



# 2.6.1 Programme Outcomes (POs).Programme Specific Outcomes (PSOs) and Course Outcomes for all courses.

Sr. No	Programme	Subjects
1		Marathi (Second language and Optional)
2		Hindi (Second language and Optional)
3		English (Compulsory and Optional)
4		Sociology
5	<b>B.A.</b>	History
6	<b>B.A.</b>	Political Science
7		Economics
8		Physical Education
9		Geography
10		Public Administration
11	M.A.	Geography
12		Chemistry
13		Zoology
14		Botany
15		<b>Environmental Science</b>
16	B.SC.	Microbiology
17		Physics
18		Electronics
19		Mathematics
20		Computer Science
21	M.SC.	Zoology
22	M.A.	Marathi

# **Faculty of Arts**

### Department of Marathi Programs offered: B.A. Marathi

Sr.	Program	Program objective	<b>Program Specific Objectives</b>
No.			
	B.A. Marathi	उच्च माध्यमिक शिक्षणानंतर	PSO1. मराठी गद्य प्रकाराची आणि
		विद्यार्थी महाविद्यालयीन	त्याच्या उपघटकांची या माध्यमातून ओळख
		शिक्षण घेतांना ऐश्चिक मराठी	होते.
		हा विषय अधिक स्वरुपात ज्ञान	PSO2. कथा, कादंबरी, नाटक कविता,
		मिळावा ही अपेक्षा असते.	आत्मचरित्र या साहित्यप्रकारा मुळे
		विद्यार्थ्यांमध्ये भाषीक गोडी	विद्यार्थ्यांमध्ये संवेदना व भावना या
		सोबतच वाङ्मयीन प्रकाराची ओळख व्हावी व या विषयात	मूल्यांची पेरणी होते.
		रोजगार संधी तयार व्हावी हा	PSO3. व्याकरणाच्या अभ्यासातून
		मुख्य उद्देश मराठी विषय	व्यवहारात उपयोजन लक्षात येते.
		अभ्यासण्यापाठीमागे आहे.तसेच	PSO4. मराठी विषय घेतलेल्या
		भावनिक क्षमता व	विद्यार्थ्यांना मुद्रितशोधन, अनुवाद लेखन
		संवेदनशीलता विद्यार्थ्यांनी	आणि जाहिरात, बातमी यासारख्या
		आत्मसात करावी हा उद्देश आहे.	वेगवेगळ्या क्षेत्रात काम करण्याची संधी
			प्राप्त होते.
			PSO5. समाजजीवनातील बारीक-सारीक गोष्टी
			निरीक्षणातून सर्जनशील तिची निर्मिती होते.

## Courses offered: F.Y.B.A. Marathi, S.Y.B.A. Marathi and T.Y.B.A. Marathi

Sr.	Course	Course outcome
No.		
	B.A. F.Y.	CO Paper- I: आधुनिक मराठी कथा वाङ्मय.
		१) विद्यार्थ्यांनी कथा वाङ्मय हा प्रकार व्यवस्थितपणे समजून घेतले आहेत.
		२) विद्यार्थ्यांना मराठी कथा साहित्य प्रकाराचे कालानुक्रमे स्वरूप लक्षात
		आले.
		३) हा पेपर अभ्यासल्या नंतर विद्यार्थ्यांना साहित्याच्या विविध प्रकाराची
		ओळख झाली.
		४) कथा साहित्यप्रकाराची अभिरुची निर्माण झाल्याने यासारखी अनेक
		कथा त्यांनी मिळून वाचलेल्या आहेत.
		५) या अभ्यासाच्या माध्यमातून विद्यार्थ्यांना विविध बोलीभाषेचा परिचय
		झाला.
		६) भाषिक कौशल्यांचा या पेपरच्या अनुषंगाने विद्यार्थ्यांमध्येही कला
		काहीप्रमाणात अवगत झाली
		CO paper II मध्ययुगीन आणि आधुनिक मराठी पद्य वाङ्मय
		१)मध्ययुगीन व आधुनिक काव्यप्रकाराची ओळख झाली
		२)कवितेच्या परंपरेचा अभ्यास करता आला.
		३) कवितेचे विविध प्रकार, प्रवाह, प्रकृती व परंपरा यांचे आकलन झाले.
		४) कवितेचे रचना बंदाची ओळख झाली.

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	CO Paper – III. मराठी कथात्म साहित्य
	१) चरित्र आत्मकथन कथा प्रवास वर्णन ललित गद्य या वांग्मय प्रकारातून
	विद्यार्थ्यांना साहित्य आणि संस्कृतीची ओळख झाली.
	२) अभ्यासक्रमातील घटकांच्या माध्यमातून महान व्यक्तिमत्त्वाचा परिचय
	झाला.
	३) चरित्र, आत्मकथनातून महान व्यक्तिमत्त्वाचा, अनुभूतीचा उपयोग त्यांच्या
	जीवनात होत असल्याचे त्यांच्या लक्षात आले.
	४) कथात्म साहित्यातील विविध लेखन प्रकारांची यानिमित्ताने विद्यार्थ्यांना
	माहिती झाली.
	५) मराठी कथात्म साहित्य अभ्यासताना विद्यार्थ्यांची वाचन आणि लेखन
	अभिरुची वृद्धिंगत झाली.
	६) साहित्याचा मानवी जीवनावर होणारा परिणाम या घटकाच्या
	अभ्यासातून विद्यार्थ्यांच्या लक्षात आला.
	CO Paper IV. मध्ययुगीन आणि आधुनिक मराठी पद्य वाङ्मय.
	१)विद्यार्थ्यांच्या भाषिक
	आकलनाची पूर्तता झाली.
	२) ओवी ते लावणी असा काव्याचा प्रवास समजला.
	३) मराठी कवितेच्या वैभवशाली परंपरा ची ओळख झाली.
	४) अलंकार, ओवी, मुक्तछंद ,उपदेशपर कवितेची ओळख झाली
B.A. S. Y.	CO Paper V निवडक मराठी गद्य
	१) मराठी गद्य साहित्याची ओळख झाली.
	२) ऐतिहासिक टप्यावरील बदलते गद्य अभ्यासले.
	३) मध्ययुगीन आधुनिक काळातील गद्य लेखनाचे बारकावे तपासता आले.
	४) गद्य साहित्यातील विविध लेखनप्रकार माहिती झाली.
	५)अभ्यास घटका आधारे तत्कालीन परीस्थितीवर प्रकाश टाकता आला
	CO Paper VI- मराठी नाट्यम साहित्य.
	१]आधुनिक मराठी नाटकाच्या प्रेरणा समजून घेतल्या.
	२] साठोत्तरी मराठी नाटकांचा नाटकाच्या जाणिवांचा अभ्यास केला.
	३]नाट्य प्रकारांचा जवळून अभ्यास केला.
	४]जागतिकीकरणाच्या परिप्रेक्ष्यातून मराठी नाटकांची मीमांसा केली.
	५]आधुनिक नाटकाच्या प्रवाहातील वांग्मयीन आणि रंगमंचाची मूल्यांची
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	मामासा कला.
	मीमांसा केली. Co Paper VII निवडक कादंबरी वाङ्मम.
	Co Paper VII निवडक कादंबरी वाङ्मम .
	Co Paper VII निवडक कादंबरी वाङ्मम . १]कादंबरी वाङ्मम प्रकार समजून घेतला.
	Co Paper VII निवडक कादंबरी वाङ्मम .         १]कादंबरी वाङ्मम प्रकार समजून घेतला.         २]मराठी कादंबरी वाङ्मम कालानुक्रमे स्वरूप समजून घेतले.
	Co Paper VII निवडक कादंबरी वाङ्मम . १]कादंबरी वाङ्मम प्रकार समजून घेतला. २]मराठी कादंबरी वाङ्मम कालानुक्रमे स्वरूप समजून घेतले. ३]कादंबरी वाङ्मम लेखना नुसार विविध प्रकाराची ओळख तयार झाली.
	Co Paper VII निवडक कादंबरी वाङ्मम .         १]कादंबरी वाङ्मम प्रकार समजून घेतला.         २]मराठी कादंबरी वाङ्मम कालानुक्रमे स्वरूप समजून घेतले.         ३]कादंबरी वाङ्मम लेखना नुसार विविध प्रकाराची ओळख तयार झाली.         ४]कादंबरी वाङ्मम यात विद्यार्थ्यांची अभिरुची निर्माण झाली.
	Co Paper VII निवडक कादंबरी वाङ्मम . १]कादंबरी वाङ्मम प्रकार समजून घेतला. २]मराठी कादंबरी वाङ्मम कालानुक्रमे स्वरूप समजून घेतले. ३]कादंबरी वाङ्मम लेखना नुसार विविध प्रकाराची ओळख तयार झाली. ४]कादंबरी वाङ्मम यात विद्यार्थ्यांची अभिरुची निर्माण झाली. ५) कादंबरी लेखनाची संरचनासूत्र लक्षात आले.
	Co Paper VII निवडक कादंबरी वाङ्मम .         १]कादंबरी वाङ्मम प्रकार समजून घेतला.         २]मराठी कादंबरी वाङ्मम कालानुक्रमे स्वरूप समजून घेतले.         ३]कादंबरी वाङ्मम लेखना नुसार विविध प्रकाराची ओळख तयार झाली.         ४]कादंबरी वाङ्मम यात विद्यार्थ्यांची अभिरुची निर्माण झाली.

	२]कालानुक्रमे अभ्यास घटकाद्वारे अध्ययन सुलभता निर्माण झाली.
	३]आधुनिक कालखंडातील विचारधारा समजून घेतली.
	४]अभ्यासाच्या व लेखनाच्या अभिरुची विकसित झाल्या.
	५]वैचारिक वाङ्ममयाचा परिचय घडला.
B.A. T.Y.	CO paper-IX मध्ययुगीन मराठी वांग्मयाचा इतिहास.
	१) मराठी वांग्मयाचा स्वरूप अभ्यासता आले.
	२) मध्ययुगीन संत वांग्मयाचा परिचय करून घेता आले.
	३) मध्ययुगीन साहित्य बद्दलची अभिरुची वाढली.
	४) साहित्यातून प्रकट झालेल्या मानवी मूल्यांचा परिचय झाला.
	५) वांग्मय निर्मितीच्या प्रेरणा माहीत झाल्या.
	CO Paper X साहित्यविचार.
	१) साहित्य म्हणजे काय त्याची लक्षणे विद्यार्थ्यांच्या लक्षात आली.
	२) भामह, रुद्रट, दंडी, भरतमुनी या काव्य शास्त्राची ओळख झाली.
	३) अतिशयोक्ती,रस,ध्वनी व पाश्चात्यांनी सांगितलेले प्रयोजन लक्षात आले.
	४) साहित्याची भाषा आणि शब्द शक्ती विचार विद्यार्थ्यांनी आकलन करून
	घेतले.
	५) भरत मुनीचा रस सिद्धांत आणि साहित्य सिद्धांताचे महत्त्व त्यांच्या लक्षात
	आले.
	CO Paper XI मध्ययुगीन मराठी वाङ्ममयाचा इतिहास
	१) मध्ययुगीन रचनाप्रकार अवगत झाले.
	२) संत साहित्य, पंडित साहित्य, शाहिरी साहित्य बखर साहित्य या प्रकाराची
	माहिती झाली.
	३) मध्ययुगातील महानुभव, नाथ, वारकरी ,समर्थ दत्तसंप्रदायाची विचार व
	आचार पद्धती लक्षात आली.
	४) मध्ययुगीन भाषेतील शब्दकळा व भाषिक सौंदर्य विद्यार्थ्यांनी आकलन
	करून घेतले.
	CO Paper XII भाषाविज्ञान व व्याकरण.
	१) अभ्यासघटक अभ्यास केल्यानंतर विद्यार्थ्यांमध्ये भाषेबद्दलची आवड
	निर्माण झाली.
	२) भाषाविज्ञान आणि मराठी भाषा यांचा सहसंबंध लक्षात आला.
	३) भाषेचे मुख्य कार्य कोणते असतात? हे लक्षात आले.
	४) ऐतिहासिक भाषा विज्ञान म्हणजे काय? याचा परिचय झाला.
	५) अर्थपरिवर्तन व ध्वनी परिवर्तन या भाषिक परिवर्तनाची माहिती
	मिळाली.
	६) प्रमाण लेखनाचे नियम व्यवहारात किती उपयोगी असतात हे लक्षात आले.
	७) व्याकरणातील प्रयोग विचार व विभक्ती विचार यांचे स्वरूप समजून
	घेतले.
	वत्त्व.

# Department of Hindi

Programs offered: B.A.Hindi,

Sr. No.	Program	Program objective	<b>Program Specific Objectives</b>
	B.A.	राश्ट्रभाशा हिंदी के प्रचार	PSO I & III. हिंदी साहित्य की कहानी

Hindi	तथा प्रसार हेतु अहिंदी प्रदे । के छात्रों को	और उपन्यास विधा से छात्रों का परिचय कर छात्रों में चिंतन एवं लेखन भौली का
	राश्ट्रभाशा हिंदी के प्रति	विकास करना।
	आकर्शित करना तथा हिंदी	PSO II & IV. हिंदी नाटक और एकांकी
	भाशा में उच्च िक्षा ग्रहण	विधा का परिचय कर नाटक के प्रति
	करने की प्रेरणा देना मुख्य	छात्रों में रूचि उत्पन्न करना।
	लक्ष्य है। जीवन मुल्यों की	PSO (SL)I&II. अहिंदी क्षेत्र के छात्रों
	िक्षा के साथ साथ	को हिंदी भाशा का व्यावहारिक ज्ञान
	वर्तमान बेरोजगारी की	देना।
	समस्या को ध्यान में रखते हुए हिंदी भाशा के माध्यम	PSO V&VII. भक्ति साहित्य के अध्ययन
	से रोजगार के अवसर प्रदान	के माध्यम से छात्रों में मानवता का भाव
	करना महत्वपूर्ण उद्दे य	विकसित करना। काव्य आस्वादन से
	है।	मानवीय संवेदना का विकास करना।
	01	PSO VI &VIII. विविध कथेत्तर गद्य की
		विधाओं का परिचय कर कथेत्तर गद्य की
		रचनाओं के अध्ययन से चिंतन गिलता,
		वैचारिक प्रगल्भता तथा बौध्दिक प्रौढता
		का विकास करना।
		PSO (SL) III&IV. द्वतीय भाशा
		के छात्रों को प्रयोजनमूलक हिंदी का सामान्य परिचय देना।
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		PSO IX. हिंदी साहित्य के बृहत इतिहास का परिचय करवाना।
		PSO X. प्राद्योगिकी के युग में हिंदी भाशा की उपयोगिता से छात्रों को परिचित
		करवाना।
		<b>PSO XI.</b> छात्रों में साहित्य का भाास्त्रीय
		पद्धति से अध्ययन करने की दृष्टि
		विकसित करना।
		PSO XII. भाशा िक्षण के महत्व के
		साथ साथ भाशाई भाुध्दता एवं कु ालता
		के द्वारा रोजगार के अवसर उपलब्ध
		करना।
Courses offered: F.Y.B.A	A. Hindi, S.Y.B.A. Hindi an	d T.Y.B.A. Hindi

Sr.	Course	Course outcome
No.		
	B.A. F.Y.	CO Paper- I & III : कथा साहित्य
	Hindi	1. हिंदी साहित्य की कहानी और उपन्यास विधा से छात्रों का
		परिचय होगा।
		2. कथा साहित्य की लेखन भौली से परिचय होगा।
		3. छात्रों में चिंतन एवं लेखन भौली का विकास होगा।
		4. विभिन्न पात्रों की मानसिकता तथा लेखन किया कलापों से

	T
	छात्रों में सही और गलत को परखने की क्षमता विकसित
	होगी।
	5. साहित्य के माध्यम् से विविध समस्याओं से अवगत होकर
	उन समस्याओं के समाधान के लिए छात्रों को प्रेरणा
	मिलेगी।
	CO paper II & IV: नाटक तथा एकांकी
	1. हिंदी नाटक और एकांकी विधा का परिचय होगा।
	2. नाटक के प्रति छात्रों में रूचि उत्पन्न होगी।
	3. संवाद लेखन तथा वाचन को ाल का विकास होगा।
	4. छात्रों को रंगमंच से संबंधित जानकारी प्राप्त होगी।
	5. अभिनय के प्रति रूचि निर्माण होगी साथ ही अभिनय के क्षेत्र में करियर बनाने का अवसर प्राप्त होगा।
	CO Paper- I & II: साहित्य भारती (SL)  1. अहिंदी क्षेत्र के छात्रों को हिंदी भाशा का व्यावहारिक ज्ञान
	ा. आहदा क्षत्र के छोत्रा का हिदा माशा का व्यावहारिक ज्ञान प्राप्त होगा।
	<ol> <li>व. दिवतीय भाशा के रूप में छात्रों को हिंदी और साहित्य का</li> </ol>
	सामान्य परिचय होगा।
	3. अहिंदी क्षेत्र के छात्रों में हिंदी के प्रति रूचि उत्पन्न होगी।
	4. विविध साहित्यिक रचनाओं के माध्यम से छात्रों में नैतिक
	मूल्यों का विकास होगा।
	1091 97 1997(1 0111)
B.A. S.Y.	C1
B.A. S.Y. Hindi	CO Paper V मध्ययुगीन कविता खंड एक 1. भारतीय भवित साधना का परिचय होगा।
	CO Paper V मध्ययुगीन कविता खंड एक
	CO Paper V मध्ययुगीन कविता खंड एक 1. भारतीय भक्ति साधना का परिचय होगा।
	CO Paper V मध्ययुगीन कविता खंड एक 1. भारतीय भिवत साधना का परिचय होगा। 2. भिवत साहित्य के अध्ययन के माध्यम से छात्रों में मानवता
	CO Paper V मध्ययुगीन कविता खंड एक  1. भारतीय भक्ति साधना का परिचय होगा।  2. भक्ति साहित्य के अध्ययन के माध्यम से छात्रों में मानवता का भाव विकसित होगा।
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	CO Paper V मध्ययुगीन कविता खंड एक  1. भारतीय भिक्त साधना का परिचय होगा।  2. भिक्त साहित्य के अध्ययन के माध्यम से छात्रों में मानवता का भाव विकसित होगा।  3. समाजिक सिहश्णुता की वृत्ति का विकास होगा।  4. भिक्त तथा नीति की िक्षा से छात्रों का आत्मिक तथा अध्यात्मिक विकास होगा।  5. जीवन द नि तथा जीवन मूल्यों का विकास होगा।  Co Paper VI & VIII: निबंध तथा कथेत्तर गद्य
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	CO Paper V मध्ययुगीन कविता खंड एक  1. भारतीय भिक्त साधना का परिचय होगा।  2. भिक्त साहित्य के अध्ययन के माध्यम से छात्रों में मानवता का भाव विकसित होगा।  3. समाजिक सिहश्णुता की वृत्ति का विकास होगा।  4. भिक्त तथा नीति की िक्षा से छात्रों का आत्मिक तथा अध्यात्मिक विकास होगा।  5. जीवन दर्णन तथा जीवन मूल्यों का विकास होगा।  Co Paper VI & VIII: निबंध तथा कथेत्तर गद्य  1. निबंध विधा का परिचय होगा।  2. छात्रों में वैचारिक प्रगल्भता तथा बौध्दिक प्रौढता का विकास होगा।  3. कथेत्तर गद्य की रचनाओं के अध्ययन से चिंतन जिलता की वृध्दि होगी।  4. विविध कथेत्तर गद्य की विधाओं का परिचय होगा।  CO Paper VII आधुनिक कविता खंड दो  1. आधुनिक हिंदी काव्य का परिचय होगा।
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	CO Paper V मध्ययुगीन कविता खंड एक  1. भारतीय भिक्त साधना का परिचय होगा।  2. भिक्त साहित्य के अध्ययन के माध्यम से छात्रों में मानवता का भाव विकसित होगा।  3. समाजिक सिहश्णुता की वृत्ति का विकास होगा।  4. भिक्त तथा नीति की िक्षा से छात्रों का आत्मिक तथा अध्यात्मिक विकास होगा।  5. जीवन दर्णन तथा जीवन मूल्यों का विकास होगा।  Co Paper VI & VIII: निबंध तथा कथेत्तर गद्य  1. निबंध विधा का परिचय होगा।  2. छात्रों में वैचारिक प्रगल्भता तथा बौध्दिक प्रौढता का विकास होगा।  3. कथेत्तर गद्य की रचनाओं के अध्ययन से चिंतन जिलता की वृध्दि होगी।  4. विविध कथेत्तर गद्य की विधाओं का परिचय होगा।  CO Paper VII आधुनिक कविता खंड दो  1. आधुनिक हिंदी काव्य का परिचय होगा।

