigning project work.

Sem: III

## Paper: SOCIOLOGY OF KINSHIP, MARRIAGE AND FAMILY

CO 1	To equip the students with an understanding of family, kinship and marriage system.
CO 2	To make the students understand the kinship organization in India as well as the Indian family in transition

## Sem: III

Paper: Sociology of Health

CO 1	Create awareness of social health.
CO 2	Understand socio-medical aspects of society.
CO 3	Introduce the basic concept in sociology of health.
CO <sub>4</sub>	Understand the policies regarding health declared by Government of India

Sem: IV

Paper: Recent Trends in Sociological Theory

To acquaint the students with some of the recent theoretical perspectives in sociology.
To develop analytical skills among the students through the study of theoretical perspectives.

Sem: IV

Paper: Data Collection and Analytical Procedures

CO 1	To give knowledge to the students regarding techniques of data collection.
CO 2	To give practical training regarding use of techniques of data collection, analytical
	procedures, statistical measures and computers.



#### Sem: IV

CO 1	To enrich students' understanding about the changing nature of rural development in India.
CO 2	To study critically the impact of various developmental schemes/ programmes introduced for rural development.

### Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj Department: M Com (New Syllabus) Course Outcomes

## M.COM PART I SEM I

#### **COURSE NAME: CC-A1 Business Management Course Outcomes**

CO1	Course Outcomes Understand the theoretical aspects of management and strategic management.
CO2	Describe the theoretical aspects of management and strategic management
CO3	Understand the contemporary issues in management.

#### **COURSE NAME: CC- BI MANAGERAL ECONOMICS**

CO1	Student should able to understand the variables and components of Managerial Economics.
CO2	Students should study the applications of demand analysis and concepts related consumer's behaviours.
CO3	Student should aware regarding production, price determination and pricing practices and they should able to apply these in business decision making policies.
<b>CO</b> 4	Student should understand the business cycle phenomenon and inflation for business decision making.

#### COURSE NAME: DSE-A-1 : Advanced Accountancy

CO1	Understanding concept of accounting standards and practical implication of AS-1 and AS-2.
CO2	Familiarity with preparing final accounts of service industries.
CO3	Perfection in preparing the consolidated financial statements of holding company and its subsidiaries.



CO4	Understanding of preparation of financial statements of insurance companies with	
	schedules.	

#### COURSE NAME: DSE - A-II: Advanced Accountancy (Auditing)

CO1	To understand the basic concepts and objectives of audit.
CO2	To gain working knowledge of generally accepted auditing procedures.
CO3	To identify the skills and techniques of conducting audit of various entities 4. To know the recent trends in practice of audit.

## M.COM PART -I SEM- II

#### COURSE NAME: CC - A2 ORGANIZATIONAL BEHAVIOUR

<b>CO1</b>	Describe theoretical concepts of organizational Behaviour.	
CO2	Classify types of personalities.	
CO3	Summarize types of conflicts.	
CO4	Summarize adoption of organizational culture.	

#### COURSE NAME: CC- B2: INTERNATIONAL BUSINESS

CO1	Students will understand the global economic and business world.
CO2	Students will equip with proper knowledge, abilities and skills of international business environment.
CO3	Students will get acquainted with the functions and mechanism of international financial institutions.
CO4	Students will enable with the knowledge of the plans and strategies to succeed at international business platform.

## COURSE NAME: DSE-A-III: ADVANCED ACCOUNTANCY

C01	Familiarity with accounting of business combinations of companies.	
CO2	Perfection in accounting of different types of cooperatives.	



CO3	Understanding the accounting for lease.
CO4	Understand the concepts of social responsibility accounting, environment accounting and human resource accounting.

# COURSE NAME: DSE-A-IV: ADVANCED ACCOUNTANCY (RESEARCH METHODOLOGY)

CO1	Familiarity with basics of research.
CO2	Designing research protocol for research problem.
CO3	Preparation of the instrument for data collection.
CO4	Ability of analysis and interpretation of data.

## M.COM PART II SEM III

## COURSE NAME: CC-C1: MANAGEMENT ACCOUNTING

CO1	Understand the fundamentals of Management Accounting.	
CO2	Explain the analysis and interpretation of financial statements.	
CO3	Demonstrate the estimation of working capital requirements.	
CO4	Practice to analyze the changes in financial position.	