	समस्याओं के निराकरण के लिए प्रेरणा प्राप्त होगी।
	CO Paper- III : कथेत्तर गद्य (SL)  1. अहिंदी क्षेत्र के छात्रों को दिवतीय भाशा के रूप में हिंदी
	भाशा तथा हिंदी साहित्य का ज्ञान होगा।
	2. कथेत्तर गद्य के अध्ययन से छात्रों में चिंतन गिलता,
	वैचारिकता का विकास होगा।
	3. अहिंदी क्षेत्र के छात्र हिंदी की कथेत्तर गद्य की विधाओं
	तथा रचनाओं से परिचित होंगे।
	4. कथेत्तर गद्य की विविध रचनाओं के द्वारा छात्रों में
	दे ाभक्ति, सामाजिक दायित्व, कर्तव्यपरायनता, नैतिकता
	आदि मूल्यों का विकास होगा।
	CO Paper- IV: नाटक तथा प्रयोजनमूलक हिंदी (SL)
	1. दि्वतीय भाशा के छात्रों को हिंदी नाटक साहित्य का
	सामान्य परिचय होगा।
	2. संवाद लेखन तथा वाचन कौ ाल का विकास होगा।
	3. दि्वतीय भाशा के छात्रों को प्रयोजनमूलक हिंदी का
	सामान्य परिचय होगा।
	4. प्रयोजनमूलक हिंदी के अध्ययन से रोजगार के अवसर
	प्राप्त होंगे।
	5. मिडीया लेखन कौ ाल विकसित होगा।
	<ol> <li>इंटरनेट की उपयोगिता, वेब सर्चिंग, इ मेल निर्माण तथा प्रेशण आदि का ज्ञान प्राप्त होगा।</li> </ol>
B.A. T.Y.	CO Paper IX हिंदी साहित्य का इतिहास
Hindi	1. हिंदी साहित्य के बृहत इतिहास का परिचय होगा।
	2. हिंदी साहित्य के सृजन की पृश्टभूमि का बोध होगा।
	3. साहित्यिक प्रवृत्तियों का ज्ञान होगा।
	4. छात्रों को जीवन दर्गन तथा जीवन मूल्यों की िक्षा
	प्राप्त होगी।
	5. साहित्य के इतिहास का अध्ययन भविश्यकालीन निर्माण में
	महत्वपूर्ण साबित होगा।
	CO Paper X: हिंदी भाशा
	1. हिंदी भाशा के प्रति छात्रों में रूचि उत्पन्न होगी।
	2. हिंदी भाशा के प्रयुक्ति क्षेत्रों से परिचय होगा।
	3. प्राद्योगिकी के युग में हिंदी भाशा की उपयोगिता से छात्र
	परिचित होंगे।
	4. बहुभाशिक वि गल भारत की संपर्क भाशा के रूप में
	हिंदी भाशा उपयोगीता सिध्द होगी।
	5. हिंदी भाशा अध्ययन के द्वारा नये नये रोजगार के अवसर
	प्राप्त होंगे।

	Paper XI: साहित्याास्त्र
1.	छात्रों में साहित्य का भाास्त्रीय पद्धति से अध्ययन करने
	की दृष्टि विकसित होगी।
2	छात्र साहित्य ॥स्त्र के महत्व को आत्मसात करेंगे।
3.	भाब्द और अर्थ के संबधों का बोध होगा।
4.	भाशाई ि ाल्प के परिवर्तनों का बोध होगा।
COI	Paper XII : भाशा िाक्षण
1.	भाशा ि ।क्षण के महत्व से परिचय होगा।
2	हिंदी भाशा की व्याकरणिक कोटियों से परिचय होगा।
3.	भाशाई भुध्दता एवं कु ालता के द्वारा रोजगार के अवसर
	प्राप्त होंगे।
4.	हिंदी भाशा के साथ साथ विज्ञान तथा व्यापार की अद्यतन
	जानकारियाँ प्राप्त होंगी।
5.	छात्रों में लेखन कौ ाल विकसित होगा।

Department of English
Programs offered: B.A.English

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Sr.	Program	Program objective
No.		
	B.A/B.SC First	Objectives:
	year	1) To enable the leaner's to communicate in English through
	Compulsory	close reading of select literary texts.
	English	2) To develop the skills of speaking, listening, reading, writing,
		viewing and representing by conducting classroom activities
		prescribed in the curriculum.
		3) To enable the leaner's to make the use of English language
		for shaping and making meaning according to purpose,
		audience and the context.
		4) To train the learners think in ways that are imaginative,
		creative, interpretive and critical.
		5) To help the learners for acquiring ways of expressing
		themselves and their relationships with others and their world.
		6) To induce the learners for reflecting on their learning
		through their study of English.
		Intended Outcomes:
		1) Through responding to and composing a wide range of texts,
		the learners will begin to use the English language in the best
		possible manner.
		2) Through the close study of texts, students will develop
		knowledge, understanding and skills in order to communicate
		effectively in English.
		3) Learners will value and appreciate the importance of the
		English language as a key to learning.
		4) Learners will gain the personal enrichment from study of
		literary pieces in English.
		5) Learners will acquire ability to communicate through oral

		and written texts.	
В.	A/B.SC	Objectives:	
se	cond Year	1) To enhance the ability of the learners to communicate in	
Co	ompulsory	English through close reading of	
Er	nglish	Select literary texts.	
		2) To develop the skills of speaking, listening, reading, writing, viewing and representing by	
		Conducting classroom activities prescribed in the curriculum.  3) To make the learners capable in the use of English language for the purpose of meaningful	
		Communication.	
		4) To impart the creative, interpretive and critical skills through close reading and exercises in	
		the prescribed text.	
		5) To refine the linguistic competence of the learners through	
		lessons in essential grammar.	
		6) To carry out a training of using the English language for media and electronic communication.	
		Intended outcomes	
		1) The learners will be able to use the English language in a refined way for the personal and	
		Social purposes.	
		2) The students will attain a higher level of understanding and	
		skills in order to carry out	
		Communicative activities.	
		3) Learners will be able to make practical use of the mechanics	
		of the English language.	
		4) Learners will be acquiring the skill of using English for media	
		and electronic communication.	
		5) The ability to communicate and interpret written texts shall	
		be augmented.	

Courses offered: F.Y.B.A.English, S.Y.B.A. English and T.Y.B.A English.

Sr. No.	Course	Course outcome	
SEMESTER	B.A. F.Y.Paper	Name of the course: Understanding Prose Fiction	
I	No I,II,III,IV	Objectives:	
	1 Understanding	1) To introduce the learners to the basics of Prose Fiction	
	Prose Fiction	in English through close reading of select literary texts.	
		2) To develop the skills of analysis, interpretation, and	
		critical scrutiny through the study of selected novels and	
		short stories.	
		3) To acquaint the learners with the art of fiction writing	
		in English.	
		Intended Outcome	
		1) Learners will be able to appreciate the texts in English	
		Prose Fiction genre.	
		2) Through responding to different texts of Prose Fiction,	
		the learners will acquaint themselves with the wide range	
		of expressions in the English language.	

		3) Learners will carry out the tasks of interpretation of novels and short stories by studying the critical analyses of the prescribed texts.
	2 Understanding	Paper 2-: Understanding Poetry in English
	Poetry	Objectives: 1) To introduce the learners to the basics of Poetry in English through close reading of select literary texts.
		2) To develop the skills of analysis, interpretation, and critical scrutiny through the study of diverse poetic texts.  3) To acquaint the learners with the art of Poetry writing in English.  Intended Outcome:
		<ol> <li>Learners will be able to appreciate English Poetry with an understanding of diverse poetic forms and themes.</li> <li>Through responding to different Poetic texts the learners will acquaint themselves with the various nuances of poetic expressions in the English language.</li> <li>Learners will carry out the tasks of interpretation of poems by studying the critical analyses of the prescribed</li> </ol>
		texts.
SEMESTER	3 Understanding Nonfictional Prose	Paper 3-: Understanding Non-Fictional Prose in English Objectives:  1) To introduce the learners to the basics of Non-fictional prose in English through close reading of select literary texts.  2) To develop the skills of analysis, interpretation, and critical scrutiny through the study of diverse Non-fictional prose writings.  3) To acquaint the learners with the art of Non-fictional prose in English.  Intended Outcome:  1) Learners will be able to appreciate English Non-fictional prose with an understanding of various prose writings as developed through ages.  2) Through responding to different Prose writings learners will be enriched in the use of prose for diverse thematic expressions.  3) Learners will attain a certain degree of proficiency in the interpretation of English prose.
	4 Understanding Drama	Paper 4-: Understanding Drama in English Objectives:  1) To introduce the learners to the tradition of drama and the development of dramatic art through ages.  2) To develop the skills of analysis, interpretation, and critical scrutiny through the study of diverse dramatic texts. 3) To acquaint the learners with the art of Drama in English. Intended Outcome: 1) Learners will be able to appreciate English Drama with an understanding of

	realized description (1) (1) (2)
	various dramatic texts. 2) Through responding to different
	plays learners will be introduced to various types of
	dramatic experiences. 3) Learners will be able to critically
	analyze texts from different dramatic genres
<b>B.A.</b> S. Y.	Paper 5: Indian Writing in English
Paper No	Objectives
V,VI,VII,VIII	1) To introduces students to Indian Writing in English
Skill	from Colonial Age up to the
Enhancement	contemporary Age, through the study of various literary
	genres such as poetry, prose, essay and
	Drama.
	2) To refine the skills of critical thinking and rhetoric
	through thought-provoking personal
	Response writing, essay writing and research assignments.
	3) To equip students with the knowledge and skills to read
	and comprehend texts in Indian
	Writing in English
	Intended Outcomes  1) I compare will be able to appreciate the tayte in Indian
	1) Learners will be able to appreciate the texts in Indian
	Writing in English
	2) Through responding to different texts of Indian Writing
	in English the learners will acquaint
	Themselves with the wide range of expressions in the
	Indian English language.
	3) Learners will carry out the tasks of literary
	interpretation by studying the critical analyses of
	The prescribed texts.
	Paper 6: American Literature
	Objectives
	1) To address the works of several major writers from the
	American literary tradition.
	2) To introduce the landmarks in American literature in
	various literary genres.
	3) To impart an in depth understanding of writings with
	dominant debates of the period like
	Religious, social, philosophical, political, and aesthetic
	aspects of American Literary tradition.
	Intended Outcomes
	1) The learners will gain an overall insight of the
	American literature, and understand the
	Background, historical context, the importance of
	American literature and its role in the society.
	2) The learners will identify, explicate, and respond to key
	themes and elements in American
	literature in various literary genres.
	3)Students will be enabled to review and recognize the
	body of literary works from America and
1	will be able to understand the American spirit as well as to

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	analyze various literary innovations	
	and their culture.	
	Paper 7: Indian Literature in English Translation	
	Objectives	
	1) To introduce the students to the magnificent Indian	
	literary tradition through exposition to	
	Some representative works available in English	
	translation.	
	2) To acquaint the students with the rich heritage of Indian	
	regional literatures and their	
	Significance.	
	3) To induce the students to explore in depth the Indian	
	spirit as evident from the diverse genres.	
	Intended Outcomes  1) The students will acquire an introductory knowledge of	
	1) The students will acquire an introductory knowledge of	
	Indian literary heritage.	
	2) The students will be familiarized with the significant	
	socio-cultural issues in India through	
	Close reading of literary texts from diverse regions.	
	3) The students will realize the intellectual potential	
	available from the Indian literary texts from	
	Various Indian languages.	
	Paper 8: Women's Literature	
	Objectives	
	1) To introduce students to Women's Writing, through the	
	study of various literary genres	
	Written by women of different nationalities such as	
	poetry, prose, essay and drama.	
	2) To equip students with the knowledge and skills to read	
	and comprehend texts written by	
	Women.	
	3) To enable the students for identifying and describing	
	distinct literary characteristics of	
	Women's literature.	
	Intended outcomes  1) Stylength will be able to suitically analyze the stylength.	
	1) Students will be able to critically analyze the structure	
	and meaning of various literary works	
	Written by women authors.	
	2) Students will acquire knowledge of the major concerns	
	of the women through a reading of the	
	Representative works from different nations.	
	3) Students will be acquainted with the richness and depth	
	of the female experience as depicted through their literary	
	representations.	
Skill	Skills for Employability-I	
Enhancement	Employability-II	
Course (SEC) -	<b>Objectives of the Course:</b>	
Semester III	To provide sound knowledge and training of	
- CONTRACTOR AND	The state of the s	

Semester IV	Employability Skills to learners  To expose learners to a variety of self-instructional, learner-friendly modes of communication for improving their employability  To expose learners to a variety of sub-skills in order to hone their skills as required in the present job market  To develop a work culture among learners for upcoming job opportunities Utility of the Course:  Developing a course that meets requirements of the 21st century learners  Building Vocabulary comprising Spelling and Pronunciation in English  Developing dialogues for Conversation Skills  Developing activities for written communication  Developing strategies for professional skills and Soft Skills.
B.A. T.Y. Paper NO. IX,X,XI,XII & Skill Enhancement course OptionalEnglish	Title of the course: Literary Criticism -I Objectives:  1) To introduce the concept and significance of Literary Criticism in Literary Studies 2) To acquaint the learners to the Classical and Renaissance tradition of Western Literary Criticism 3) To familiarize the learners with the major contributions of select critics Intended Outcomes: 1) Learners will be able to understand the historical background of the canon of Western Literary Criticism 2) Learners will appreciate the various theories developed during the Classical times and European Renaissance 3) Learners will be sensitized to the foundations of different critical traditions
	Objectives:  1) To introduce the learners to the study of the physical aspects of speech.  2) To impart training in the transcription of the sounds of the English Language as per the International Phonetic Alphabet (IPA).  3) To familiarize the learners with the articulatory, acoustic and perceptual phonetics.  Intended Outcomes:  1) The learners will be able to perceive, and transcribe the sounds of the English language, while learning the acoustic and articulatory properties.  2) The learners will gain practical skills of transcribing

Т	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
	data in the International Phonetic Alphabet (IPA).
	3) The ability of synthesizing speech will be acquired.
	Objectives:
	1) To impart the knowledge of significant propositions
	propounded by major English
	Literary critics.
	2) To acqua in t the learners with the foundation for the
	development of critical schools in English
	Studies after the Renaissance.
	3) To enable the learners for undertaking practical
	criticism
	Intended Outcomes:
	1) Learners will understand the basic principles of
	Literary Criticism as revealed from the study of the
	individual critics.
	2) Learners will perceive the development of English
	Literary Criticism through the ages.
	3) An ability to appreciate literary text through the
	practice of actual critical analysis will be gained.
	Objectives:
	1) To develop a good understanding of modern English
	grammar.
	2) To enable the learners to produce grammatically and
	idiomatically correct language.
	3) To impart the knowledge of the theory and practice in
	the field of English grammar at contemporary times.
	Intended Outcomes:
	1) The learners will be able to have an appreciable
	understanding of English grammar.
	2) The learners will gain capability of producing
	grammatically and idiomatically correct
	spoken and written discourse.
	30 The learners will acquire the skill of locating language
	errors and ambiguities.
	. Objectives
	1. The course prepares the learners for a smooth entry in to
	the world of work
	2. Self-awareness and social awareness are developed
	3. Skill necessary for digita llife style are introduced
	Utility of the Course:
	1) Developing personal and social skills in the learners
	2) Creating gender awareness
	3) Developing skills for individual and group activities
	Objectives:
	1)To assist the learners for a smooth transition from
	student life in to the world of work.
	2)To develop the skills necessary for understanding one
	self and the socio-cultural group.

	3)To help the learners choose the best ways of utilizing their time, efforts and mental energies.  4)To provide training in skills required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats.  5)To make the learners able to use diverse technologies appropriately and effectively to retrieve information, interpret results, and judge the quality of that information. Prerequisites for the Course:  1. Handouts, course material and activity sheets  2. Progress chart of learners for evaluation of their performance.
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**Department of Economics Programs offered: B.A. Economics** 

rogram	rogram objective	rogram Specific Objectives
.A. Economics	contributed much to every sector of human development and it has responded to every current activities of knowledge. Economics is relevant to the emerging dynamics of the Indian Economy. The subject is practical and more useful and job-oriented in the multifaceted environment ranging from trade,	<ul> <li>SO3. To highlight the potential of various branches to become an entrepreneur.</li> <li>SO4. To equip the students with skills related to Banking as well as field based studies</li> <li>SO5. To inculcate interest and foundation for further studies in</li> </ul>
	hich are giving it a greater adaptability and exposure to students. To aprove the educational standard	
	3	A. Economics  Economic has contributed much to every sector of human development and it has responded to every current activities of knowledge. Economics is relevant to the emerging dynamics of the Indian Economy. The subject is practical and more useful and job-oriented in the multifaceted environment ranging from trade, industry to infrastructure and to the information technology; Economics develop a deeper insight in each students to enable him for the self-employment. Literature in Economics has been increasing at a rapid space. Theoretical and empirical contributions e made continuously  hich are giving it a greater adaptability and exposure to students. To prove the educational

Courses offered: F.Y.B.A. Economics, S.Y. B.A. Economics and T.Y.B.A. Economics

ourse	ourse outcome
.A. F.Y.	<ol> <li>CO Paper- I: Micro Economics</li> <li>Meaning, nature and scope will be studied in this course. 2.         Student's ability will be utilized to tackle the current economic problems.     </li> <li>Students will adept more knowledge in the field of modern economics by studying this course.</li> <li>This course will increase the utility and application to acquire more satisfaction in life.</li> </ol>
	CO paper II: Agriculture Economics  1. To study the main characteristics of Rural Economy in India 2. To study the concept of Production, Agriculture Production and Agriculture Productivity etc 3. To understand the role of Agriculture in economic Development. 4. To study of Agriculture All Aspect Which Impact the Economy.  CO Paper III: Micro Economics 1. To study the Concept and theories of Production. 2. To understand the concepts of Cost and Revenue. 3. To study the concepts of exchange through market structure. 4. To analyze the theory of distribution into various factors of production, such as: Land owner, labor, organizer, and Capital owner
	CO Paper IV: Agriculture Economics  1. To study the main characteristics of Agriculture Sector.  2. To understand the role of Agriculture in economy of India.  3. To study the concept of Agriculture Finance, Agriculture Price, Labor Market etc.  4. Students will understand the various challenges of Rural Labor Market in India.  5. Students will be study the problems of Agriculture Finance.
.A. S. Y.	CO Paper V: Macro Economics  1. To prepare the students to understand the basic introductory principles of macroeconomic theory.  2. To help students to understand the basic analytic framework and models of macroeconomics in a gradual manner.  3. To equip students to analyses the real world economic issues in a rational manner.
	Co Paper VI: Statistical Method  1. To apply quantitative skill to real economic problems.  2. To study the rank correlation coefficient and apply practically.  3. To study the various techniques in statistics.  4. To study the mathematical techniques in the competitive exams.  5. To study for the increase of the numerical efficiency among the student.

	CO Paper VII: Banking 1. Discuss Banking systems inexistence and how they are structured 2. Explain the relative importance of new modes of payments (cashless) in transactions. 3. Discuss the main types of cashless instruments and the main techniques employed by banks
	CO paper-VIII: Statistical Method  1. Students will get knowledge about how the value of money is decided.  2. Students will study price differentiation between base year and current year.  3. Students will study the change in economic factors in course of times.  4. Students will study the economic & social trend with the help of moving average method
A. T.Y.	CO Paper IX: Quantities Technique  1. Student will study the course as a guideline in the general economic affair.  2. Student will use techniques easily in the research of humanities.  3. The course will be useful to the student since the course is best on the techniques of statistics
	<ol> <li>CO Paper X: Indian Economy</li> <li>Student will acquire the knowledge of Indian Economy.</li> <li>Student will understand various challenges of Indian Economy.</li> <li>Student will be able to suggest various measures to policy makers for solution of economic problem.</li> <li>CO Paper XI: Quantities Technique</li> </ol>
	<ol> <li>Students will get knowledge about how the value of money is decided.</li> <li>Students will study price differentiation between base year and current year.</li> <li>Students will study the change in economic factors in course of times.</li> <li>Students will study the economic &amp; social trend with the help of moving average method.</li> </ol>
	CO Paper XII: Public Finance  1. Student will able to analyze different concept of public finance.  2. The student will understand the imbalance between public revenue and public expenditure.  3. The students will suggest various measures to decrease deficit.  4. The student will be able to evaluate working of recent finance commission

### **Department of History**

**Programs offered: B.A. History** 

r. rogram	rogramme objective	rogramme Specific Objectives
.A. History	The programme educational objective of the undergraduate programme in history, WILL be able to:  • To acquaint students ith the past and present of India and the World  • Impart a critical understanding of Indian society, economy, polity, and culture through a historical perspective  • To prepare students for a range of careers  • To stimulate intellectual curiosity and research attitude in the students  • To introduce the various Indian and foreign traditions of history writing	SO1. To understand the historical advancement of Ancient India from stone age to 647 A.D. PSO2. To understand the historical events from 648 A.D. to 1526 A.D. SO3. To understand the most important and inspiring history of Chhatrpati Shivaji Maharaj and his times. SO4. Students WILL understand the historical advancement of Mughal period 1526 to 1707 A.D. PSO5. To introduce Indian Freedom Struggle Movements in broad manner. SO6. To aware the students to know the contribution of Social Reformers & social change process in Modern Maharashtra. SO7.(SEC) To introduce the students to the Indian art & Tourism. SO8. (SEC) To introduce the students to the Indian art from past to present.

Courses offered: F.Y.B.A. History, S.Y. B.A. History and T.Y.B.A. History

r.	ourse	ourse outcome
Ο.		
	.A. F.Y.	CO Paper- I & III: History of Ancient India (up to 647 A.D.)  1. Student will have the brief introduction of Ancient Indian History.  2. students will have information of sources of Ancient Indian History.  3. Students are must be familiar with the religions in Ancient India.  4. Students are must be knowing the achievements of some eminent kings in Ancient India  5. Students will have more information of Indus valley civilization and Vedic age.  6. Create interest among students about Ancient periods Empire and Dynasty.
		CO Paper II & IV: History of India (648 to 1526 A.D.)  1. Students must be known about the archaeological and literary sources.  2. Students are must be familiar with historical events from 648 A.D. to 1526 A.D.  3. Develop a broad view among students about various Empire and dynasty.  4. Create an interest among the students about muslim invasions and dynasties.

	C V	CO Donor V & VII .
.A.	S. Y.	CO Paper V & VII: Chhatrpati Shivaji and his Times (1630 A.D. to 1707A.D.)
		1. Student will have the brief introduction of Chhatrpati Shivaji and his
		contribution.  2. Students will be aware of conflict of Chhatrpati Shivaji with
		Adilshahi and Mughal.
		3. Students are must be familiar with Adilshahi, Nizamshahi and Mughal.
		4) Students will be understand the real history of Chhatrpati Shivaji
		Maharaj and his times 5) Students will be understand the benevolent nature of Chhatrapati
		Shivaji's regime
		6) Students will be focus on the contribution of Chhatrpati Shivaji in building an independent Swarajya
		7) Students will be introduce the various policies regarding Agriculture,
		Water management, Environment and Scientific approach of Chhatrpati
		Shivaji Maharaj.  Co Paper VI & VIII: History of India (1526 A.D. to 1707
		A.D.)
		1) Students will have information of sources of Mughal History.
		2) Students will understand the historical advancement of Mughal period 1526 to 1707 A.D.
		3) Students will understand the Political aggressiveness of Mughal and
		British in this age. 4) It will develop the broad view about the religious development of
		Mughal and British in India.
		5) It WILL introduce the students about the contributions of Mughal Badshah and British governors.
EC	1	· · · · · · · · · · · · · · · · · · ·
		CO SEC Paper I & II TOURISM  1) To introduce the students to the Indian art.
		2) To appreciate the various contexts of lot of things about Tourism.
		3) To give wide exposer to the Tourism through site visits and visual
		effects. 4) To create awakening to conserve the heritage by way of establishing
		Tourist places.
		5) To enhance the views regarding the Indian Tourism. 6) To enrich the understanding of the students with reference to greative sites.
		6) To enrich the understanding of the students with reference to creative sites for Tourist.
		7) To enable the students for their vocational careers.
		<ul><li>8) To get jobs in Tourism Department and Tourism Industries.</li><li>9) To conserve the historical Monuments and places in their local areas</li></ul>
I.A	. T.Y.	1
		CO Paper IX & X: History of Modern India (1857- 1947 A.D.)
		1. To introduce Indian Freedom Struggle Movements in broad manner. 2. To instil the spirit of nationalism among students
		<ul><li>instil the spirit of nationalism among students.</li><li>3. Make the students responsible Citizen of the nation.</li></ul>
		4.To inculcate moral qualities like Devotion, Unity, Fraternity,
		Brotherhood in students.  5. To make the students aware of criticizing.
		6. To enhance the national interest among the students.
		<ul><li>7. To support the spirit of competency.</li><li>8. To inculcate the National and International virtues in the minds of</li></ul>
		8. To incurcate the National and International virtues in the minds of students.
		9. To enlighten the spirit of fellow feeling.
		10. To elaborate the Modern Indian History in various contexts.

	CO Paper X & XII : Social Reformers in Modern
	Maharashtra
	1. To acquaint the students with social change process in Modern
	Maharashtra.
	2. To introduce the educational development in Modern Maharashtra.
	3. To generate curiosity to study the Modern Times History of
	Maharashtra.
	4. To enhance the perception ability of the students.
	5. To widen the broad view of the students about the society.
	6. To aware the students to know the contribution of Social Reformers. 7. To
	contribute constructively towards the building of society.
	8. To make preparation for competitive examinations.
	9. To maintain the social harmony.
	10. To know the legacy of the great social reformers and thinkers
EC	CO SEC III & IV : Appreciation of Indian Art
	1. To introduce the students to the Indian art from past to present.
	2. To unfold aesthetic prosperity of the Indian art.
	3. To appreciate the various contexts of Indian art.
	4. To give wide exposure to the Indian art through site visits and visual
	effects.
	5. To create awakening to conserve the historical heritage by way of
	establishing the Museums.
	6. To enhance the views regarding the Indian Art.
	7. To enrich the historical understanding of the students with reference to creative arts.
	8. To enable the students for their vocational careers.
	9. To get jobs in Archaeology Department and Tourism Industries.
	10. To conserve the historical Monuments and places in their local areas.

Department of Sociology Programs offered: B.A. Sociology

r.	rogram	rogram objective	rogram Specific Objectives
	.A. Sociology		SO1. student learn basic concepts of Sociology and Student could acquire scientific Knowledge of introductory Sociology SO2. The Students learn societal objectives of Social integration Social reproduction and Social continuity SO3. The Students of Sociology must possess the Knowledge of

	various Health-related concepts and
	diseases.
	<b>PSO4.</b> Students know the basic
	concepts of sociology.
	<b>PSO5.</b> Students know our culture and the
	society problems
	<b>PSO6.</b> Students know the social
	health.
	<b>PSO7.</b> The coursealso has as its focus
	the changing patterns of inequality
	in contemporary societies and
	students to gain a better
	understanding of their situation and
	region.
	<b>Introduction Period</b>
	<b>PSO8.</b> students will have an
	opportunity to learn philosophical
	Background of various social
	movements in India.
	PSO9. Students Know present era
	rural development programmers
	improvement of the living standards
	and providing them opportunites for
	rural peoples.
	<b>PSO 10.</b> Students will be made to
	elaborate a framework for
	the
	observation of the present problems.
	The state process processing
Courses offered: FVRA Sociology S	Y.B.A. Sociology and T.Y.B.A. Sociology
Courses offered. F.1.D.A. Sociology, S	.1.D.A. Sociology and 1.1.D.A. Sociology

r. No.	ourse	ourse outcome
	.A. F.Y.	CO Paper- I: Introduction to Sociology  1. student will learn basic concepts of Sociology and Student could acquire scientific Knowledge of introductory Sociology
		O paper II: Major Social Institutions  1. Students will understanding of the basic social Institutions  2. The Students learn societal objectives of Social integration Social reproduction and Social continuity.
		O Paper – III. Basic Concepts in sociology  1. The student will be able know about the basic concepts of sciology.
		O Paper IV. Social Institutions and Its Problems Students know our culture and the society problems

	A. S. Y.	CO Paper V- Indian Society : Structure & Change
• £	A. S. Y.	Students will able to know the social changes between the present
		and the past is an evident feature of the society.
		2. The coursealso has as its focus the changing patterns of
		inequality in contemporary societies.
		3. It is quite hope that the sociological perspectives on society. The
		1 1 1
		ocial Milieupresented in proposed course will enable students to
		in a better understanding of their situation and region.
		o Paper VI Transformative Movement in India
		1. Students will know the India is multilingual multi ethnic and multi-
		cultural country. So that they are various traditions, customs, myths
		and rituals as well as ethics and social values too.
		2. Consequently this situation gives birth to radical social movements
		and Indian society in hermits of the unique features compared to
		other societies.
		3. students will have an opportunity to learn philosophical Back
		ground of various social movements in India.
		O Paper – VII Social Problems in Contemporary India Students
		will able to understand the consideration on the legal and the secular
		state in India. We will explore the contemporary Social issues, causes
		of crime, gender discrimination in various
		institutional context and women's issues that have been central
		it.
		O paper-VIII Human Rights and Society
		1. Studentsareable to understand in emerging aspects of applied
		knowledge in Human Rights and social issues under the surveillance
		of Indian constitution.
		2. Students will able to understand the present course introduced the
		update of new areas of sociological explorations related to
		Government policies & schemes as well as to develop familiarity
		with emerging areas of Human Resource and its interface with
		social issues.
		kill Enhancement Course – I Rural
		Society and Development
		To understand Rural Society
		2 To Know the various Rural Development Programmes.
		3 To understand issues in process of implementation of rural
		development programmes.
		kill Enhancement Course – II
		Problem of Slum
		1 To understand problem faced by people living in slums
		2 To Know slum people and their living conditions
		3 To Know various programmes related to problems of slum
	A. T.Y.	SE – A : Western Sociological Thinkers – I
• £	A. 1.1.	1. Students will able to understand the introduce with western
		social thinkers understand their analysis and build up your own
		ideas.
		2. Students will know about development stages of sociology. It is
		intended to coverthose who have made substantive contributions to social theory and research, including any sociology with sub field.

<ul> <li>GE – A: Methods of Social Research – I</li> <li>1. Students will understanding of the nature of social phenomena. The issue involved in social research and the ways and means of understanding and studying social reality.</li> <li>2. Firstly, on the study of research methods as a means of understanding social reality.</li> <li>3. Second, the tools and techniques are only instruments and not the end</li> </ul>
or goal of research. 4. Thirdly, there are different perspectives and methods (as a quantitative and qualitative research) of understanding social phenomena.
<ul> <li>EC – III: Social Counseling – 1</li> <li>1. Students will able to social counseling in sociology has very different kinds of Significance; social counseling has many challenges and issues in front of sociologist.</li> <li>2. Students will able to which tools and techniques to the students for social counseling.</li> </ul>
SE – B: Modern Sociological Thoughts in India – II  1. Studnets will help student to introduce with modern Indian Social Thinkers to understand their thoughts and build your own ideas.  2. Students will know the percolate and develop the philosophy and principles, to disseminate the constitutional literacy at grass root vel of society, by following multidisciplinary approach of thinking for getting solution of social problems.
GE – B: Techniques of Social Research – II  1. Students will able understanding of the nature of social phenomena.  2. Firstly, on the study of research methods as a means of understanding social reality.  3. Second, the tools and techniques are only instruments and not the end or goal of research.  4. Thirdly, there are different perspectives and methods (as a quantitative and qualitative research) of understanding social penomena. There are no universally accepted methods.
EC – III: Social Counseling – 2  1. Students will able to understand the moral ethics and values which would be helpful for the sustainable development of the human society.  his course has field work and field visit camp to provide portunities to students to understands issues and problem for solutions and adopt the counseling skills.

### **Department of Geography**

Programs offered: B. A. Geography

r.	rogram	rogram objective	rogram Specific Objectives
0.			CO1 T '1 4 1
	. A.	spire the students for	<b>SO1.</b> To provide through
	eography	arsuing higher studies	nowledge about various
		Geography and for	eographical factors
		coming an	<b>SO2.</b> To make the students aware of
		trepreneur and also	pplications of Geography subject in
		hable students to get	rious sectors.
		nployed in the	<b>SO3.</b> To highlight the potential of
		eography Related	rious branches to become an

ector	& Institutes,	trepreneur.
dustries,		<b>SO4.</b> To equip the students with
stitutes		ills related to laboratory as well as
stitutes	and in the	eld based studies
arious	concerning	<b>SO5.</b> To make the students aware
epartment	of State and	out conservation and sustainable
entral	Government	se of Natural resources.
ased	on Geography	<b>SO6.</b> To inculcate interest and
ıbject.		undation for further studies in
		eography.
		<b>SO7.</b> To address the socio-
		conomical challenges related to
		eography.
		SO8. To facilitate students for
		king up and shaping a successful
		reer in Geography.
		<b>SO9.</b> To create interest in nature
		nservation among the students
		SO10. The life of all living
		eatures on earth depends on nature,
		it is the duty of human beings to
		nserve nature.

Courses offered: B.A. F.Y. Geography, B.A.S.Y. Geography and B.A.T.Y. Geography

r	ourse	ourse outcome
0.		
	. A. F.Y.	CCGEOG- I - An Introduction toPhysical Geography  1) Students know about the formation and structure of Solar System  2) Students learn about the various planets in the solar system and their satellites  3) Students know about continental and ocean formation  4 Students learn about different types of landforms on Earth  5) Students know how the earth rotates  6) Students understand the effects of Rotation and Revolution of the earth  7) Students understand the truth about solar eclipse and lunar eclipse and misconceptions about it are removed
		CCGEOG- II - An Introduction toHuman Geography  1) Students know about Race evolution and types 2) Students have knowledge about nature and environment 3) Students know about the life of tribes living in different parts of the world.
		CCGEOG – III: Practical Geography  1) Students understand how standard is made and its importance in geography  2) Students understand the importance of Scale for map and plan.  3) Students are aware of various ReliefShowing methods  4) Students are aware of the landforms in the land view map.  CCGEOG- IV-Geomorphology

1) Students know about the creation and evolution of various ear forms.  2) Students know the process, type and process of rock formation.  3) By understanding the process of formation of internal a external forces of the earth, students get information about the for formed by external factors and internal forces.  4) Students get scientific information about disasters learthquakes and thus remove misconceptions about them.  CGEOG-V-Population Geography  1) Students know about population growth and distribution in the world and in India  2) Students have information about working population, gender ratio and literacy rate in India  CGEOG – VI: Practical Geography  1) Students acquire the skills of reading Indian topographical map.  2) Students get the skill to get information about various natural a cultural elements of the region on the basis of topographical map.  3) Students acquire the skills of presenting geographi information with the help of line graphs and bar graphs.  A. S. Y. CGEO- VII: Human Geography
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ratio and literacy rate in India  CGEOG – VI: Practical Geography  1) Students acquire the skills of reading Indian topographical map. 2) Students get the skill to get information about various natural a cultural elements of the region on the basis of topographical map. 3) Students acquire the skills of presenting geographi information with the help of line graphs and bar graphs.
CGEOG – VI: Practical Geography  1) Students acquire the skills of reading Indian topographical map. 2) Students get the skill to get information about various natural a cultural elements of the region on the basis of topographical map. 3) Students acquire the skills of presenting geographi information with the help of line graphs and bar graphs.
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. A. S. Y. CGEO- VII: Human Geography
. A. S. Y. CGEO- VII: Human Geography
1) Students know the real relationship between human a
environment
2) Knows the various functions of human beings
3) Knows about human life in different parts of the world
4) There is only one human being living in different regions of
earth but the geographical conditions of that region have creat
diversity in his way of life. Students get this message of national
unity through human geography
CCGEO- VIII Economic Geography
1) Students know about the economic activities of human beings
different regions of the earth
2) Students have knowledge about agriculture, mineral resource
energy resources, industries, trade and transportation in differ
regions.
3) Students understand the importance of having various natural
resources for the development of human life
4) Students have knowledge about conservation and planning
natural resources
CCGEO- IX Practical Geography
1) Students acquire skills in presenting various geographical
elements in two dimensional and distribution maps.
2) Students acquire skills to measure population density and
population growth
SEC I Tourism Geography
1) Students know various aspects of tourism
2) Students know the role of tourism center in the development of
various regions
3) Students acquire various skills related to tourism
CCGEO- X Geography of Maharashtra

	1) Students learn about the natural resources of Maharashtra, river
	system, soil, vegetation, minerals and energy resources
	2) Students get to know the various features of agriculture,
	irrigation, industrialization and population in Maharashtra and in all
	these factors they get information about where Maharashtra is
	compared to other states in India.
	CCGEO- XI Population Geography
	1) Students know about population growth and distribution in the
	world and in India
	2) Students have information about working population, gender
	ratio and literacy rate in India
	CCGEO- XII Practical Geography
	1) Students acquire skills to present meteorological data with the
	help of various meteorological graphs and figures.
	2) Students understand the design and operation of equipment for
	recording meteorological factors
	3) Students acquire the skills of how to read Indian daily weather
	condition map and identify the weather conditions based on it.
	SEC II Soil Geography
	1) Students know the process of formation and distribution of
	different types of soil on earth
	**
	2) Students understand the importance of soil for all living
	creatures on earth and especially for human development
	3) Students acquire soil conservation skills
. A. T.Y.	DSE GEOG-I XIII: Development of Geographical Thought
	– Part- I
	1) Students know about the development of geographical thinking
	from ancient to modern times
	2) Students know the role of thinkers of different times and
	different countries in the development of geography.
	GE GEOG-I XIV Geography of India – Part- I
	1) Students are aware of the natural elements of India, natural
	climate, river system, soil and vegetation
	2) Students have information about the distribution of water,
	mineral and energy research in India
	•
	3) Students know the importance of planning various resource
	wealth in India.
	DSE GEOG-II XV Practical Geography
	1) Students acquire skills to create different types of projections
	2) Students acquire the skill of surveying the land with the help of
	various instruments.
	SEC III An Introduction to Research Methodology
	1) Students know the steps of doing research work
	2) Students get the skills to do research work
	3) Students acquire the skill of Report writing based on the
	researched information
	DSE GEOGIIIXVI: Development of Geographical Thought –
	Part II
	1) Students know the basic concepts of geography
	2) Students get the skills to use various approaches to solve various

problems by getting acquainted with the study of geography and the paradigms in the subject.
GE GEOG-II XVII Geography of India – Part II  1) Students are aware of the factors affecting the population distribution in India.  2) Students are aware of the impact of the explosion of population growth in India on various sectors  3) Students have a real knowledge of agriculture, industrialization, trade and colonies in India  4) Students are aware of issues like regional inequality, poverty and gender in India's development
DSE GEOGIV—XVIII: Practical Geography  1) Students have the skill to measure various statistical techniques  2) Students understand the usefulness of computer and geographical information system in the study of geography. Through study tours, students gain observation skills and through village surveys, survey and report writing skills.
SEC IV Disaster Management  1) Students know about disaster management and disaster management rules  2) Gains skills to manage disasters before, during and after disasters.  3) Students acquire the skills to use remote sensing and geographic information systems in various disaster management  4) Students know the role of various agencies in disaster management.