#### COURSE NAME: CC-CD1: BUSINESS FINANCE

CO1	Understanding of different theoretical aspects of Business Finance.
CO2	Understanding of connection between theoretical concept & practical applicability of Business Finance.
CO3	Exposure to students towards recent trades in business Finance.

## COURSE NAME: DSE-A-V ADVANCED ACCOUNTANCY (COSTING)

CO1	To acquire the knowledge of elements of cost and cost sheet.



CO2	To acquaint the knowledge and skill to prepare job cost sheet and contract account.
CO3	To explain the costing process for processing units and service organizations.
CO4	To understand to reconcile the cost and financial accounts.

# COURSE NAME: DSE-A-VI ADVANCED ACCOUNTANCY (PROJECT WORK AND VIVA-VOCE)

CO1	To identify the research problem and formulate objectives.
CO2	To choose appropriate methodology with proper tools and techniques.
CO3	To analyse and interpret the data collected from different sources.
CO4	To make decision or find out conclusions on the basis of data analysis.

## M.COM PART -II SEM- IV

## COURSE NAME: CC – CC-C2: MANAGEMENT ACCOUNTING PAPER-II (Management Control System)

C01	Understand the fundamentals of Management Control System and Reporting.
CO2	Explain the marginal costing and cost-volume-profit analysis and practice decision making based thereon.
CO3	Simulate the budgetary control system and demonstrate the budgeting. 4. Practice to analyse the cost variances.
CO4	Practice to analyze the cost variances.

# COURSE NAME: BUSINESS FINANCE PAPER-II (FINANCIAL MANAGEMENT)

CO1	Understanding of different aspects of Capital market and depositories.
CO2	Understanding of connection between Mutual Funds, Portfolio Management and Micro Finance.
CO3	Exposure to students towards corporate restructuring and financial decision making.



CO1	To know the basic concept related to income tax.
CO2	To acquaint with knowledge and skills of computing taxable income of different business entities.
CO3	To practice with e-filing of income tax return and online payment.
CO4	To gain knowledge about GST.

### COURSE NAME: DSE-A-VII Advanced Accountancy (Taxation)

# COURSE NAME: DSE-A-VIII ADVANCED ACCOUNTANCY (CONTEMPORARY ISSUES IN ACCOUNTING)

C01	To acquire the knowledge of contemporary issues in accounting.
CO2	Perfection in accounting of different types of cooperatives.
CO3	Understanding the accounting for lease.
CO4	Understand the concepts of social responsibility accounting, environment accounting and human resource accounting.

Shivraj College of Arts Commerce & D S Kadam Science College, Gadhinglaj

Department: M Com (Old Syllabus)

Course Outcomes

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#### SEM I

### **COURSE NAME: CC-A1 Business Management Course Outcomes**

CO1	Course Outcomes Understand the theoretical aspects of management and strategic management.
CO2	Describe the theoretical aspects of management and strategic management
CO3	Understand the contemporary issues in management.

#### **COURSE NAME: CC- BI MANAGERAL ECONOMICS**

CO1	Student should able to understand the variables and components of Managerial
	Economics.



CO2	Students should study the applications of demand analysis and concepts related consumer's behaviours.
CO3	Student should aware regarding production, price determination and pricing practices and they should able to apply these in business decision making policies.
CO4	Student should understand the business cycle phenomenon and inflation for business decision making.

### COURSE NAME: DSE-A-1 : Advanced Accountancy

CO1	Understanding concept of accounting standards and practical implication of AS-1 and AS-2.	
CO2	Familiarity with preparing final accounts of service industries.	
CO3	Perfection in preparing the consolidated financial statements of holding company and its subsidiaries.	
CO4	Understanding of preparation of financial statements of insurance companies w schedules.	

### COURSE NAME: DSE - A-II: Advanced Accountancy (Auditing)

CO1	To understand the basic concepts and objectives of audit.
CO2	To gain working knowledge of generally accepted auditing procedures.
CO3	To identify the skills and techniques of conducting audit of various entities 4. To know the recent trends in practice of audit.