Department of Physical Education Programs offered: B.A. Physical Education

r.	rogram	rogram objective	rogram Specific Objectives
0.			
	A. Physical Education	about all physical education games and sports. udents are achieve the goal in physical education. udents will participate in the national and international games.	SO1. student learn basic concepts of istory of Physical Education SO2. The Students learn Principle of Physical Education SO3. The Students of Sociology must possess the Knowledge of various Health-related concepts and diseases. SO4. Students know the Basic Anatomy, Physiologyand First Aid SO5. The course may provide opportunity to higher education specially in the field of hysical education SO6 The course is significant to enhance the abilities of the student to work in the different fields of Physical education in the area of coaching,

		_	&Curriculum
	develop	ment etc.	
	PSO7The	course is	helpful to get
	knowled	dge and skil	lls with respect
	to coach	ning, teachin	g,
	guidance d	& Curriculu	m development
	etc. in p	hysical educ	ation
	PSO8 The	e profession	al abilities and
	persona	lity of the s	tudents may be
	enhance	d	

Courses offered: F.Y.B.A. Physical education, S.Y.B.A. Physical education and T.Y.B.A. Physical education

r. No.	ourse	ourse outcome
	.A. F.Y.	O Paper I- History of Physical Education  1. student will learn basic concepts of Physical Education  2. Students know the history of physical Education  3. Students Know the awards in games and sports  O Paper II- Practical
		<ol> <li>Students will understanding Skill and techniques in running</li> <li>The Students learn about the optional games</li> <li>Students will understand the Indian games</li> </ol>
		O Paper III- Principal of Physical Education  1. The student will be able know Biological basic of physical education  2. Students is able to understand the meaning of play and games  3. Students will know about the role of National integrity and Indian culture
		O Paper IV- Practical Students will able to understand the height measurement shot-put, Long jump, Table tennis, etc. students are able to understand the mentation the record in record book.
	.A. S. Y.	O Paper V- Basic Anatomy, Physiology and First Aid1 1. Students will able to know the anatomical structure of human being 2. Students will able to understand the physiology of all system in human body. 3. Students are able to the use of first aid after injuries on playing in ground.
		o Paper VI External Practical  1. Studesnts will able to understand the practical work in Pulse rate Measurement,. Relay (4*100 /4*400) Men and Women, Kho-Kho, oga/ weight lifting, Dand Baithak (Men), Bent Knee Sit-ups.
		EC- I Fitness and wellness  1. Students will able to understand the different fitness exercise.

	Students will know about Nature and Duties of Life Guard
	O Paper – VII Fitness and Diet
	1. Students will able to understand the fitness of body.
	2. Students will able to know about the types of posture
	3. Students will able to understand about diet and nutrition.
	O paper-VIII External Practical
	1. Students areable to understand the fundamental skill in different
	mes like Throwing event, Jumping event, Cricket, judo etc.
	kill Enhancement Course – II Curative Therapies
	1. Students will able to understand the Concept & types of massage, Techniques of massage, Massage for body relaxation,
	Massage for disabled people, Benefits of massage.
	2. Students will bale to understand the Types of acupressure, Points of
	acupressure, Acupressure for upper body extremities,
	cupressure for lower body extremities, Precautions of acupressure Benefit
	of acupressure.
.A. T.Y.	SE – A : Paper-IX ORGANIZATION AND MANAGEMENT IN
	PHYSICAL EDUCATION
	udents are able to understand the basic management in physical education
	Students will be understand organize the games and tournaments.
	aper- X Generic Elective, Physical Education Practical
	rudents will know about the practically play the games asn sports
	KILL ENHANCEMENT COURSE -III
	ogic Therapies and Sports Physiotherapy
	udents arre able to understand the Yoga, diet and physiotheropy
	aper-XI Test measurement and Psychology in Physical Education
	and Sports
	udents are able to understand the Test and Measurement,
	onstruction and classification of Test, Scope of Sports Psychology.
	aper- Xiigeneric Elective Physical Education Practical
	1. Students will able to understand the Flexibility measures, Track and
	Field event: High Jump, Aerobics Activities, Volley Ball, Hand
	Ball
	2. Students are able to know about the Historical development,
	ground measurements. Rules and regulation, records and awards
	EC-IV Officiating and Coaching  1. Students will able to understand the Officiating in Kabaddi
	1. Students will able to understand the Officiating in Kabaddi, Officiating in Kho-Kho, Officiating in Volley Ball, Officiating in
	Cricket, Officiating in Track and Field.
	2. Students are able to understand the Ground Management in
	Kabaddi, Ground Management in Kho-Kho, Ground Management
	in Volley Ball, Ground Management in Cricket.
	3. Students are able to understand the Coaching of Basic Skills in
	Kabaddi, Coaching of Basic Skills in Kho-Kho, Coaching of Basic
	Skills in Volley Ball, Coaching of Basic Skills in Cricket.
	4. Students are able to understand the Coaching for Conditioning
	Exercise, Coaching for General Physical Fitness, Coaching for

Department of Political Science Programs offered: B.A. Political Science

Sr.	rogram	Program objective	rogram Specific Objectives
lo.			
		B.A.I Year	
1	B.A.I	aper Title: Political Theory, Paper – I, II	П
	Political Science	This is an introductory paper to the concepts; ideas and theories in political theory. It seeks explain the evolution and usage of these concepts, ideas and theories with reference to individual thinkers both historically and analytically. The different ideological standpoints with regard to various concepts and theories are to be critically explained with the purpose of highlighting the difference in their perspectives and in order to understand their continuity and change. Furthermore there is a need to emphasize the continuing relevance of these concepts today and explain how in idea and theory of yester years gains prominence in ontemporary political theory.	Political concepts and Political analysis.  ii) To study the introductory part of Political concepts and relevant issues.  iii) To study the Political concepts and its relevant parts.  iv) To study the basic concepts of Political theories or issues concern with Political
2	B.A.I Political Science	his paper gives an in depth insight to the level of state politics in India. In this context it offers to study the patterns of state politics especially in the light of politics of	i) To Study the various Elements concern with Maharashtra Politics and
		Maharashtra. It not only deals with evolution or formation of Maharashtra state but focus on the changing nature of political culture thereof, and the role of different regional parties in shaping states political system. Followed by structure and function of state government, state legislature, and local self-government, followed by Electoral process which is responsible for stability or instability of Maharashtra plitical system.	<ul> <li>ii) To understand different political issues of Maharashtra Politics.</li> <li>iii) To understand the Government of Maharashtra State and its organs.</li> <li>iv) To understand various Administrative</li> </ul>
		· ·	
	L	B.A.II Year	
3	B.A.II Political	aper Title: Indian Constitution, Paper – aper Title: Indian Government and Political Constitution (Constitution)	
	Science	his course acquaints students with the	i) To prepare students for

	The Indian constitution accommodates conflicting impulses of liberty and justice, territorial decentralization and a strong union for instance within itself. The course traces the embodiment some of these conflicts in constitutional provisions and shows how thus have played out in Political practices. In further, encourages a study of state institution in their mutual interaction with e larger extra constitutional environment.	UPSC, MPSC and other Exams.  ii) To expose the students with basic concepts and political institutions like Parliament, Supreme Court, Political Parties Constitution & Democracy etc.  iii) To introduce the students with the administrative and Political setup and Mechanism with roll and functions.  iv) To develop sensitive citizenship among the students
Political	aper Title: International Relations, Paper aper Title: International Organizations & ternational Relations is the study of interactions Students will acquire knowledge of the basic structure, processes & trends of International Politics. To understand the conceptual framework needed to systematic analysis of World Politics, understand and be capable of evaluating the validity of constructivist approach, To understand theories & concepts of International Relations, International Organization and non government organizations, Role of UN, International Law and contemporary critical issues in World politics, study of International Relations and develop the ability to think critically above current issues and the future of the world order.	z Issues, Paper-VIII
	aper Title: Election Management- I Pape his course will give introduction to the students of the debates, principles & practices of Election Management. Election, electoral, voting behavior, political participation, public opinion of the context of Democracies with special reference to India. It will familiarize the students with how to conceptualize &	The main purpose of this paper is to educate students about the Elections of India.

6	B.A.II Political	easures of election management using quantitative methods, with particular attending being paid to development asic skills pertaining to the collection, analyze and utilization of data.  aper Title: Political Journalism, Paper: his course will give introduction to the	The main purpose of this
	Science	students of political journalism aims to provide voters with the information to formulate their own opinion and participate in community, local to global matter that will effect then. Political journalism is provided through different mediums in print, broadcast, online reporting, instant coverage of campaign, politics, event news, overnment status, election updates etc.	about the Political Journalism
		B.A.III Year	<u> </u>
7	3.A.III	aper Title: Western Political Thinker, Pa	per-IX
	Political Science	This paper focus on the Classical ideas generated in the western world representation the ancient to the modern. The four thinkers have been selected who represent ideal, realistic and liberal tradition. The text are interpreted both in the historical and Philosophical erspective.	*
8	B.A.III	aper Title: Government & Politics of Uni	ted Kingdom, Paper-X
0	Political Science	his course acquaints students with the constitution, design of state structure, institutions and their actual working over time. Government & Politics of United Kingdom accommodates conflicting impulses of liberty and justice, territorial decentralization and a strong union for instance within itself. The course traces the embodiment some of these conflicts in constitutional provisions and shows how thus have played out in Political practices. In further, encourages a study of state institution in their mutual interaction with elarger extra constitutional	<ul> <li>i) To prepare students for competitive exams like UPSC, MPSC and other Exams.</li> <li>ii) To expose the students with basic concepts and political institutions like Parliament, Supreme Court, Political Parties Constitution &amp; Democracy etc.</li> <li>iii) To introduce the students with the administrative and Political setup and</li> </ul>
		nvironment.	Mechanism with roll and functions.  iv) To develop sensitive citizenship among the students
9	3.A.III Political		Mechanism with roll and functions.  iv) To develop sensitive citizenship among the students

dia. It deals with the main sources of the political traditions in modern India and focuses the development of social stitution and as well as various patterns of politics that emerged in modern India.	contribution to the evolution of political theorizing in
OR	,
Paper Title : India's Foreign	Policy, Paper-XI
This paper deals with foundations,	The main objective of
phases and India's Relations with major	this paper is to familiar
countries as well as neighbors around her.	students with change and
It seeks to search and ascertain the he	continuity, major issues and
major issues and debates in the field of	debates in India's foreign
Indian foreign policy and probe India's	policy.
complex relationship, both bilateral and	
ultilateral with other countries.	

Courses offered: B.A.F.Y. Political Science, B.A.S.Y. Political Science, B.A. T.Y. Political Science

Sr. No.	Course	Course outcome			
	SEMESTER I & II				
01	.A. F.Y.	olitical Theory, Paper – I, III			
		i) Pupils will understand the basic Political concepts by standing the			
		course.			
		ii) Students will be able to solve the Political problems by standing			
		this course.			
		iii) Students will acquire the judgment power by standing the various			
		Political			
		iv) Ideas, concepts and other Political issues concern with Politics.			
02	.A. F.Y.	overnment and Politics of Maharashtra, Paper -II, IV			
		i) Students will understand the formation, Government and other			
		Political issues concern with Maharashtra Government.			
		ii) Student will be to solve the Political problems by studying this			
		course.			
		iii) Pupils will acquire to understand various Political issues, Political			
		process and Political activity.			
		iv) Students get various political ideas concern with state Government and			
		other relevant Political issues.			
		SEMESTER III & IV			
03	B.A.S.Y.	Paper Title: Indian Constitution, Paper – V,			
		Paper Title: Indian Government and Politics VII			
		he outcome of course lies in building ideal citizens competition ready			
		skilled, man power mass awareness about the political structure and			
		functionary among the youth. It will also go a long way in building			
		emocracy and mass awareness among with about Indian Constitutions with			
0.4	D A C X	their Fundamental Rights and Duties.			
04	B.A.S.Y.	aper Title: International Relations, Paper-VI,			
		aper Title: International Organizations & Issues, Paper-VIII			
		he Utility of the course Lies in the course Constitution in raising the			
		student's awareness about the global International Politics with Key			
		oncepts approaches and Political Institutions like UNO. It will also			

		elps students to prepare themselves for competitive exams like UPSC, IPSC etc. moreover it will career like Political analyst Media,		
		Professionals and Ideal Politicians.		
05	A.S.Y.	aper Title: Election Management- I Paper: SEC -I		
		i) It will help students to eradicate fear of General Elections.		
		ii) Pupils will develop skills to Face General Elections		
		iii) Students will know the process of General Elections		
		iv) Students will understand the how to face General Elections.		
06	A.S.Y.	aper Title: Political Journalism, Paper: SEC-II		
		i) It will help students to understand the Political Journalism.		
		ii) Pupils will develop skills of Political Journalism.		
		iii) Students will know and use Journalism Skills in there Life.		
		SEMESTER V, VI		
07	A.T.Y.	aper Title: Western Political Thinker, Paper-IX		
		he course will narrate students the legacy of the thinkers and orient		
		em about continuity and change within the western political tradition. It helps		
		them to study historical aspects western state and society.		
08	A.T.Y.	Paper Title: Government & Politics of United Kingdom, Paper-X		
		The outcome of course lies in building ideal citizens competition ready		
		skilled, man power mass awareness about the political structure and		
		functionary among the youth. It will also go a long way in building		
		Democracy and mass awareness among with about Government &		
		plitics of United Kingdom with their Fundamental Rights and Duties.		
09	A.T.Y.	aper Title: Indian Political Thinkers, Paper-XI		
		his course will encourage students to understand and decipher the diverse and		
		often contesting ways in which the ideas of nationalism,		
		emocracy and social transformation were discussed in Pre and Post-		
		independence India.		
		OR		
		aper Title : India's Foreign Policy, Paper-XI		
		his Course will encourage the student to undertake an n depth analysis of		
		India's foreign policy.		

### Department of Public Administration Programs offered: B.A. Public Administration

or. To.	Program	Program objective	Program Specific Objectives

)1	B.A. I Public
	Administration

Public Administration is one of the youngest branches of Faculty of Humanities. With the expansion of the activities of modern state, public administration has assumed great significance in modern society. The Public Administration Administrative Officers playing impartment role in social and economic development of the Nation. Administration is as old as mankind. It has acquired all spheres of human life right from birth to death. It is very close to the daily life of any person in practical. Public Administration Studies the systematic implementation of Laws and Government policies, theories principles and its controlling system. The subject stands as an integral element of democratic system of the nation.

The Present system of district administration owes its origin to the time of the Mauryan Empire. But modern structure of district administration in India developed in Colonial Period (1772). At that time was district administration established for collection of revenue. In the present era, district is the basic territorial unit of administration in India. District administration is the total functioning of Government in a district level. In this paper focus on providing knowledge of district administration for the Students.

Public Administration is one of the youngest branches of Faculty of Humanities. With the expansion of the activities of modern state, public administration has assumed great significance in modern society. The course is introduced to comprehend the importance of organizations. as well as line and staff agencies and Chief Exhalative Administrative etc. Organization and its principles is an public important of part administration. The focus of the course is on the Hierarchy, Span of control, Moral ,Communication etc..

Maharashtra has a parliamentary system of government with two mocratically elected houses, the Legislative Assembly (Vidhan Sabha)

- **PSO1.** The Course introduces and provides knowledge of Public Administration.
- PSO2. To provide knowledge of the new trends in public administration PSO3. To understand the relations of public administration with other humanities
- **PSO4.** To know District Administration.
- PSO5.To understand Structure and function of various
  Administrative offices of District
  Administration. PSO6. To provide knowledge of the Revenue
  Administration, Police
  administration and Judiciary
  system at district and taluka level.
- **PSO7.** After studying the course students will have a capacity to understand the Basic Knowledge of administrative Organization and its principles.
- **PSO8.** To provide knowledge of the Functions and qualities of chief executive
- **PSO9.** To understand the importance of public relations in administration.
- **PSO10.** After studying the course students will have a capacity to understand:
- **PSO11.**To Understand the Role of Chief Minister and State Secretariat in Maharashtra state.
- PSO12.To understand Structure and function of State Legislature PSO13.To provide knowledge of the state government and Administration.

Legislative Council (Vidhan Parishad). The Government Maharashtra is headed by the chief Minister and the Chief Secretary is at the apex of the Administrative Hierarchy of Maharashtra state. The focus of the course is on the Administrative system of Maharashtra state. It also introduces with the various commissions in Maharashtra state. The Course goals to inform administrative system of Maharashtra as well as Formation of Maharashtra state. The syllabus makes students to aware of the government and administration of Maharashtra state. It informs U.G. level students about the High Court, Chief Council of Ministers, Minister, M.P.S.C., state Election Commission 12 B.A. II Public Personnel administration is an **PSO14.** To familiarize the students Administration important of Public with basic process of Civil Service part Recruitment in Indian Personnel administration. Personnel Administration. administration is the art and science of **PSO15.**To understand how to Train planning, organizing, directing, Civil Servants for their Better controlling and motivating human Role in Indian Governance and resources. The main thing is to give Administration. knowledge of personnel system in **PSO16.** To know the Systematic Indian administration, specially how to process in Personnel Administration process of Recruitment, Training, (Recruitment to Retirement of Promotion and Retirement of the the Personnel). Government Sector Employees; and **PSO17.** To familiarize the students understands all new issue in personnel with basic process of Public Service administration. Recruitment in India is a Democratic Republic with a Indian Administration. **PSO18.**To Parliamentary form of government throw light on how the public which is federal in structure with unitary Servants are trained, made features. There is a Council of Ministers professional &skilled with the Prime Minister so that they work towards its head to advice the President who is the development. constitutional head of the country. PSO19.To brief them about the Similarly in states there is a Council of Systematic process Ministers with Chief Minister as its Personnel Administration head, who advices the Governor. In this (Recruitment to Retirement). paper focus is on the Structure of State PSO20. To acquaint the Government and Administration with students about how the human special reference to Maharashtra. The resource planning is done. course is designed to provide knowledge **PSO21.** The Course introduces and to the students about formation of state provides knowledge of State in India, State Legislature, State Government and Administration. executive and State judiciary. PSO22. To understand process of Rural development programmes are State Judiciary. designed to facilitate a multi-faceted **PSO23.** To know perceive Constitutional and Statutory

owth of the rural poor people by extending the benefits of development to them. The main aim of rural development programmes is to improve the living standards of the people and providing them opportunities. In the present era, various rural development programmes have been newly defined by Prime Minister. This course designed to create awareness of rural development in the students.

Everyone knows what is meant by an 'Office' but very few are able to define it. Office Administration is a part of general management. The main aim of the paper Office Administration is to introduce the process of the work method. What is role of head of the office in office administration? How to keep safely and smoothly maintain office records & environment.

The Present system of district administration owes its origin to the time of the Mauryan Empire. But modern structure of district administration in India developed in Colonial Period (1772). At that time was district administration established for collection of revenue. In the present era, district is the basic territorial unit of administration in India. District administration is the total functioning of Government in a district. In this paper stress is on providing knowledge of district administration for the Students.

The E-Governance is basically associated with carrying out the functions and achieving the result of governance through the utilization of ICT (Information and Communications Technology). World Bank explained the "E-Governance as the use Government agencies of information technology that have the ability to transform relations with citizens." In India, main trust for E-governance was provided by the launching of NICNET in 1987 by the national satellite based computer network. It is established that E-Governance is the application of and information Communication technology to transform the efficiency, effectiveness, transparency and

Agencies.

PSO24. To understand Rural
Development and Empowerment.
PSO25.To study various Rural
Development Programmes.

**PSO26.**To understand various issues in rural development programmes

**PSO27.** The students would learn about the Three tier system of Panchayati Raj

Institutions in Maharashtra state. **PSO28.** It will help the students understand do the local self government function for the overall well being.

**PSO29.** It would demonstrate a basic understanding for various aspects of Three tier system of Panchayati Raj Institutions.

PSO30. The students would be enlightened about the role of Panchayati Raj Institutions in Development of India.

**PSO31.** To understand the meaning of Office Administration.

**PSO32.** To introduce the Office Procedure and Method.

PSO33.To identify various problems in Office Administration. PSO34.It Introduce and Provides the students with the Knowledge of Administrative

Skills.

**PSO35.** The students are acquainted with the work of Good Administrator

**PSO36.** The enhances the ability of the Students to understand the work of the good Administrator .

**PSO37.** To know what is District Administration means.

**PSO38.**To understand Structure and function of various departments of District Administration.

**PSO39.**To provide knowledge of the revenue system, Judiciary system and Police administration at district level.

**PSO40.** To Understand the Role of Urban Local Government in the Development of the

Nation.

**PSO41.**To Develop a Local

		countability in the government. The course mainly aims at creating new skill in students for Application of E-Governance and Digital Devices in administrative service delivery.	PSO42. To Understand the Role of urban local Institutions in urban development.  PSO43. To acquaint the students with the basic local governing system.  PSO44. To familiarize the students with concept of E-Governance and digital technology in service delivery.  PSO45. To understand how to use of E-Governance in various administrative departments.  PSO46. To know the application of E-Governance and various issues. PSO47. The Course would introduce and Provide Knowledge of E-Administration to the students.  PSO48. To familiarize the students with the concept of E- Administration.  PSO49. It will acquaint the students the way ICT (Information and Communication technology) would be applied on Administration.  PSO50. It would help the students understand the need & significance of e-devices in Public Administration.
)3	B.A. III Public Administration	iblic Administration is one of the youngest branches of Faculty of Humanities. With the expansion of the activities of modern state, public administration has assumed great significancein modern society. Administrative Thinkers and their contribution is an important rt of public administration. The main thing is to impart knowledge of Indian and western administrative theories.  Financial administration thus forms a crucial aspect of public administration. Financial machineries may be designed to promote and develop particular public policies. Government raises fund from the public to meet maintenance expenditure or the running expenses of public administration. The course focuses on the important branch of iblic administration.	PSO51. After studying the course students will have a capacity to understand the basic knowledge of various administrative Theories. PSO52. The approaches of study of public administration. PSO53. The relevance of thoughts in organizations. PSO54. To provide basic Knowledge of financial administration. PSO55. To Understand the Indian Budgetary process. PSO56. To Familiarize the students with basic Knowledge of Budget and financial administration . PSO57. To Understand the Three tire system of panchayati Raj in Maharashtra state. PSO58. Understand to how to help to Zilla parishad, panchayat samiti and Gram Panchayat improve

One of significant the most development India in since independence in the field of local government has been the establishment of a net-work of Panchyayati Raj Institutions. It is a Three tire system of governance at village ,tahsil and district level. Panchayati Raj Institutions playing impartment role in social and economic development of Maharashtra state .The course

ll throw light on details of the formation and working of Panchayati Raj institutions and powers responsibilities. The course covers the part which is commonly added in U.P.S.C.,M.P.S.C. and other competitive exams. This course would focus on the panchyayati Raj institutions and their administration.

isaster Management is very significant to survive in the case of a natural or a man made disaster, and can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies in particular preparedness response and recovery.

ublic Administration is one of the youngest branches of Faculty of Humanities. With the expansion of the activities of modern state, public administration has assumed great significance in modern society. The impact of Information Technology has given to many new trends which have all branches in public administration. Recent trends is an important part of public administration. The main thing is to impart knowledge of recent trends in public administration.

blic Administration is one of the youngest branches of Faculty of Humanities. With the expansion of the activities of modern state, public administration has assumed great significance in modern society. estern Administrative Thinkers and their contribution is an important part of public administration. The main thing is to impart knowledge of western administrative theories.

One of the most significant development in India since

their overall well being.

**PSO59.** To develop awareness of the basic Governing system to students.

**PSO60.** The Course Introduce and Provides Knowledge of Disaster Management

**PSO61.** To understand the role of various factors in Disaster

Management.

**PSO62.** To Understand the emerging and recent trends in public administration.

**PSO63.** To Know the Importance of Information Technology in Public Administration.

**PSO64.** To introduce and provide knowledge of Right to Information Act.

**PSO65.** To provide basic Knowledge of various modern administrative . theories

**PSO66.** To Understand the Views of Human Relation theory.

**PSO67.** To Familiarize the students with basic Knowledge of modern administrative thoughts.

**PSO68..** To Understand the Role of Urban Local Government in Development of Nation.

**PSO69.** Develop a Local Leadership in urban

**PSO70.** To Understand the Role of urban local Institutions in urban development.

PSO71. To develop of the basic Governing system to students. PSO72. To Introduce and Provides Knowledge of Non Government Organization and their.

Administration.

**PSO73.** To understand the work of N.G.Os in Nation building.

**PSO74.** The ability of Students to understand the Non Government organization and its works.

dependence in the field of local government has been the establishment of a net-work of Urban local Institutions. All round Development of Urban areas is done through the Urban Administration. To make Municipal Councils and Municipal Corporation strong and democratic under the 74 Amendment of Indian Constitution. ne urban local Institutions playing impartment role in the development of Maharashtra state .The course will throw light on details of the formation and working of urban local institutions and powers and responsibilities. The course covers the part which is commonly added in U.P.S.C., M.P.S.C. and other competitive exams. This course would focus on the Nagar Panchyayat, Muncipal Council and Municipal Corporation and their administration. The development process in a democratic form of government can only succeed when the citizens not only associate themselves with planning development programmes but participate fully in their implementation. Citizens participation through NGOs make administration responsive to the needs of the peoples. The focus of the course is on the NGOs, their functions and sponsibilities.

Courses offered:
B.A.F.Y. Public Administration, B.A.S.Y. Public Administration, B.A. T.Y. Public Administration

: No.	ourse	ourse outcome
01	A. F.Y.	O Paper- I: Principles of Public Administration  It is intended that the subject is introduced, as a optional subject to the
		students of U.G. level. The subject is introduced to comprehend the importance of Administration theory and practice. as well as Public Administration and private Administration, Public Private Partnership, civil
		ciety and sustainable development.
		O Paper- II: District Administration
		1. It help the students Conceptualize about the developmental process as
		nations develop cities grow, and how planning is done & implemented in a bottom – to- top approach.
		2. Awareness of the basic governing system (Urban) as well as development measures.
		3. Exhibit the efforts for urban development in Maharashtra state.

#### O Paper- III: Administrative organization and its Principle

- 1) The course will aid the students to develop their personality..
- 2) It will introduce them about the functioning of the Administrator in Public Administration.
- 3) It will make the students aware of the various issues in Public Administration .

## O Paper- IV: Indian Administration

- 1. It help the students to understand the system of Indian Administration
- 2. Awareness of the basic governing system
- 3. Exhibit the efforts for urban and Rural development in India.

## 02 B.A.S.Y. O Paper- V: Personnel Administration

- 1. It will provide knowledge of Personnel Administration.
- 2. Explain the importance of human resources and their effective work in Administration
- 3. Outline the principles of recruitment and the advantages and disadvantages of Direct & Indirect Recruitment
- 4. Analyze the key issues related to Promotion , Merit & Seniority principle etc.

## O Paper- VI: State Government & Administration

- 1. It help the students to understand the system of State Government & Administration
- 2. Awareness of the basic State governing system
- 3. Exhibit the efforts for development in States.

# O Paper- VII: Rural Development and Empowerment Programmes The Content of the course will enable the students to prepare themselves for various competitive examinations such as U.P.S.C.,M.P.S.C. and other competitive examinations. The students will learn and try to understand the functioning of several democratic institutions such as Zilla Parishad, Panchyayat Samiti and

Gram Panchyayat. Due to the course the students will be motivated to develop interest towards rural development.

1. Develop a rural local leadership.

- 2. Awareness of the basic governing system as well as development measures.
- 3. It will provide knowledge of Three tier system of Panchayati Raj in Maharashtra state.
- 4. Understand the role of Panchyat Raj Institutes as the main instrument of State to achieve its Rural developmental goals.

## O Paper- VIII: Office Administration

- 1) The course will aid the students to develop their personality...
- 2) It will introduce them about the functioning of the Administrator in Public Administration.
- 3) It will make the students aware of the various issues in Public dministration.

#### O Paper- IX: District Administration

- 1. It help the students Conceptualize about the developmental process as nations develop cities grow, and how planning is done & implemented in a bottom to- top approach.
- 2. Awareness of the basic governing system (Urban) as well as development measures.
- 3. Exhibit the efforts for urban development in Maharashtra state.

## O Paper- X: Application of E Governance and E-Devices in Administration

- 1. The course will help to the students learn about the basic elements of E Administration.
- 2. It will provide knowledge of E-devices in Public Administration.

		Awareness of the basic E- administrative system as well as various issues in administration.
03	.A.T.Y.	O Paper- XI: Administrative Thinkers
		ne students will be channelized to learn and understand various
		eories put forth by administrative thinkers regarding public administration and
		management. Through the narratives described in the course students will be made

# Corruption. O Paper- XII: (OR) Financial Administration

ne present syllabus will help the students to study various phases of Indian budget. The students will be channelized to understand various steps of budget such as preparation, Legislation and Execution. The students will be able to demonstrate the implementation of

acquainted with ancient theories advocated by administrative thinkers like

Kautilya about good governance and his views about eradication

adget and various financial machineries.

## O Paper- XIII: Rural Local Government in Maharashtra

ne Content of the course will enable the students to prepare themselves for various competitive examinations such as U.P.S.C.,M.P.S.C. and other competitive examinations. The students will learn and try to understand the functioning of several democratic institutions such as Zilla Parishad, Panchyayat Samiti and Gram Panchyayat. Due to the course the students will be motivated to develop interest towards rural development.

- 1. Develop a rural local leadership.
- 2. Awareness of the basic governing system as well as development measures.
- 3. It will provide knowledge of Three tier system of Panchayati Raj in Maharashtra state.
- 4. Understand the role of Panchyat Raj Institutes as the main instrument of ate to achieve its Rural developmental goals.

#### O Paper- XIV: Disaster Management

the recent years the branch of Disaster Management has attained unique importance. The course will teach the students the utility of the disaster anagement.

#### O Paper- XV: Recent Trends in Public Administration

ne era of Information Technology has given to many new trends which have I walks of life and administration of several offices is not an exception. The said course willhelp the students to understand such changes and get to it.

## O Paper- XVI: (OR) Administrative Thoughts

ne students will be channelized to learn and understand various theories put forth by Modern administrative thinkers regarding public administration and management. Through the narratives described in the course students will be made acquainted with theories advocated by administrative thinkers like

ton Meyo, Abraham Maslow about Human Relations Theory.

#### O Paper- XVII: Urban Local Government in Maharashtra

ne utility of the course is discuss and analyze the problems created due to urbanization and suggest possible salutations about urban management and other related issues. The students will learn and try to understand the functioning of several democratic urban institutions such as Nagar panchyayat, Nagar Parishad and Muncipal Corporations. .Due to the course

e students will be motivated to develop interest towards urban development of Maharashtra state.

#### O Paper- XVIII: Administration of N.G.O.

the country like India, the role of NGO is very significant. The purpose of e course is to make the students to analyze the work of NGOs and to inspire them to undertake such project according to his potential and skills.

## Programs offered: M. A. Geography

r.	rogram	rogram objective	rogram Specific Objectives
0.			
	I. A. eography	spire the students for arsuing higher studies Geography and for ecoming an attrepreneur and also hable students to get in ployed in the eographical research stitutes, Forest epartment, letrological epartment, Survey of dia and Educational stitutes and in the arious concerning epartment of State and entral Government hased on subject eography.	SO: 01To familiarize the students with the understanding of the society through concepts and social theory, philosophical approaches and spatial processes.  SO:02To examine the process of social region formats in India with the help of social cultural factors.  SO:03To Understand diversity of cultures and its diffusion.  o introduce GIS (Geographic Information System) as a tool of spatial science.  SO:04To indicate the basic elements of GIS and methodology of GIS.  o outline the steps and areas of application of GIS.  SO: 05 The aim of this course is to introduce the students with the fundamentals of regional planning PSO: 06 To provide in depth knowledge about agriculture geography SO: 07 To nurture scientific and search approach among the students

## Courses offered: F.Y. M.A. and S.Y.M.A. Geography

r. No.	ourse	ourse outcome
	F.Y. M. A.	aper I Geomorphology
	EMESTE R-	<ol> <li>The course will provide an understanding of the conceptual and dynamic aspects of landform development.</li> <li>Students will also learn the relevance of applied aspects of Geomorphology in various fields.</li> <li>Understanding crustal mobility and tectonics; with special emphasis on their role in landform development</li> </ol>
		aper II Climatology
		<ul> <li>On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.</li> <li>Students will learn the process of interaction between the</li> </ul>

	atmosphere and the earth's surface.
	aper – III Economic Geography
	• Students will become sensitized to concept and classification of resources, use or misuse and will learn conservation methods and techniques.
	<ul> <li>Students would be able to understand how in an increasingly globalized world, economic activities occur unevenly over geographical space; how local places and global economy are intertwined.</li> </ul>
	<ul> <li>Assessing the importance of economic activities around the world. Discussing the locational factors for development of industries</li> </ul>
	aper IV Practical
	<ul> <li>Will be able to represent relief features of the plateaus, hills, foothills, valleys, plains and flood plains through superimposed / composite / serial or projected profiles.</li> <li>Determining the area, the height and making of the plan of the</li> </ul>
	land using dumpy level and prismatic compass in the field Survey, Methods of Slope Analysis.
	<ul> <li>Conducting field excursions and preparation of field report on research on problem in nearby different areas.</li> </ul>
F.Y. M.	paper V Oceanography
<b>A.</b>	<ul> <li>Describing and analyzing the concepts of Oceanography</li> </ul>
EMESTE R-	<ul> <li>Understanding the variations of global hydrological cycle</li> <li>Emphasizing the significance of groundwater quality and its circulation</li> </ul>
II	Circulation
	aper VI settlement Geography
	Understand the origin and Evaluation Settlements.
	<ul> <li>Know about different theories origin of Towns and Urbanization</li> </ul>
	• Demonstrate an understanding of the concept, principles and theories in the field of Urban Geography.
	<ul> <li>Identify and explain the patterns of urbanization in developed and developing countries.</li> </ul>
	aper VIIPolitical Geography
	<ul> <li>Emphasizing the significance of different political systems.</li> <li>Analyzing different political ideologies, Developing an</li> </ul>
	understanding of geopolitics,  • Global geostrategic views and functioning of political
	systems.
	<ul> <li>Student will understand the history and development of political geography</li> </ul>
	aper VIII PRACTICAL-II
	• Conducting field excursions and preparation of field report on research on problem in different areas of India.
	Using statistical techniques in order to summarize, represent, analyze and interpret data
<u> </u>	<u> </u>

M.A.S.Y	aper IXGeography of regional planning
	Analyzing the concept of regions and regionalization.
EMESTE R-	Studying the indicators of economic development
	aper X Biogeography
	• Introducing ecosystem and biosphere concepts. Analyzing the importance and role of biogeochemical cycles.
	<ul> <li>Learn about concept and relevance of biogeography, ecosystem and ecology responsible for global trend of distribution of major plants and animals.</li> </ul>
	<ul> <li>Learn about bio diversity, types of bio diversity, role of human in ecological disturbances and conservation issues.</li> </ul>
	aper XI Agricultural Geography
	<ul> <li>To introduce students Agricultural activities and its relation with Geography.</li> </ul>
	• To familiarize the students with new modern technical methods and their applications in Agricultural activities.
	<ul> <li>To enable students to apply Previously knowledge in Problems and Prospects in agriculture</li> </ul>
	aper XII Practical in Human Geography
	• The practical use of this paper is that students are able to show different objectives like population growth, population distribution, density etc on maps.
	<ul> <li>So that the student can develop knowledge regarding different mapping procedure like choropleth, thematic</li> </ul>
	mapping etc.
M.A.S.Y	aper XIII Population Geography
EMESTE R-	<ul> <li>Identifying habitable parts of the world and different global population dynamics.</li> </ul>
IV	<ul> <li>Understand the distribution of population.</li> </ul>
	<ul> <li>Population distribution and its problems.</li> </ul>
	Students aware about the population policies
	aper XIV Social and Cultural Geography
	Explaining the concept and dynamics of human society.
	<ul> <li>Analyzing the unity in the vast cultural background of India.</li> </ul>
	<ul> <li>Establishing the correlations between man and his natural and cultural landscape</li> </ul>
	aper XV Geography of Maharashtra
	Understand the location of physiographic, natural, historical and political of Maharashtra.
	Understand the geographical area and administrative division of Maharashtra.
	<ul> <li>To understand the major rivers and dams of Maharashtra.</li> <li>To understand the climate, soils, and natural vegetation's.</li> </ul>
	aper XVI Practical in Field work & Remote sensing.