### SEM-II

### COURSE NAME: CC - A2 ORGANIZATIONAL BEHAVIOUR

CO1	Describe theoretical concepts of organizational Behaviour.	
CO2	Classify types of personalities.	
CO3	Summarize types of conflicts.	
CO4	Summarize adoption of organizational culture.	

### COURSE NAME: CC- B2: INTERNATIONAL BUSINESS

CO1	Students will understand the global economic and business world.
CO2	Students will equip with proper knowledge, abilities and skills of international
	business environment.



CO3	Students will get acquainted with the functions and mechanism of international financial institutions.
CO4	Students will enable with the knowledge of the plans and strategies to succeed at international business platform.

### COURSE NAME: DSE-A-III: ADVANCED ACCOUNTANCY

CO1	Familiarity with accounting of business combinations of companies.
CO2	Perfection in accounting of different types of cooperatives.
CO3	Understanding the accounting for lease.
CO4	Understand the concepts of social responsibility accounting, environment accounting and human resource accounting.

# COURSE NAME: DSE-A-IV: ADVANCED ACCOUNTANCY (RESEARCH METHODOLOGY)

CO1	Familiarity with basics of research.	
CO2	Designing research protocol for research problem.	
CO3	Preparation of the instrument for data collection.	
CO4	Ability of analysis and interpretation of data.	

#### SEM III

### COURSE NAME: CC-C1: MANAGEMENT ACCOUNTING

CO1	Understand the fundamentals of Management Accounting.	
CO2	Explain the analysis and interpretation of financial statements.	
CO3	Demonstrate the estimation of working capital requirements.	
CO4	Practice to analyze the changes in financial position.	

### COURSE NAME: CC-CD1: BUSINESS FINANCE

CO1	Understanding of different theoretical aspects of Business Finance.	
CO2	Understanding of connection between theoretical concept & practical applicability of Business Finance.	
CO3	Exposure to students towards recent trades in business Finance.	



# COURSE NAME: DSE-A-V ADVANCED ACCOUNTANCY (COSTING)

CO1	To acquire the knowledge of elements of cost and cost sheet.
CO2	To acquaint the knowledge and skill to prepare job cost sheet and contract account.
CO3	To explain the costing process for processing units and service organizations.
CO4	To understand to reconcile the cost and financial accounts.

# COURSE NAME: DSE-A-VI ADVANCED ACCOUNTANCY (PROJECT WORK AND VIVA-VOCE)

C01	To identify the research problem and formulate objectives.
CO2	To choose appropriate methodology with proper tools and techniques.
CO3	To analyse and interpret the data collected from different sources.
CO4	To make decision or find out conclusions on the basis of data analysis.

### SEM- IV

### COURSE NAME: CC – CC-C2: MANAGEMENT ACCOUNTING PAPER-II (Management Control System)

CO1	Understand the fundamentals of Management Control System and Reporting.
CO2	Explain the marginal costing and cost-volume-profit analysis and practice decision making based thereon.
CO3	Simulate the budgetary control system and demonstrate the budgeting. 4. Practice to analyse the cost variances.
CO4	Practice to analyze the cost variances.

### COURSE NAME: BUSINESS FINANCE PAPER-II (FINANCIAL MANAGEMENT)

CO1	Understanding of different aspects of Capital market and depositories.	
CO2	Understanding of connection between Mutual Funds, Portfolio Management and Micro Finance.	
CO3	Exposure to students towards corporate restructuring and financial decision making.	



# COURSE NAME: DSE-A-VII Advanced Accountancy (Taxation)

CO1	To know the basic concept related to income tax.
CO2	To acquaint with knowledge and skills of computing taxable income of different business entities.
CO3	To practice with e-filing of income tax return and online payment.
CO4	To gain knowledge about GST.

# COURSE NAME: DSE-A-VIII ADVANCED ACCOUNTANCY (CONTEMPORARY ISSUES IN ACCOUNTING)

CO1	To acquire the knowledge of contemporary issues in accounting.	
CO2	Perfection in accounting of different types of cooperatives.	
CO3	Understanding the accounting for lease.	
CO4	Understand the concepts of social responsibility accounting, environment accounting and human resource accounting.	