<ul> <li>Students can acquire a broad knowledge regarding remote sensing, various sensors and can developed idea about aerial photographs, satellite imagery etc.</li> <li>Students will acquire knowledge regarding the use of modern tools and technology like GIS in geographical studies and can apply this knowledge in any field of study.</li> <li>Training in the use. Geographic Information System (GIS) software's for contemporary mapping skills.</li> <li>Student demonstrate their knowledge of physical geography, the methods and techniques for observing, measuring recording and reporting geographical phenomenon.</li> <li>Student will be familiar with modern techniques in geography. Student will be prepared the apply their skill in professional careers.</li> <li>They understand about Aerial photography and Satellite Remote Sensing</li> </ul>
<ul> <li>This paper is a field based paper where students developed their field based knowledge and become able to tackle or face any problem while conducting a research project.</li> <li>Overall this paper gives research based knowledge</li> </ul>

# **Faculty of Science**

Department Profile Chemistry
Programs offered: B.Sc. Chemistry

r <b>.</b>	rogram	rogram objective	rogram Specific Objectives
0.	.Sc. hemistry		<ul> <li>B. Sc. Chemistry syllabus has been framed as per UGC-CBCS pattern.</li> <li>The students are expected to understand the fundamentals, principles, mathematical concepts and recent developments in the subject area.</li> <li>The students are able to know the elements present in nature &amp; its properties.</li> <li>The practical course is in relevance to the theory courses to improve the understanding of concepts in chemistry.</li> <li>It would help in development of practical skills of the students.</li> <li>It is expected to inspire the students towards competitive exams in chemistry</li> </ul>

Courses offered: 1) F.Y. B.Sc. Chemistry

2) S.Y. B.Sc. Chemistry

3) T.Y. B.Sc. Chemistry

	ourse outcome	
c. ours	se	ourse outcome
	F.Y.	<ul> <li>CCC-I (Section A), P-I:Organic + Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.</li> <li>1. Learning and understanding rules of logarithm, Rules of drawing graph, Derivatives, Integration, different mathematical concept and SI units, and their use in solving numerical.</li> <li>2. Learning surface phenomena at heterogeneous surfaces.</li> <li>3. Student will learn the basic knowledge of gas phase, Kinetic molecular theory, critical phenomenon, liquefaction and molecular velocities.</li> <li>4. To impart knowledge about solid phase, crystallography and some crystal structure.</li> <li>5. General characteristics of s-block elements, oxides, hydroxide, carbonate &amp; its complexes</li> <li>6. Study the oxidation and reduction by different methods.</li> </ul>
2 .Sc.	F.Y.	CCC- I (Section B), P-II: Physical + Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.  1. Learning and understanding rules of logarithm, Rules of drawing graph, Derivatives, Integration, different mathematical concept and SI units, and their use in solving numerical.  2. Learning surface phenomena at heterogeneous surfaces.  3. Student will learn the basic knowledge of gas phase, Kinetic molecular theory, critical phenomenon, liquefaction and molecular velocities.  4. To impart knowledge about solid phase, crystallography and some crystal structure.  5. General characteristics of s-block elements, oxides, hydroxide, carbonate & its complexes  6. Study the oxidation and reduction by different methods.
Sc.	F.Y.	<ul> <li>CCC II (Section A) P-III: Organic + Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.</li> <li>Student should learn the concept of aromatic hydrocarbons, Aromaticity and antiaromaticity.</li> <li>Student should understand the phenols and synthesis of phenols</li> <li>Student knows about the haloalkene and haloarenes compounds.</li> <li>To know the concepts of carboxylic acids and their derivatives.</li> <li>To know about the types of alcohols and reaction of epoxide.</li> <li>To study the different properties of P- block elements.</li> <li>To know the acids &amp; Bases by different concepts.</li> </ul>
i .Sc.	F.Y.	CCC- II (Section B), P-II: Physical + Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.  To impart knowledge of atomic structure, different theories of

		atomic structure, rules of electronic configuration and quantum
		numbers.  2. Learning of properties of liquid phase as surface tension,
		Viscosity and parachor.
		3. Student will learn the basic knowledge of colloidal state, types,
		preparation, properties and applications of colloidal state.
		4. Learning and understanding of catalysis, types of catalysis and
		characteristics of catalyzed reactions.  5. To understanding the chemical bond and its different types of
		bonds.
		6. Learning the Concept of hybridization and study of VSEPR &
		Molecular Orbital theory.
5		CCCP-1 Paper V (Practical): Practical's based on Section A
		& Section B of CCC-I &CCCC- II
		After completion of syllabus students will be able to understand following outcomes.
		To impart knowledge of basic of chemistry practical.
		2. Learning of inorganic qualitative analysis
		3. Student will learn the basic knowledge of organic preparation and
		their method of preparation.
		4. Learning and understanding of Surface tension, Viscosity,
		<ul><li>Hardness.</li><li>To understanding the basics of acid base titration.</li></ul>
		6. Learning the Concept of equivalent and molecular weight and
		their determination.
5	.SC. S. Y.	CCC III (Section A) P-VI: Organic + Inorganic Chemistry
		After completion of syllabus students will be able to understand
		following outcomes.
		<ol> <li>Learn the mechanism of name reactions.</li> <li>Know the Synthesis and Reactions of Aromatic Carboxylic and</li> </ol>
		Sulphonic acids.
		3. Know the Synthesis and Reactions of Organometallic
		compounds.
		4. Learn the synthesis, mechanism, applications of active
		methylene compounds.  5. Gethoring besig knowledge of Oile, Fets, Seens and Detergents
		<ul><li>5. Gathering basic knowledge of Oils, Fats, Soaps and Detergents.</li><li>6. Understand the basic principle and application of Qualitative</li></ul>
		Analysis.
		7. Know the Classification, Properties of Non- aqueous solvents.
7	.SC. S. Y.	CCC III (Section B) P-VII: Physical + Inorganic Chemistry
		After completion of syllabus students will be able to understand
		following outcomes.
		After completion of these courses students should be able to,     Write an expression of Davisson German experiment.
		<ul><li>2. Write an expression of Davisson-Germer experiment.</li><li>3. Derive Schrodinger wave equation.</li></ul>
1		o. Don't comoding or wave equation.
		4. Understand De-Broglie's hypothesis and uncertainty principle.
		<ul><li>4. Understand De-Broglie's hypothesis and uncertainty principle.</li><li>5. Solve the numerical problems based on De-Broglie.</li></ul>
		<ul><li>5. Solve the numerical problems based on De-Broglie.</li><li>6. Understand concept of entropy.</li></ul>
		5. Solve the numerical problems based on De-Broglie.

		8. Know the meaning of phase, component and degree of freedom.  9. Know the nuclear structure & different energy of nuclear.
		10. Understand the different steps & procedure in the gravimetric separation method.
3	.SC. S. Y.	CCC IV (Section A) P-VIII: Organic+ Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.  1. Learn the stereoisomerism of Chiral compounds. 2. Know the Classification, and Reactions of carbohydrates.
		<ol> <li>Know the Synthesis, and Reactions of Nitrogen Compounds.</li> <li>Gathering applications of Reagents in Organic Synthesis.</li> <li>Understand the Characteristics of d-Block Elements.</li> <li>Know the Characteristics of d-Block Elements.</li> </ol>
)	.SC. S. Y.	<ul> <li>CCC IV (Section B) P-IX: Physical + Inorganic Chemistry After completion of syllabus students will be able to understand following outcomes.</li> <li>1. Know the rate constant and factors affecting rate of reactions.</li> <li>2. Write an expression for rate constant (K) for first order, second order reaction.</li> <li>3. Know the terms cell constant, specific conductivity, equivalent conductivity and molar conductivity.</li> </ul>
		<ol> <li>4.  Know the applications of Kohlrausch's law.</li> <li>5. Compare between thermal and photochemical reactions.</li> <li>6. Discuss different types of photochemical process.</li> <li>7. Know the preparation, properties, structure &amp; application of different compounds.</li> <li>8. Discuss different inter halogen compounds by preparation, properties, structure and uses.</li> </ol>
	SC. S. Y.	P-VIII  After completion of syllabus students will be able to understand following outcomes  1. Learn basics of thin layer chromatography and distillation.  2. Learn fundamentals of organic qualitative analysis.  3. Learn about organic estimations.  4. Basics of volumetric analysis.
	SC. S. Y.	CCCP III (CCC III & IV, Section B) Practical based on P-VII & P-IX  After completion of this course students should be able to,  1. Calculate normality and strength of the solution using potentiometer and conductivity meter.  2. Find pka value on pH meter.  3. Verify Lamberts-Beer's law colorimetrically and determine unknown concentration of the solution.  4. Determine energy of activation.  5. Determine heat of solution.  6. Study the effect of solute on CST of phenol-water system.  7. Determine the enthalpy of ionization of weak acid / weak base.  8. Determine partition coefficient.  9. Separations of elements from each other & analysis by

		volumetric method.
2	.Sc. T.Y.	SEC- V (Section A) Organic + Inorganic Chemistry (P-XII) After completion of this course students should be able to,  1. Learn the mechanism of Electrophilic Substitution reaction of Heterocyclic Compounds  2. Know the characteristics, Classification and synthesis of Drugs and Dyes  3. Explaining theories of Color and chemical constitution of Dyes  4. Gathering basic knowledge of Alkaloids, Vitamins and Pesticides  5. Understand the basic principle and application of coordination complexes
		<b>6.</b> Know the application of elements in Medicine
3	.Sc. T.Y.	DSEC- V (Section B) Physical + Inorganic Chemistry (P-XIII) Understand the concepts of molecular Spectroscopy and its applications  1. Analyze Rotational, Vibrational and Raman Spectra 2. Interpret the theoretical and experimental methods of chemical kinetics 3. Know the theory and application of Distribution law 4. Explain the Nomenclature, classification and application of Organometallic Compounds 5. Illustrate the classification and application of Metal Carbonyls
1	.Sc. T.Y.	<ul> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV) After completion of syllabus students will be able to understand following outcomes.</li> <li>1. To learn the basic principle and terms used in UV, IR &amp; NMR Spectroscopy</li> <li>2. Acquire the fundamental knowledge of classification and Synthesis of Amino Acid and Peptides</li> <li>3. Describe the types of Rearrangement</li> <li>4. Postulates and limitations of VBT and CFT</li> <li>5. Calculation of CFSE for Tetrahedral and Octahedral Complexes</li> <li>6. Explain the types of electronic transition and selection rule</li> <li>7. Apply spectroscopic techniques in analyzing the structure of simple organic Molecules</li> </ul>
5	.Sc. T.Y.	DSEC-VI (Section B) Physical & Inorganic Chemistry (P-XV) After completion of syllabus students will be able to understand following outcomes  1. Basic concepts of electrochemistry and its applications  2. Understanding the Nernst heat theorem and the Thermodynamics open system  3. Know the Vant-Hoff's Reaction isochore and numerical on it  4. Explain the types of magnetic substances and effect of temperature on it  5. Biological role of alkali and alkaline earth metal ions  6. Describe the structures and functions of Metal Cluster
5	.Sc. T.Y.	DSEC V & VI (Section-A) Organic + Inorganic Chemistry (P-XVI)  After completion of syllabus students will be able to understand

	following outcomes	
	1. By considering the scope of chemistry in different	
	pharmaceuticals to make trained man power in synthetic	
	chemistry and analysis	
	2. Understanding organic qualitative analysis	
	3. Separation of binary organic mixture	
	4. To know the calculation of theoretical and practical yield	
	5. To know the gravimatric estimation	
7 .Sc. T.Y.	DSEC V & VI (Section-B) Physical + Inorganic Chemistry (P-	
	XVII)	
	After completion of syllabus students will be able to understand	
	following outcomes	
	1. Determine the normality and strength of oxalic acid conductometrically	
	2. Determine the equivalent conductance of a strong electrolyte at several concentrations	
	3. Determine the normality and strength of acids in mixture	
	4. Determination of dissociation constant of an organic acid	
	5. Determine the rate constant of the reaction	
	6. Determine energy of activation	
	7. Inorganic preparations and estimation of metal ion	

# **Zoology Department Profile**

Programs offered: B.Sc. Zoology

:.	rogram	rogram objective	rogram Specific Objectives
0.	Sc. Zoology	pursuing higher studies in Zoology and for becoming an arrepreneur and also enable students to get employed in the iological research stitutes Industries, Educational Institutes and in the various concerning department of State and Central Government based on subject Zoology.	groups.  SO2. To make the students aware of applications of Zoology subject in various Industries.  SO3. To highlight the potential of various branches to become an

		<b>PSO8.</b> To facilitate students for taking up and shaping a successful career in Zoology.

# Courses offered: F.Y.B.Sc. Zoology, S.Y.B.Sc. Zoology and T.Y.B.Sc. Zoology

r. O.	ourse	ourse outcome
0.	.Sc. F.Y.	O Paper- I: Biodiversity of Invertebrates
		1. The student will be able to identify a given invertebrate upto
		class level.
		2. Ability to understand the contribution of Invertebrates in the
		biodiversity index of any given habitat.
		3. Ability to understand and appreciate the ecological and
		economic importance of invertebrates and vertebrates.
		4. Ability to identify and describe external morphology and internal anatomical features of representative invertebrate species.
		CO paper II: Biodiversity of Chordates
		1. The student will be able to identify and understand the
		Biodiversity of Chordates.
		2. Ability to understand anatomical relation between different
		vertebrate classes.
		3. The learner will be able to understand the economic importance of
		Chordates.
		CO Paper – III. Comparative Anatomy of Vertebrates
		1. The student will be able to identify and understand comparative
		anatomical structure of vertebrate organ systems.
		2. The learner will be able to understand the evolution of various
		organs and systems in the vertebrate body according to its
		environment.
		3. Understand the plasticity of organ systems to adapt to the
		environment and acquire different novel forms.
		CO Paper IV. Developmental Biology of Vertebrates
		1. The student will be able to explain the basics processes of
		vertebrate embryonic development.  2. Ability to describe the various steps in vertebrate development.
		3. Identify and explain about the different embryonic structures.
		4. Describe the functions of different extra-embryonic structures.
		5. Understanding of the Assisted Reproductive Technologies.
		CO Paper V (Practical):Biodiversity of Invertebrates and
		Chordates & ComparativeAnatomy and Developmental
		Biology of Vertebrates(Based on P-I,II,III&IV)
		1. Ability to understand the anatomical organization of organs and
		systems in representative species.
		2. Ability to identify and describe structure and functions of
		different body parts of invertebrates and vertebrates.
		3. Students would be able to prepare temporary and permanent
		mountings of biological material.

	4. Students would be able to relate different bones and be able to
	articulate them to form an skeleton.
	5. Students would make observations of organisms in their natural
SC. S. Y.	environment and document them.
.SC. S. Y.	O Paper VI- Physiology On successful completion of the course, the students will be able to
	1. Monitor their blood pressure and identify blood groups.
	2. Understand function and types of heart & circulatory system.
	3. Appreciate the basic function of kidney, main function of nerves.
	4. Acquire knowledge on the nature and functions of hormones and
	learn the mechanism of hormone action.
	5. Learn the structure and functions of Endocrine glands.
	6. Understand the structure, development and function of
	reproductive organs in human.
	Co Paper VII Biochemistry
	On successful completion of the course, the students will be able to
	1. Understand the chemical structure and functions of various
	biomolecules
	2. Learn the signaling of biomolecules in cell membrane.
	3. Understand the correlation between metabolism of different
	types of biomolecules
	CO Paper – VIII Cell Biology and Genetics
	On successful completion of the course, the students will be able to
	1. Understand the structure and function of the cell as the
	fundamentals for understanding the functioning of all living
	organisms.  2. Understand structures and various cellular functions associated with
	the macromolecules found in cells.
	3. Acquire knowledge of Mendelian Genetics and its Extension.
	4. Graduates will be able to explain and interpret various processes,
	phenomena, states and evolutionary tendencies at a biological system
	level.
	CO paper-IX Evolutionary Biology and Genetic Engineering
	1. Understand the theories and concepts of evolution.
	2. Learn the process of evolution in animals.
	3. Understand the patterns of evolutionary changes in animals.
	4. Understand the organization and functions of genetic material in the
	living world.
	5. Understand the Recombinant DNA Technology.
	CO Paper X (Preactical) Physiology and Biochemistry
	(Practical based on P-VI & VII)
	1. Students able to improve the skills in microscopy, slide
	preparation, observations, drawings and laboratory techniques.
	2. To acquaint the students with operations of the different laboratory equipment.
	3. Ability to understand the detection of blood groups of humans.
	4. Ability to Understand the estimation of blood cell counts,
	Haemoglobin content in humans.
	5. To acquaint the students with operation of clinical procedures for
	blood & urine analysis.
<u> </u>	office and analytic.

	CO Paper XI (Practial) Cell Biology, Genetics, Evolutionary Biology and Genetic Engineering (Practical based on P-VIII & IX)  1. Students would be able to prepare temporary squash preparations of onion root tips for mitosis.  2. Demonstrate the genetic traits in Man.  3. Ability to culture Drosophila flies in the laboratory.  4. Ability for mounting of salivary glands of Drosophila larvae.  5. Students are able to understand the outline of Genetic Engineering.  6. Ability to Learn the role of Genetic Engineering in biology.
.Sc. T.Y.	CO Paper XII Ecology And Zoogeography  1. Students are able to understand and appreciate the interactions of organisms with their environments and the consequences of these interactions for population, community, and ecosystem dynamics.  2. Students are aware of the current environmental issues with an understanding of the basic ecological concepts involved.  3. Students are help to study the local and geographical distribution and abundance of organisms (habitat niche, community, bio-geography).  4. To understand the inter-relationship between individuals in population and communities (population ecology).  5. To understand the study of conservation and management of natural resources and pollution (applied ecology).
	CO Paper XIII Pisiculture:  1. Students will be able to exchange and circulate information, ideas and practical experience on all matters relating to fisheries and their management.  2. Students understand with Fishery specific knowledge for entering PG courses or fishery industries.  3. Students establish and maintain an appropriate Branch and Specialist section structure to meet the local, specialist and overall needs of fisheries interests.  4. Students are able to start the fish farming and get employment.
	CO Paper XVI Ethology, Biometry And Bioinformatics  1. Students will be understand different types of animal in their natural habitat  2. Students will be able to find out mean of any kinds of routinely used items.  3. Student will get the statistical biological methodology.  4. Students will get the basic practical techniques of bioinformatics.  5. Students will apply of bioinformatics and biological databases for problem solving in real-life & research
	CO Paper XV Aquaculture  1. Students will know various types of aquaculture and culture methods.  2. Students will obtain knowledge of fishery science, with a particular emphasis on the biology, assessment, and management

of fish and invertebrate fisheries.  3. Students will able to create awareness about manmade hazards to aquaculture.  4. Students will know about the important species for public health.  5. Students acquire knowledge of Mariculture.  6. Students will able to understand and appreciate the role of Government in aquaculture development.

# **Department of Botany**

## **B.Sc. Programme Objectives**

r.	rogram	rogram objective	rogram Specific Objectives
0.	.Sc. Botany	tudying plant sciences prepares the student for a career working in either an educational institution or an industry in which can be directly involved in the research and development and Knowledge of modern and applied plant science and excellent career prospects.	PSO1. To expand and increase current knowledge about plants  PSO2. to ensure up-to-date level of Understanding of plant sciences.  PSO3. solve problems in many fields including agriculture, ecology, medicine, biotechnology and horticulture  PSO4. To equip the students with skills related to laboratory as well as field based studies  PSO5. To make the students aware about conservation and sustainable use of Biodiversity.  PSO6. Develop aptitude towards science and nature and also undertakes the fundamental and applied research in plant science in the benefit of the human and nature.  PSO7. To interact with each other which impact their physical environment  PSO8. To facilitate students for taking students for their career development
	1		1

## Courses offered: F.Y.B.Sc., S.Y.B.Sc and T.Y.B.Sc. Botany

·.	ourse	ourse outcome
<i>,</i> .	Sc. F.Y.	CO Paper- I: Viruses, Bacteria, Algae, Fungi, Lichens and Mycorrhiza
		<ol> <li>to expose themselves to the diversity of life forms</li> <li>To make aware of Different life forms</li> </ol>
		<ul><li>3. To apply ethical principles to plant science research</li><li>4. To develop ability to identify and classify the organisms</li></ul>

	CO paper II: Plant Ecology, Phytogeography and	
	Environmental Biology	
	1. Understand the theories and concepts of Biodiversity	
	2. Learn the process of Plant adaptations.	
	3. Understand the principles of community ecology.	
	4. Understand the concept of environmental pollution.	
	5. Aware about biogeo chemical cycle.	
	CO Paper – III. Bryophytes, Pteridophytes, Gymnosperms &	
	Paleobotany	
	1. The student will be able to identify and understand different	
	•	
	cryptogams  2. The learner will be able to understand behitet and developmental	
	2. The learner will be able to understand habitat and developmental	
	aspects of cryptogams	
	3. Understand the anatomical structures of cryptogams.	
	CO Paper IV. Taxonomy of Angiosperms	
	1. To expose themselves to the diversity amongst life forms.	
	2. Aware of Morphological aspects of plants.	
	3. Acquire knowledge of plant classification methods.	
	4. Acquire knowledge on Taxonomical principles.	
	O Paper V Practicals based on Theory papers of CCB-I&II	
	1. Ability to understand the anatomical organization of	
	Cryptogames	
	2. Ability to identify and describe structure and functions Cell and cell	
	division.	
	3. Students would be able to prepare temporary and permanent	
	slides.	
	4. Students would be able to relate different chromosomes.	
	5. Students would make observations human syndromes.	
.SC. S. Y.	O Paper VI- Morphology and Taxonomy of Angiosperms	
.50.5.1.	On successful completion of the course, the students able	
	To expose themselves to the diversity amongst life forms.	
	2. Aware of Morphological aspects of plants.	
	3. acquire knowledge of plant classification methods.	
	<ul><li>4. Acquire knowledge on Taxonomical principles.</li></ul>	
	Co Paper VII Histology, Anatomy and Embryology of	
	Angiosperms	
	On successful completion of the course, the students will be able to	
	1. Understand plant histology	
	2. Learn the aspects of plant anatomy.	
	3. Understand the principles of plant embryology	
	4. understand the processs of fruit and seed development	
	CO Paper – VIII Gymnosperms and Palaeobotany	
	On successful completion of the course, the students will be able to	
	1. Understand the differences between gymnosperms and	
	angiosperms	
	2. Understand development, morphology and anatomy of	
	gymnosperms.	
	3. Acquire knowledge on paleobotany.	
	4. Understand the aspects of fossilization.	
	CO paper-IX Ecology and Environmental Biology	
	F-Per 11 20008J mm 21 11 10 mm 21 10 10 8J	

	1. Understand the theories and concepts of Biodiversity.
	2. Learn the process of Plant adaptations.
	3. Understand the principles of community ecology.
	4. Understand the concept of environmental pollution.
	5. Aware about biogeo chemical cycle.
	CO Paper X Practicals based on Section-A Of CCB-III&IV
	1. Students able to improve the skills in describing morphology,
	taxonomical aspects.
	2. To acquaint the students with operations of the different
	laboratory equipment.
	3. Ability to understand the anatomical differences of
	gymnosperms.
	4. Able to Understand the paleo botanical aspects.
	CO Paper XI Practicals Based on Section-B Of Ccb-III&IV
	Students would be able to prepare temporary Slides
	2. Understand the embryological differences among plants
	3. Ability to measure plant biomass.
	4. Ability to differentiate adaptations among plants.
	5. Students are able to understand tissues of plants
.Sc. T.Y.	CO Paper XII Plant Physiology
	1. Students are able to understand Different bio-physico-chemical
	phenomenon.
	2. Students aware of Major and Minor elements.
	3. Students understand Growth and Plant growth regulators
	4. To understand the inter-relationship between individuals in
	*
	population and communities (population ecology).
	5. understand the biomolecules and secondary metabolites
	CO Paper XIII Plant Pathology-I
	1. Students Understand basic principles of plant pathology
	2. Students understand the process of disease development
	3. Students aware about the plant diseases caused by pathogens
	4. Students aware about controle measures of plant diseases.
	CO Paper XVI Plant Metabolism, Biochemistry and
	Biotechnology  1. Students and contents of photographs and recripation
	1. Students understand aspects of photosynthesis and respiration
	2. Students will be able to find out mean of any kinds of routinely
	used items.
	3. Student Know the role of enzymes
	4. Students get knowledge of Nitrogen metabolism
	5. Understand the basic aspects of Biotechnology.
	6. Aware of tools and techniques of Genetic engineering
	or the same statement of contents on Sincoling
	CO Danar VV Dlant Dathalam, H
	CO Paper XV Plant Pathology-II
	1. Students know Principles of aerobiology.
	2. Students will obtain knowledge on defence mechanism in plants.
	3. Students able to create awareness on plant diseases.
	4. Students get knowledge on plant disease controle.
	CO Practicals based on theory papers- XII & XIV
	Students learn to determine osmotic potential

<ol> <li>Study effect of light colours on photosynthesis.</li> <li>Students Learn different physiological experiments.</li> <li>Students Acquire knowledge on biotechnological skills.</li> <li>Students Learn qualitative tests for secondary metabolites</li> </ol>
CO Practicals based on theory papers- XIII & XV  1. Students Study different laboratory equipments 2. Students able to isolate fungal pathogen 3. Students able to differentiate plant diseases 4. Acquire knowledge on control measures of plant diseases

# Department of Microbiology Programs offered: B.Sc. Microbiology

r.	rogram	rogram objective	rogram Specific Objectives
0.			
	.Sc. [icrobiology	spire the students for pursuing higher studies in Microbiology and for becoming an antrepreneur and also enable students to get employed in the iological research stitutes Industries, Educational Institutes, Pharma industry, Pathology labs and in the various concerning department of State and Central Government based on subject Microiology.	

	<b>SO8.</b> To facilitate students for taking up and shaping a successful career in Microbiology.

# $\label{eq:courses} \textbf{Courses offered: F.Y.B.Sc. Microbiology and T.Y.B.Sc. .} \\ \textbf{Microbiology}$

r.	ourse	ourse outcome
0.		
	.Sc. F.Y.	O Paper-I: Introductory Microbiology
		1. To study scope of microbiology.
		2. To study development of microbiology.
		3. Characteristics of microorganisms.
		CO Paper- II: Fundamentals of Microbiology
		1. The student will be able to identify Bacterial cell with the help of
		microscope.
		2. Ability to understand the Bacterial cells with structure and
		function.
		3. Ability to understand sterilization techniques.
		4. To understand microbial growth factor.
		CO paper III: Basic Microbiology & Biomolecules
		1. The student will be able to study microbial staining technique.
		2. Ability to understand structure of viruses.
		3. To study the different biomolecules.
		CO Paper IV. Microbial Physiology
		1. The student will be able to study culture media.
		2. Ability to understand reproduction and growth in
		microorganisms
		CO Paper V (Practical): Annual Practical's based on
		Section A & Section B of CCMB
		I & CCMB II (PV)
		1. Ability to understand the Principle of autoclave, hot air ovan,
		Laminar air flow etc.
		2. Ability to stains of different culture medium.
		3. Students would be able to Preparation of culture media
		4. Students would be able to learn isolation technique.
	.SC. S. Y.	O Paper VI- APPLIED MICROBIOLOGY
		On successful completion of the course, the students will be able to
		1. Sources and scope of microorganisms.
		2. Microbial examination of water.
		3. Microbiology of sewage water.
		Co Paper VII IMMUNOLOGY
		On successful completion of the course, the students will be able to
		1. Types of infections, sources of infection, modes of
		transmission, Microbial pathogenicity, Aggressive factors of
		pathogens

	2. General properties of antigen, antigen specificity, bacterial
	antigens.
	3. Antigen antibody reactions.
	CO Paper - VIII Food, Soil Microbiology and Microbial
	Ecology On successful completion of the course the students will be shie to
	On successful completion of the course, the students will be able to
	1. Sources of contamination in food, Factors affecting kind and number of microorganisms in food.
	2. signification of microorganisms in soil, soil
	as culture medium.
	3. Microbial interaction, association and ecology.
	9,
	CO paper-IX Medical Microbiology
	1. Students can understand Pathogenesis, Clinical features,
	laboratory diagnosis, epidemiology, treatment of cholera, typhoid etc.
	2. Students can understand different infections.
	CO Paper X (Preactical) Practical Paper: CCMBP II [CCMB
	III & IV (Section A)]
	1. Students able to Bacteriological examination of air by solid
	impingement techniques.
	2. Students able to Bacteriological examination of water:
	Quantitative analysis: MPN method
	3. Ability to understand the Bacteriological examination of food by
	SPC method
	CO Paper XI (Practial) Practical Paper: CCMBP III [CCMB
	III & IV (Section B)]
	1. Students would be able to Blood staining by Leishman's /
	Giemasa's method.
	2. Metachromatic granule staining (Albert's Method)
	3. Ability to RBC counting.
	4. Ability to WBC counting.
.Sc. T.Y.	CO Paper XII Microbial Genetics DSEMB I (Section A)]
	1. Students are able to understand Evidences for DNA as
	genetic material.
	2. Students are understand General Concepts of DNA
	Replication.
	3.Students are help to study Genetic Recombination
	•
	4.To understand Conjugation and transduction.
	CO Paper XIII Microbial Metabolism DSEMB I (Section B I)
	Students will be able to study Physicochemical properties
	of enzymes.
	2. Students understand Role of nucleotides in metabolism.
	3. Students are able to study Respiratory electron transport
	chain in bacteria.
	CO Paper XIV:Molecular Biology DSEMB II (Section A)
	1. Students will be understand Gene expressions.
	2. Students will be understand DNA repair.
	3. Student will understand gene regulation
•	· · · · · · · · · · · · · · · · · · ·

O Paper XV:Industrial Microbiology DSEMB II (Section B I)
1. Students will know various types of industrial microbiology.
2. Students will learn different types of Screening techniques.
3. Students will able perform different types of purification
tecniques

## **Departmental Profile**

## **Programs offered: B.Sc. Environmental Science**

·. 0.	rogram	rogram Objective	rogram Specific Objectives
5.	Sc. nvironmental Science	➤ Enable to understand key concepts in the life and physical sciences and will apply the scientific process, as well as appreciate both the potential and limitations of the process.  ➤ To make able to utilise knowledge of the sciences within an interdisciplinary context in solving environmental issues such as environmental health, food and agriculture, energy, waste and pollution, climate change, population, esource management, and loss of biodiversity.  ➤ To aware about the environmental problems, and the proposed solutions.  ➤ Inspire the students for pursuing higher studies in Environmental Science and also enable students to get employed in the 1 research Institutes Industries, Educational Institutes and in the various consultancies run by NGO's	· ·

# Courses offered: B.Sc. F. Y., S.Y., and T. Y., Environmental Science

ŗ.	ourse	ourse outcome
0.	.Sc. F.Y.	CO Paper- I: CCENV-I Section A : Earth and Earth Surface
	.SC. P.1.	Processes reamble: The content of the paper will acquainted to students about the basic ructure and composition of the Earth and will explore various

rface processes.
01. Understand about the tectonic plates, sea floor spreading and
mountain formation.
02. Have the Knowledge of composition of atmosphere and
atmospheric
rocesses.
03. Get the idea of soil properties and composition.
04. Able to know the interactions of earth processes.
*
O paper II: CCENV-I Section B: Basic Science and Environment
his paper aims to build conceptual understanding of students by exposing
them to the basic principles behind various environmental processes.
The
aper has been divided into two sections, with the view to introduce students
to the
ndamental concepts of physics and chemistry of environment.01.
Understand the basics of Environmental Physics.
02. Grasp knowledge about the Basics of Environmental Chemistry.
03. Able to know about the interrelations of atmosphere and
meteorological parameters.
04. To acquire the skill of the measurement of meteorological
variables.
O Paper – III CCENV-II Section A : Developments in
Environment
he contents of this paper will covers the conceptual understanding of
udents by exposing them to the natural processes and developments in
environment.
he paper has been divided into Three sections, with the view to
introduce students to
e concepts of universe, earth and atmospheric movements.
01. Understand key concepts of Evolution of universe and Biogeochemical
cycles.
02. Acquire the knowledge minerals and rocks.
03. Gets the detailed knowledge of different chemical reactions occurring
in atmosphere.
The defined price of the second price of the s
O Danor IV CCENV II Section D. Jeanes in Environment
O Paper IV. CCENV-II Section B: Issues in Environment
he course examines the relationship between the environment and social
sues enabling the students to understand and appreciate the role played
the enviro conflict
nd society and their interface in shaping environmental decisions.
ne students will be
abled to think critically on Environmental issues.
01. Aware about the global Environmental issues.
02. Understand developmental activities and Environmental
problems.
A .
03. Able to know impact of urbanization on Environment.
04. Have the knowledge of human intervention in the Environment.
1

.SC. S. Y.	O Paper VI- CCENV III (Section A)
	asic concepts in Environmental Microbiology
	im of this paper to know about the microbes, their life and their
	relationship with environment
	tudents will come to know about Diversity and Scope of Microbes and
	its Importance, Microscopy and Staining, Classifications and different
	environmental factors
	O Paper VII_CCENV III (Section B)
	ir pollution and Meteorology The course examines the Atmosphere & Meteorology ,Structure of Atmosphere, Economic effects of Air Pollution.
	udents will understand Atmosphere & Meteorology Types of Air Pollutants and Their Sources, Mechanism of action of air pollutants,
	ffects of Air pollution on Plants:
	O Paper - VIII CCENV IV (Section A)
	Applied Environmental Microbiology
	cquaint the students about the Methods in Microbiology, Concept of Sterilization and sources of microbes and its applications in various Environmental processes
	tudents will understand the microbes, its applications and will able to develop the Microbial techniques to use in various environmental processes
	CO paper-IX CCENV IV (Section B)
	Air and Noise Pollution Control
	The course content examines the Ambient Air Pollutants, Noise
	Pollution and various Control techniques
	udents will come to know about Ambient Air Pollutants Sampling, Analysis and Measurement: Noise Pollution: Sources of Noise,
	ffects of Noise Pollution and control measure
Sc. T.Y.	O Paper XII DECENV I (Section A)
	Water pollution and Waste water Analysis
	o understand scientific reasons of point and non point source of water pollutants which enable to give correct suggestions for it's proper treatment.
	tudents will come to know that
	01. Various sources of water and waste water.
	02. It's quality through physico – chemical and biological characters
	O Paper XIV DECENV [(Section – B) Elective – II]:
	Environmental education and biodiversity.
	nvironmental education for better understanding and upliftment of
	biodiversity and natural resources.
	he outcome of this paper is To understand the goals and objectives of
	Environmental Education., to understand the importance of
	Biodiversity and natural resources
	O Paper - XVI DECENV II (Section A) Waste
	Water Engineering
	o give the proper treatment on the basis of load of waste water. Students
	will understand 01. The scientific process of treatment of waste water.
	2. To know the load of waste water for appropriate primary /
1	
	condary / tertiary treatment

	O Paper – XVIII DECENV II [(Section B) Elective II]: Environmental Management o understand various movements of environmental protection management through software tools and environmental laws. udents will understand the principles of environmental management and various historical movements in environmental protection. And various laws and legislations of environmental protection
SKILL	ENHANCEMENT COURCES B.Sc.II and III YEAR
1. Skill Enhancement Course	cenv-I (A) Soil Testing Analyst he main objective of the course is to provide the student with a formalized way to build their fundamental knowledge and skills within the different areas of soil science to enhance their professional skills sting or similar topics that provide information about soil bil testing analyst works like laboratory technician, who is responsible for collecting and analyzing soil samples to determine whether the soil is suitable for agricultural practices, gardening or plantation or natural uses.
Skill Enhancement Course	CENV II (Section B) omposting from Solid Waste he main objective of course is to improve the awareness and skills of the students with modern techniques of collections, transportations and analysis of solid waste materials for production of organic manure and research activities.  Dil testing analyst will able to Use of instruments and their general maintenance, interpretation of analytical data and formulation of ports/recommendations
Skill Enhancement Course	ECENV III Paper - XV  pil conservation Practices  the main objective of the course is to imbibe the importance of soil and its development.  tudent will acquire the soil management skill, will know how to check the nutrient contents, deficiencies and its impact on food
Skill Enhancement Course	raining course on waste water Analysis he main objective of the course is to make students aware and expert in handling waste water its analysis and use of various techniques and instruments. his course is designed to train students to safely and effectively operate advanced wastewater treatment plants in future

**Department of Physics** 

**Programs offered: B.Sc. Physics** 

# **Courses offered:**

## F.Y.B.Sc. Physics, S.Y.B.Sc.Physics, T.Y.B.Sc. Physics

r.	ourse	ourse outcome
0.		
	Sc. F.Y.	O Paper- I: Mechanics and properties of matte  1. Students will be introduced to the world of mechanics and properties of the matter that exists in different phases i.e., solid, liquid and gas.  2. Laws of motion and its applications to various systems studied in this paper is of fundamental nature and enable the students to handle different types of problems and is the pre-requisite for several other advanced courses in physics and chemistry.  3. The pre-requisite for this course is knowledge of calculus, wave theory and modern physics. This course is the core course and every student pursuing B Sc with physics as one of the optional is required to study this course.
		CO paper II: Mathematical Methods in Physics