### Shivraj College of Arts, Commerce and D. S. Kadam Science College, Gadhinglaj Department of Chemistry M.Sc. (Organic Chemistry) PROGRAM OUTCOMES (POs)

On completion of M. Sc. in (Organic Chemistry) the students will:

PO1	Students will be able to acquire in-depth knowledge of basic as well as applied organic chemistry concepts.
PO2	Students will be able to solve a variety of problems by identifying the essential parts of a problem, formulating a strategy to solve the problem, adopting appropriate techniques to arrive at a solution, testing the accuracy and correctness of the solution and interpreting the results.
PO3	Students will acquire domain specific knowledge and technical skills required for



	employment in industry, teaching and research.	
PO4	Students will be able to apply basic knowledge to solve cross-cutting issues such as sustainable development.	
PO5	Students will gain a thorough understanding of organic chemistry research ethics for production of quality research.	
PO6	Students will be able to communicate effectively, i.e. understand and write effective reports, make effective presentations and documentation, and be able to express topics through technical writing as well as oral presentations.	

# PROGRAM SEPCIFIC OUTCOMES (PSOs)

PSO1	Students will get an opportunity to serve in various chemical, pharmaceutical as well as food and agrochemical industries.
PSO2	Students will be able to qualify competitive examinations like NET, SET, GATE, etc.
PSO3	Students will have world-class research opportunities in the Ph.D. Programme.
PSO4	Collaborate effectively on team-oriented projects in chemistry or other related fields.
PSO5	Students can start their own chemical industry/business (Entrepreneurship).
PSO6	Students will be able to interpret NMR, MS and IR for structural elucidation.

# COURSE OUTCOMES (COs)

Part-I Semester-I	
Title of Course	Course Outcomes
Inorganic Chemistry-I	CO1: Students will be able to explain the basic chemistry of transition
(CH.1.1)	metals and their compounds, spectral characteristics of such compounds, nomenclature, reactions and applications.
	CO2: Students will gain knowledge about preparation, structure, physical and chemical properties of metal carbonyls of transition metals.
	CO3: Students will be able to understand all aspects of synthesis, bonding, structure and reactivity of organometallic compounds and their applications in homogeneous catalysis.
	CO4: The student will be able to determine the stability of complexes and

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	explain nuclear stability and reactivity.	
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Organic Chemistry-I	CO1: Students will be able to differentiate between various organic reactive intermediates.	
(CH.1.2)	CO2: Students can identify, classify, explain and apply fundamental	
	organic reactions.	
	CO3: Students will have the ability to differentiate between different	
	types of isomers.	
	CO4: The course will generate interest in writing and finding new	
	reaction mechanisms.	
Physical Chemistry-I	CO1: Students will be able to understand the basic principles of	
(CH.1.3)	thermodynamics and statistical mechanics.	
	CO2: Able to learn advanced topics such as quantum statistics and	
	molecular dynamics simulation methods.	
	CO3: Develop an understanding of how to predict and analyze the	
	physico-chemical properties of condensed and gas phase materials.	
	CO4: Able to use spectral data to predict molecular thermodynamic	
	properties through partition function calculations.	
	CO5: Understand the properties of detergents and colloidal materials. CO6: Learns the principles and techniques for understanding gas and	
	liquid adsorption on solid surfaces.	
	CO7: One can learn spectral techniques to study surface absorption	
	phenomena.	
	CO8: Learn the principles and techniques for estimating the average	
	molecular weight of polymers or biological macromolecules.	
	CO9: Develop the ability to characterize polymers by understanding the	
	theory of virial coefficients, concepts of glass transition temperature, etc.	

Analytical Chemistry-I	CO1: Students will gain knowledge of the fundamentals of analytical
Analytical Chemistry-I (CH.1.4)	CO1: Students will gain knowledge of the fundamentals of analytical chemistry including sampling, sample pretreatment, basic techniques, methods and data handling, processing and statistical analysis. CO2: Students will acquire knowledge and understand the scope of analytical chemistry in various fields. Students will learn the fundamentals of qualitative analysis using traditional techniques. CO3: Students will learn chromatographic techniques, selection of chromatographic techniques and tuning of the chromatographic technique as per the need based on the samples to deal with, learn electroanalytical techniques and computational chemistry that will prepare them for alternative analytical strategies that will become an important component. Analytical Chemistry. CO4: Students will learn to refer to and extract information from standard reference books. Analytical case study problems will be discussed to familiarize with the scope and benefits of analytical chemistry.

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### Part-I Semester-II

Inorganic Chemistry-II	CO1: Students will gain knowledge of basic chemistry of non-transition
(CH.2.1)	elements and their compounds, synthesis and structural features and
	applications.
	CO2: To be able to explain the structure of inorganic compounds based
	on different theories. Students will understand the chemistry of different types of solvents.
	CO3: Be well versed with knowledge of the chemistry of lanthanides and
	actinides with respect to occurrence, isolation, compounds and applications.
	CO4: Understanding the three-dimensional structures of solid-state materials of industrial importance and gaining knowledge of bio-inorganic chemistry.
Organic Chemistry-II (CH.2.2)	CO1: Illustration of modern synthetic methods and applications of reagents.
()	CO2: Provide knowledge of various organometallic compounds and

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	various coupling reactions.	ENCE
	CO3: Understand the principle and applications of protection and	
	deprotection of various functional groups.	
	CO4: It will explain in detail the concepts of chemoselectivity,	
	regioselectivity and enantioselectivity.	
Physical Chemistry-II	CO1: Students will learn the fundamentals of quantum mechanics.	
(CH.2.3)	CO2: Knowledge of the course will form the basis or prerequisite for the	
Carola Historica Indee 1	"Advanced Quantum Chemistry" course.	
	CO3: Able to understand selection rules and predict electronic spectra of	
	conjugated organic molecules.	
	CO4: Able to study photochemical and photophysical phenomena.	
	CO5: Capable of qualitative and quantitative analysis of various	
	components in industrial, food and pharmaceutical samples using the	
	technique of emission spectroscopy.	
	CO6: Able to understand electrochemical aspects of materials, ionic	
	processes and electrochemical sensors, battery materials, characteristics,	
	etc.	
	CO7: Able to study Electrokinetic effects and their applications in the	
	field of protein separation, characterization, etc.	
	CO8: Understanding molecular dynamics through kinetic studies.	
	Applications to explore reaction pathways, protein-ligand binding rates,	
	etc. will help to understand the processes that govern life.	
Analytical Chemistry-II		
(CH.2.4)	instruments/instruments used for chemical analysis and interpretation of	
	data. The scope and limitations of spectroscopic instruments will be	
	discussed so that students will be informed about the types of samples that	
	can be analyzed by these instruments, giving them choices in	
	spectroscopic instruments.	
	CO2: Students will learn about the simple and advanced tools used for	
	analysis such as NMR, MS, AAS, ICP and thermal analysis (TGA, DTA,	
	DSC, etc.) techniques spanning wide variety of samples to be considered	
	for analysis.	
	CO3: Students will learn about instrumentation, sample preparation and	
	sample handling, analysis and data interpretation, and structural	
	elucidation.	

	CO4: Learning about different tools will give them an idea of the right
	CO4: Learning about different tools will give them an idea of the right
	choice of tool for analysis based on the type of sample source and analyte
	under consideration.
	Part-II Semester-III
<b>Organic Reaction</b>	CO1: Develop the ability to use effective written and/or oral
Mechanism	communication through the application of organic chemistry concepts.
(OCH.3.1)	CO2: Provides a basic understanding of how organic chemistry affects the
	natural and technological environment.
	CO3: This course provides a comprehensive understanding of organic
	reaction mechanisms.
	CO4: This course will introduce ideas about pericyclic reactions.
Advanced Spectroscopic	CO1: Students will be able to use various stretching and bending
Methods	vibrational modes in IR spectroscopy and apply their knowledge in the
(OCH.3.2)	definition of functional groups.
	CO2: Understand mass spectral fragmentation techniques in the context of
	structure determination.
	CO3: Understand how to interpret a nuclear magnetic resonance spectrum
	from chemical shift values.
	CO4: Students will have an idea of Beer Lamberts Law and its
	applications.
Advanced Synthetic	CO1: Applications of Reagents help students in designing multistep
Methods	organic syntheses.
(OCH.3.3)	CO2: They can use advanced techniques like microwave, ionic liquid,
	ultrasound, etc. during their higher education.
	CO3: Knowledge of retro-synthetic analysis helps in the study and design
	of new reactions.
	CO4: Students will have the ability to develop environmentally friendly
	methods for organic transformation.
(A) Drugs and	CO1: Able to correlate structure activity relationships of bioactive
Heterocycles	compounds.
(OCH.3.4)	CO2: Give an idea of different classes of drugs for specific diseases.
	CO3: Use their knowledge in the synthesis of various bioactive
	heterocycles.
	CO4: Able to identify reactions and applications of three, four, five, six
	and seven membered heterocycles.

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(B) Polymer Chemistry	CO1: Students will get to know the technique of polymerization.	SCHENCE
(OCH.3.4)	CO2: Students can identify the stereochemistry of polymers.	C.L.
(1)	CO3: Students will be able to apply their knowledge of polymerization in	
	industries.	
	CO4: Students will understand the chemical kinetics of polymers.	
	Part-II Semester-IV	
Theoretical Organic	CO1: Students will apply the principles of green chemistry to organic	
Chemistry	synthesis.	
(OCH.4.1)	CO2: Students will be able to identify aromatic compounds.	
	CO3: Students will get an idea of calculation of delocalization energy of	
	organic compounds.	
	CO4: Students will acquire knowledge of kinetic and thermodynamic	
	controlled reactions.	
Stereochemistry	CO1: The study of stereochemical aspects of organic molecules provides	
(OCH.4.2)	a very important tool for assigning the properties of bioactive molecules.	
· · · · · · · · · · · · · · · · · · ·	CO2: Students will have good knowledge about structures of acyclic and	
	cyclic compounds.	
	CO3: Students will have good skills in designing new bioactive molecules	
	with specific stereochemical properties.	
	CO4: Students will have an idea of the use of chiral reagents in	
	asymmetric synthesis.	
Chemistry of Natural	CO1: Gain knowledge about the classification of natural products and	1
Products	their stereochemistry.	
(OCH.4.3)	CO2: Explain the principles of biosynthesis, green synthesis,	
(3.5	stereoselective transformations and its physiological role in human body.	
	CO3: Understand the structure and synthesis of various hormones.	
	CO4: Able to understand vitamin deficiency and importance of various	
	vitamins in human health.	
(A) Applied Organic	CO1: This knowledge helps students to get placement in Agrochemicals,	
Chemistry	Cosmetic, Pharmaceuticals, Dyes, Polymers industries, etc.	
(OCH.4.4)	CO2: Students will gain knowledge of cosmetics, perfumes and food	1.
	flavors in everyday life.	
	CO3: Knowledge of unit processing will be useful for automation	
	industries.	
	CO4: Students will get an idea of the synthesis of pesticides and their	

	application in agriculture.
(B) Bioorganic	CO1: Students will understand the concept of biomacromolecules.
Chemistry	CO2: Students will get an idea about the classification, structure and
(OCH.4.4)	functions of various bioorganic molecules.
	CO3: Students will understand the structure and functions of plant and
	animal cells.
	CO4: Students will understand the physiological role of RNA, DNA and
	enzymes.

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### Shivraj College of Arts, Commerce and D.S. Kadam Science College, Gadhinglaj.

#### M.Sc. I (Computer Science)

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

MSc-I Semester-I (Computer Science) CS2111 : Theory of Languages MSc (Choice Based Credit System)

CO 1	To uncover and understand the current directions of computer networks from literature readings.
CO 2	To expose students to the "full span" of the computer network's frontier { a breath goal }.
CO 3	To encourage a performance perspective towards analysis of computer and communications networks.
CO 4	To "fill-in" gaps in students' networking knowledge

MSc-I Semester-I (Computer Science) CS2112 : Advance Computer Networks MSc (Choice Based Credit System)

CO 1	Understand the basic properties of formal language and grammars.
CO 2	Differentiate regular, context-free and recursively enumerable languages.
CO 3	Make grammars to produce strings from a specific language.
CO 4	Acquire concepts relating to the theory of computation and computational models.

MSc-I Semester-I (Computer Science)

CS2113 : Advance Data Base Theory

MSc (Choice Based Credit System)

CO 1	Define the terminology, features, classifications, and characteristics embodied in database systems
CO 2	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS
CO 3	Formulate, using SQL, solutions to a broad range of query and data update



	problems.
CO 4	Use PL/SQL for handing data in a database as per the user's requirement using programming features.
CO 5	Define various cursors and its implementation along with procedure and functions.

MSc-I Semester-I (Computer Science) CS2115 : Database Lab MSc (Choice Based Credit System)

CO 1	Demonstrate a familiarity with data structures and algorithms.
CO 2	Employ graphs to model real life problems, when appropriate. Develop algorithms that employ graph computations as key components, and analyze them.
CO 3	Be familiar with advanced data structures such as balanced search trees, hash tables, Red-Black trees, Btrees.
CO 4	Understand Divide & Conquer approach, Greedy algorithm, Backtracking approach for algorithm design

MSc-I Semester-II (Computer Science)

CS2211 : Compiler Techniques

MSc (C	hoice Based Credit System				
CO 1 Understand scanner and parser using LEX and YACC tools.					
CO 2	Derive the three-address code from the parse tree.				
CO 3	Understand the code optimization techniques to improve the performance of the compiler.				

CS2213 : Java Programming

MSc (Choice Based Credit System)

CO 1	Apply problem solving by intelligent search approach.					
CO 2	Represent knowledge using AI knowledge representation techniques					
CO 3	Derive solutions for problems with uncertainty using Fuzzy theory.					
CO 4	To develop a good understanding of all aspects of Natural Language Processing(NLP) and Genetic algorithm					

MSc-I Semester-II (Computer Science)

CS2221 : Elective - I

MSc (Choice Based Credit System)

CO 1	The student will be able to develop distributed business applications, develop web pages using advanced server-side programming through servlets and Java server pages.
CO 2	Demonstrate approaches for performance and effective coding
CO 3	Develop component-based Java software using JavaBeans
CO 4	Understand the multi-tier architecture of web-based enterprise applications using Enterprise JavaBeans (EJB), use Struts frameworks, which gives the opportunity to reuse the codes for quick development and map Java classes and object associations to relational database tables with Hibernate mapping files



### MSc-I Semester-II (Computer Science)

CS2214	: Java Lab
CO 1	To understand the structure, function and characteristics of computer systems
CO 2	To understand the design of the various functional units and components of computers
CO 3	To identify the elements of modern instructions sets and their impact on processor design.
CO 4	To explain the function of each element of a memory hierarchy

### CS2215 : Project

MSc (Choice Based Credit System)

CO 1	Analyse and model requirements and constraints for the purpose of designing and implementing software artefacts and IT systems
CO 2	Design and implement software solutions that accommodate specified requirements and constraints, based on analysis or modelling or requirements specification
CO 3	Present a clear, coherent and independent exposition of software applications, alternative IT solutions, and decision recommendations to both IT and non-IT personnel via technical reports of professional standard and technical presentations.

### Shivraj College of Arts, Commerce and D.S. Kadam Science College, Gadhinglaj.

#### M.Sc. II (Computer Science)

#### COURSE OUTCOMES (COs)

MSc-II Semester-III (Computer Science) CS2311 : Internet Programming MSc (Choice Based Credit System)

CO 1	Analyze a web page and identify its elements and attributes.						
CO 2	Create web pages using XHTML and Cascading Style Sheets.						
CO 3	Build dynamic web pages using JavaScript.						
CO 4	Create XML documents and Schemas.						
CO 5	To introduce the fundamentals of Internet and the principles of web design.						
CO 6	To construct basic websites using HTML and Cascading Style Sheets.						
CO 7	To build dynamic web pages with validation using JavaScript objects and by applying different event handling mechanisms.						
CO 8	To develop modern interactive web applications using PHP, XML and MySQL.						

MSc-II Semester-III (Computer Science) CS2313 : Open Source Software's

MSc (Choice Based Credit System)

CO 1 Students will be able to describe the fundamental algorithms used in computer



	graphics and to some extent be able to compare and evaluate them					
CO 2	tudents will be able to work and interact through hands on experiences, to designs evelop and modify electronically generated imaginary using wide range of ophisticated graphical tools and techniques.					
CO 3	To summarize different hidden surface elimination algorithms and shading techniques used in computer graphics and digital media production.					
CO 4	To explain about the technology necessary for creating multimedia content for web, video, DVD, 2D, 3D graphics, sound and programming.					

MSc-II Semester-III (Computer Science) CS2313 : Open Source Software's MSc (Choice Based Credit System)

CO 1	Understand how server-side programming works on the web.
CO 2	PHP Basic syntax for variable types and calculations.
CO 3	Creating conditional structures
CO 4	Using PHP built-in functions and creating custom functions
CO 5	Understanding POST and GET in form submission.
CO 6	How to receive and process form submission data.
CO 7	Reading and writing cookies

MSc-II Semester-III (Computer Science) CS2314 : Open Source Software's Lab MSc (Choice Based Credit System)

CO 1	Identify the different project contexts and suggest an appropriate management strategy.				
CO 2	Practice the role of professional ethics in successful software development				
CO 3	Identify and describe the key phases of project management				
CO 4	Determine an appropriate project management approach through an evaluation of the business context and scope of the project.				

MSc-II Semester-III (Computer Science) CS2316 : Computer Graphics Lab MSc (Choice Based Credit System)

CO 1 Lab assignments based on Data Internet Programming Course.

MSc-II Semester-III (Computer Science) CS2317 : Project MSc (Choice Based Credit System)

CO 1	Gain skills as they apply knowledge effectively in diverse contexts.						
CO 2	Analyze and model requirements and constraints for the purpose of designing and implementing software artefacts and IT systems						
CO 3 Design and implement software solutions that accommodate specified r and constraints, based on analysis or modelling or requirements specifi							
CO 4	Present a clear, coherent and independent exposition of software applications, alternative IT solutions, and decision recommendations to both IT and non-IT personnel via technical reports of professional standard and technical presentations.						

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# The attainment level for course outcome is defined as follows :

A = Number of students scoring 50% or less than 50% marks.

Level 0: A = 0 % (No. of student from a class scores 50% or less than 50% marks)

Level 1: 0 % < A < 20%

Level 2:  $20\% \le A < 50\%$ 

Level 3:  $A \ge 50\%$ 

# Target level for CO attainment is set at 2.5

CO attainment by both methods is measured and results are obtained.

# Attainment of programme outcomes at UG levels

CO's contribute to the attainment of programme outcomes. PO attainment is defined at three levels. It is based on the average outcome attainment levels of corresponding courses and programme specific outcomes and programme specific activities progression and placement.

# Programme outcome attainment target level is set at level -2.5

The main purpose of college is to achieve minimum level of 2.5 in the performance of students. This method consist of University rank holders, students with meritscholarships, taking higher studies and doing jobs. After completion of UG courses , students opt themselves in academics , industry, research and law which is an indication of higher attainment level of PO's. Feedback is collected from alumini and employers on curricular aspects and their suggestions are considered . Acadmic audits are conducted every year by IQAC to observe analyze the results in semester examination and give suggestions to improve attainment of the CO , PO and PSO .

# Academic Year 2021 – 22 Sample CO Attainment table



# Class- B.Sc.III Physics(Sem VI)

Paper Title	Direct Me	ethod		Indirect Method			
	Number of students securing 50% or more marks	Total number of students	% of students securing 50% or more marks	Attainment level	Activities	Attainment level	Average of direct and indirect methods
Nuclear and particle physics	14	14	100	3	3	3	3

# Class- B.Sc. III Computer Science(Sem - V)

Paper Title	Direct Method				Indirect Method		
	Number of students securing 50% or more marks	Total number of students	% of students securing 50% or more marks	Attainment level	Activities	Attainment level	Average of direct and indirect methods
Linux -l	119	121	98.34711	3	3	3	3

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# Academic Year 2021 – 22 Sample CO Attainment table



### Class- B.Sc. III Physics(Sem - VI)

Paper Title	Direct Me	ethod		Indirect Method			
	Number of students securing 50% or more marks	Total number of students	% of students securing 50% or more marks	Attainment level	Activities	Attainment level	Average of direct and indirect methods
Nuclear and particle physics	14	14	100	3	3	3	3

# Class- B.Sc. III Computer Science(Sem - V)

Paper Title	Direct Me	thod		Indirect Method			
	Number of students securing 50% or more marks	Total number of students	% of students securing 50% or more marks	Attainment level	Activities	Attainment level	Average of direct and indirect methods
Linux -l	119	121	98.34711	3	3	3	3

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