	<ol> <li>This course helps to develop knowledge in mathematical physics and its applications, to develop expertise in mathematical methods required in the study of Physics, to develop critical thinking and problem solving skill.</li> <li>After completion of this course students will be able to apply the concept of vectors and complex variables to various physical quantities.</li> <li>This course will also enable the students to solve the problems related to partial differentiation.</li> <li>Fourier Analysis unit will enable the students to analyze the periodic functions</li> </ol>
	1
	<ol> <li>CO Paper – III. Heat and Thermodynamics         <ol> <li>This course will introduce the students to the world of heat and thermodynamics and the behaviour of the physical systems at different thermodynamical conditions.</li> <li>After completing this course students will understand the difference in the behaviour of the ideal and real gases, transport phenomenon in gases.</li> </ol> </li> <li>Students will also understand the working of various heat engines and the ways to increase their working efficiency.</li> </ol>
	CO Paper IV. Electricity and Magnetism
	<ol> <li>The students will be able to understand the concepts of static and dynamical electrical magnetic fields, the sources for generating such fields, polarization and induction effects, understand the basic difference between the DC and AC circuits and their functioning.</li> <li>This course is of most applied nature and will enable the students to understand the role of electricity in everyday life, relate electrical conduction, relate using Ohm's law and will also enable the students to understand the working principles of various electrical components and gadgets.</li> </ol>
	<ol> <li>Paper V (Practical): Laboratory Course         <ol> <li>This Laboratory course introduces the students to the practical applications of the four core courses in Physics that the students have studied in Semester I and II.</li> <li>The students will be able to perform simple experiments like finding Young's modulus, modulus of rigidity, surface tension, co-efficient of viscosity, etc.</li> <li>The Laboratory course also includes experiments based on the computational methods applicable for solving problems in physical situations.</li> </ol> </li> <li>The course will consist of lectures (both theory and practical) in the Computer Lab.</li> <li>Evaluation of the computational method does not include the programming skill of the students but will only analyze the basis of formulating the problem.</li> </ol>
.SC. S. Y.	O Paper VI- Waves and Oscillations
	1. The students will be able to understand the concepts of mechanical waves, their properties, propagation and

reflection properties, formation of standing waves, their applications in resonance tubes, energy distribution in the standing waves, free and forced vibrations, acoustics and acoustical designs and also introduces the students to the concepts of ultrasonic waves and their applications.  2. This course is the pre-requisite for several advanced courses in physics and chemistry and is necessary for understanding the behavior of the mater when mechanical waves passes through them.  3. Pre-requisite for this course is the knowledge of elementary mathematics and calculus, wave theory, etc. This forms the core course of the programmes and every student pursuing B Sc with physics as one of the optional is required to study this course
Co Paper VII– Statistical Physics, Electromagnetics and theory
<ol> <li>of Relativity</li> <li>The students will be able to understand the concepts of macroscopic world, statistical approaches for understanding properties of the macroscopic bodies, ensembles, their classification on the basic of macroscopic and microscopic basis, their applications to photonic and electronic gases, electromagnetism, Maxwell's equations and their applications in the electromagnetic waves, energy carried by the EM waves and theory of relativity.</li> <li>This course is the prerequisite for several advanced courses in physics, chemistry, life sciences and the modern communication systems.</li> <li>Pre-requisite for this course is the knowledge of elementary mathematics and calculus.</li> <li>This forms the core course of the programmes and every student pursuing B Sc with physics as one of the optional is required to study this course.</li> </ol>
<ol> <li>CO Paper – VIII– Optics and Lasers</li> <li>This course is aimed to introduce the students to important core subject optics and its applications. The students will be able to understand the concepts of geometrical optics, properties of optical instruments, interference and diffraction of light, polarization of light and finally introduces to the advanced source like LASERS and conditions for the lasing action.</li> <li>This course is the advanced course having applications in nearly all the branches of science.</li> <li>Pre-requisite for this course is the knowledge of light waves and their properties in different media and requires the knowledge of EM waves.</li> <li>This forms the core course of the programmes and every student pursuing B Sc with physics as one of the optional is required to study this course.</li> </ol>
CO paper-IX- Basic Electronics
After completing this course students will be able to

	<ol> <li>Identify and understand construction and properties of different types of P-N junction diodes</li> <li>Apply knowledge of semiconductor devices to use them in different combinations to see their applications as amplifiers and oscillators</li> <li>Design different circuits using semiconductor devices and demonstrate their usage.</li> </ol>
	<ul> <li>CO Paper X (Practical) Laboratory Course (Practical based on P-VI &amp; VII)</li> <li>1. This Laboratory course introduces the students to the practical applications of the core courses Section A of CCP III &amp; IV in Physics that the students have studied in Semester III and IV.</li> <li>2. This laboratory course also includes experiments based on the computational methods applicable for solving problems in physical situations.</li> <li>3. After completing this course students will get insight of the theory course they have undergone and will understand the importance and applications of the courses.</li> </ul>
	<ul> <li>CO Paper XI (Practical) – Laboratory Course (Practical based on P-VIII &amp; IX)</li> <li>1. This Laboratory course introduces the students to the practical applications of the core courses Section B of CCP III &amp; IV in Physics that the students have studied in Semester III and IV.</li> <li>2. This laboratory course also includes experiments based on the computational methods applicable for solving problems in physical situations.</li> <li>3. After completing this course students will get insight of the theory course they have undergone and will understand the importance and applications of the courses.</li> </ul>
.Sc. T.Y.	<ol> <li>CO Paper XII - Quantum Mechanics         <ol> <li>This course introduces the students to the world of microscopic particles such as molecules, atoms, atomic nuclei and elementary particles, study their dynamics employing wave analogy, and also to make the connections between the rules governing the microscopic particles with that of the macroscopic bodies around us.</li> <li>This course is the pre-requisite for several advanced courses in physics and chemistry and is necessary for understanding the behavior of molecules, atoms and elementary particles.</li> <li>The pre-requisite for this course is knowledge of calculus, wave theory and modern physics.</li> </ol> </li> <li>This course is the core course and every student pursuing B Sc with physics as one of the optional is required to study this course.</li> </ol>

	<ol> <li>Paper XIII – A – Solid State Physics</li> <li>This course provides fundamental knowledge of the crystallography, principles behind the formation of matter, their structure and physical properties.</li> <li>This course also enables the students to understand the relationship between the internal structure and various properties of matter such as periodicity, structure and bonding in solids, making these solids an attractive material for the device applications.</li> <li>At the end of this course, students will be able to classify the materials in different classes based on their physical, thermal, electrical, and magnetic properties.</li> </ol>
	CO Paper XIV - Atomic , Molecular and Nuclear Physics
	<ol> <li>Students will be able to understand the physics of atoms, molecules and nuclei, their structures, emission of Gamma rays, X-rays, optical and microwave spectra from these systems, the interaction of atoms and molecules with electric and magnetic fields.</li> <li>Students will be able to acquire adequate knowledge on the nuclear energy sources and reactions with its application in establishing nuclear reactors.</li> </ol>
	CO Paper XV– Digital and Communication Electronics
i i g	1. This course enables the students to understand the importance and interconvertibility of various number systems, principles of digital gates, and working principle of communication systems.  2. After completing this course students will be in a position to know the working of communication systems i.e., modulators, demodulators, transmitters and receivers, etc.
	CO Paper XVI – (Physics Practical) – Laboratory Course
	1. The students will be able to perform different spectroscopic practicals like determining the resolving power, Rydberg's constant, wavelength of Hα line in the hydrogen spectrum.
	CO Paper XVII - A – (Physics Practical) – Laboratory Course
	<ol> <li>Students will be able to construct and identify the truth tables of various gates.</li> <li>Students will be able to observe modulated waves and demodulation on the C.R.O.</li> <li>Students will be able to identify the gates and build the circuits.</li> <li>Students will be able to build and study the different logic circuits</li> </ol>

# **Department Profile Electronics**

**Programs offered: B.Sc. Electronics** 

·. 0.	rogram	rogram objective	rogram Specific Objectives
		spire the students for arsuing higher studies Electronics and for ecoming	SO1. To provide through nowledge about various electricity inciples SO2. To make the students aware of

ntrepreneur and also	applications of Electronics subject in
hable students to get	various Industries.
nployed in the	<b>PSO3.</b> To highlight the potential of
lectrical research	various branches to become an
stitutes ,Industries,	entrepreneur.
ducational Institutes	<b>PSO4.</b> To equip the students with
nd in the various	skills related to laboratory as well as
oncerning department	field based studies
State and Central	<b>PSO5.</b> To introduce learners to
overnment based on	
bject Electronics.	basic components, semiconductor
	devices, digital electronics, working
	and uses of some indispensable
	laboratory instruments.
	<b>PSO6.</b> To inculcate interest and
	foundation for further studies in
	Electronics.
	<b>PSO7.</b> To address the socio-
	economical challenges related to
	electrical sciences.
	<b>PSO8.</b> To facilitate students for
	taking up and shaping a successful
	career in Electronics.

## **Courses offered:**

## F.Y.B.Sc. Electronics, S.Y.B.Sc.Electronics ,T.Y.B.Sc. Electronics

	ourse	ourse outcome
).		
	.Sc. F.Y.	O Paper- I: Basic Electronics and Network Analysis
		After completion of this course students will be –
		1. able to identify variety of electronic components viz. resistors
		inductors capacitors and their types & uses.
		2. able to understand I-V characteristics of basic electronic components.
		3. able to apply network theorems to simplify given network.
		4. able to distinguish between DC/AC sources, relate various
		characteristics of sinusoidal voltage and understand use of resonan
		circuits.
		CO paper II: Basic Digital Electronics
		After completion of this course students will be –
		1. able to distinguish between analogue & digital signal/data.
		2. able to draw logic circuit for a given Boolean expression.
		3. able to analyse, transform, minimize Boolean expression &
		implement it.
		CO Paper - III. Semiconductor Devices and Electronic
		Instruments
		After completion of this course students will be –
		1. able to understand I-V characteristics of various semiconductor
		diodes.
		2. able to understand input/output characteristics of transistor.

	3. able to distinguish between unregulated & regulated power
	supply and its significance.
	4. able to demonstrate the use of multi-meter & CRO
	CO Paper IV. Digital Logic Circuits
	After completion of this course students will be –
	1. able to distinguish between JK Flipflop & JKMS Flipflop;
	between T Flipflop & D Flipflop.
	2. acquire the skill of using FFs for given application such as
	register, counter etc.
	3. able to present the use of MUX, DMUX.
	4. able to understand the uses of ADC & DAC.
	CO Paper V (Practical): Laboratory Course Work(Based
	on P-I,II,III&IV)
	1. Students will be able to identify the different components
	like resistor, capacitor, inductor, etc.
	2. Students will be able to distinguish between A.C. and D.C.
	sources.
	3. Students will be able to identify the gates and build the
	circuits.
	4. Students will be able to build and study the different logic
	circuits.
.SC. S. Y.	O Paper VI- Amplifiers
	1. Knowledge of transistor biasing.
	2. Analysis of small signal amplifier using h-parameters and
	designing of CE amplifier.
	3. Concept of an ideal amplifier, knowledge of IC 741 and its
	applications.
	**
	Co Paper VII- Microprocessor and Its Applications
	1. Knowledge of microprocessor based systems.
	2. Knowledge of Instruction set of 8085 and ALP skills.
	3. Working and applications of ICs 74LS373 and Intel 8255.
	CO Paper – VIIIOscillators and Multivibrators
	1. Understanding of positive and negative feedback.
	2. Knowledge of working of an oscillator.
	3. Working principle of multivibrators and applications of IC 555
	4. Knowledge of various time base circuits.
	CO paper-IX- Introduction to Microcontroller Intel 8051
	1. Knowledge of internal architecture of 8051 and function of each
	block.
	2. Instruction set of 8051 and ALP skills.
	3. Knowledge of SFRs, Timers and Interrupts of 8051.
	CO Paper X (Practical) Laboratory Course (Practical based on
	P-VI & VIII)
	1. Students will be able to design, build and study various
	electronic circuits like amplifiers, oscillators, multivibrators etc.
	creationic encurs like amplifiers, oscillators, multiviorators etc.
	CO B VI (B (L B I L L C C C C C C C C C C C C C C C C C
	CO Paper XI (Practical) Laboratory Course (Practical based
	on P-VII & IX)
	1. Students will be able to write and perform various programs

	of microprocessor and microcontroller.
.Sc. T.Y.	CO Paper XII -Communication Electronics-I
	1. Will be able to understand basics of communication systems.
	2. To understand the analog modulation techniques (Amplitude and
	Frequency).
	3. To understand the basics of Analog pulse modulation.
	4. To study the Digital pulse modulation.
	CO Paper XIIIA - Power Electronics – I
	1) To introduce Thyristor family,
	2) To study construction and characteristics of SCR, DIAC,
	TRIAC, UJT, and
	MOSFETs
	3) To study different triggering techniques for SCR.
	4) To study SCRs connected in series and parallel.
	5) To study static equalising network and dynamic equalising
	network.
	CO Paper XVI - Communication Electronics-II
	1. To study basics of Radio Receivers.
	2. To understand the basics about the Microwaves.
	3. To learn the RADAR systems
	4. To Study the concepts in Mobile communication
	5. To understand the optical fibres and study the optical fibre
	communicationsystems.
	CO Paper XV- A Power Electronics – II
	1. To understand the operation of single phase half controlled and
	fully controlled converters.
	2) To understand working of choppers and inverters.
	3) To construct & study working of some power control circuits
	used in industry.

# **Department of Mathematics**

r.	ourse	ourse outcome
0.		
	.Sc. F.Y.	aper – I Differential calcus
		After successful completion of the course student will be able
		to
		1. Understanding concept of Limit, Continuity of Single and two variable Functions.
		2. Find the Higher order derivatives of Product of Functions
		3. Expand functions in terms of infinite series.
		4. Find Equation of Tangent, Normal and Length of Tangent,
		Normal, Sub-tangent, Sub-normal.
		5. Understanding of Mean Value Theorem concepts.
		6. Understand the concept of Partial differentiation.
		7. Use the results to solve problems.
		8. Differentiate difference between derivative of single
		variable and two variables.
2	.Sc. F.Y.	aper II: Algebra and Trigonometry
		After successful completion of the course student will be

		able to
		1. Add, Subtract and Multiply two Matrices.
		2. Recognize the different types of Matrices.
		3. Find the Inverse of invertible Matrices.
		4. Determine the Rank of a Matrix.
		5. Transform matrix to Row Echelon form
		6. Solve the System of Linear Equations.
		7. Find the Characteristic Roots and Characteristic Vectors of
		a Square Matrix.
		8. Check that every square matrix satisfies its own
		Characteristic Polynomial.
B	.Sc. F.Y.	aper III: Calculus-II (Integral Calculus)
		After successful completion of the course student will be able
		to
		1. Apply method of integration to find the integral of function.
		2. Solve examples of definite integrals using Properties
		definite integrals.
		3. Find the area and volume of given shape.
		4. Understanding concept of Gamma and Beta Functions.
		5. Solve problems on Multiple Integrals.
1	.Sc. F.Y.	aper IV: (Geometry)
		After successful completion of the course student will be able
		to
		1. Understanding concepts on Three Dimensional Geometry.
		2. Find equations of Right lines, Planes, Spheres, Cones
		and Cylinders.
		3. Find the Direction cosines of any line under the different
		given conditions.
		4. Understand the intersection of any two or three, three
		dimensional geometrical figures.
		5. Transform the equation of a plane to the normal form.
		6. Transform equation of line from the unsymmetrical to the
		symmetrical form.
		7. Find the length of perpendicular from a point to a plane.
		8. Find the angle of intersection of two spheres.
		9. Understanding concepts of plane of contact.
5		CCCP-1 Paper V (Practical): Practical's based on Section A
		& Section B of CCC-I &CCCC- II
		After completion of syllabus students will be able to understand
		following outcomes.
		1. To impart knowledge of basic of chemistry practical.
		2. Learning of inorganic qualitative analysis
		3. Student will learn the basic knowledge of organic preparation and
		their method of preparation.
		4. Learning and understanding of Surface tension, Viscosity,
		Hardness.
		5. To understanding the basics of acid base titration.
		6. Learning the Concept of equivalent and molecular weight and
		their determination.
	Sc. F.Y.	Paper V: (PRACTICAL PAPER)
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	After successful completion of the course student will be able to 1. Vertify associativity of matrix addition, left distributive law and right distributive law of matrices. 2. Find determinant, eigen values, eigen vectors, inverse, powers and characteristics polynomial of a square matrix. 3. To draw the graph of diffierent functions with the help of MATLAB software and related Freeware.
SC. S. Y.	Paper VI: Real Analysis-I Outcomes:  After successful completion of the course student will be able to 1. Understanding the basic concept of sets and their properties. 2. Understanding the concept of a neighborhood of a point, interior points of a set, open set. 3. Understanding concept of limit points of a set, closed set, closure of a set, dense set. 4. Understanding the basic concept of sequences, subsequences, bounds of sequences, limit point of sequences, general principle of convergence, different types of sequences. 5. Understanding the concept of infinite series, different types of series, the generalprinciple of convergence 6. Use the results to solve some problems. 7. Understanding the difference between different types of sequences, series, and comparison tests.
7 .SC. S. Y.	Paper VII: Group Theory After successful completion of the course student will be able to  1. Understand the concepts on an equivalence relation.  2. Find the examples of equivalence relation.  3. Check whether the given set, is a group for the given operation or not.  4. Understand the general properties of groups.  5. Solve problems on groups.  6. Understand the concepts of the cyclic group.  7. Use Lagrange's theorem to solve the problems in number theory.  8. Form a quotient group.  9. Find the kernel of a group homomorphism.
3 .SC. S. Y.	Paper VIII: Ordinary Differential Equations After successful completion of the course student will be able to  1. Understanding concept of solution of differential equations, order and degree.  2. Transform the equations into variable separable form.  3. Transform first-order non-homogeneous equation in x and y to homogeneous equation in x and y and solve it.

		4. Find the equations that can be resolved into components
		equation and solve it.
		5. Solve Clairaut's equation.
		6. Find the solutions when the auxiliary equations are equal,
		different, repeated, and imaginary roots.
		7. Find the solution of the exact differential equation, rules of
		finding the integrating factor.
		8. Transform non-linear equation to linear equation and
		solve it.
		9. Find the solution of linear equation with variable coefficients.
		10. Transform the equations to the homogeneous linear form.
		11. Transform the homogeneous linear equation with
		constant coefficient by changing the independent
		variable x to z
)	.SC. S. Y.	Paper IX: Real Analysis-II
		After successful completion of the course student will be able to
		1. Understand the meaning of interval, subinterval, partitions, and
		their refinement.
		2. Understanding the basic concept of upper integral and
		lower integral and Riemann integral.
		3. Understanding difference between upper sum, lower sum and
		Riemann sum
		4. Acquire the idea about Riemann Integrability and
		Riemann Integration
		5. Understand various theorems associated with Riemann
		Integration
		6. Develop a knowledge about Riemann Integration and
		applies to problems
		7. Understand the meaning of improper integral.
		8. Determine convergence of improper integrals with
		discontinuities in their domain or infinite limits of
		integration.
		9. Develop skill in checking the convergence of improper
		integral using various tests of convergence
		10. Understanding distinguishes between convergence and
		absolute convergence of improper integral.
		11. Use comparison test with a corresponding improper
		integral with other improper integral to decide whether
		improper integral converge or diverge
		12. Use the results to solve some problems.
)	.SC. S. Y.	Paper X: Ring Theory
		After successful completion of the course student will be
		able to
		1. Understand given algebraic structure is a Ring or not.
		2. Construct the examples of ring with known examples of
		ring.
		3. Differentiate between zero-divisors and non-zero-divisors in a
		given ring.
<u> </u>		

	4. Check whether given two rings are isomorphic or not.
	5. Check whether the given ideal of a ring is a principal ideal or
	not.
	6. Understand the concepts on principal ideal ring
	7. Understand concepts on Euclidean rings.
SC. S. Y.	Paper XI: Partial Differential Equations
	After successful completion of the course student
	will be able to
	1. Classification of PDE.
	2. Solve linear as well as non-linear PDE of first and second
	order.
	3. Apply PDE techniques to predict the behavior of certain
	phenomena.
	4. Solve real problems by identifying them approximately
	from the perspective of PDE.
	5. Mathematical formation of real problem precisely.
0 77.77	6. Solve problem using boundary conditions.
.Sc. T.Y.	1) Utility of Syllabus:
	i) Students can verify the convergence of sequences,
	completeness compactness and connectedness of given metric spaces.
	ii) Students will be able to find dimensions of various vector
	spaces and by using determinant concept students can solve
	the linear equations in two, three unknowns.
	iii) Students can obtain the solutions of LPP using various
	methods.
	iv) Students can obtain equilibrium of forces and resultant
	force of forces.
	v) Students will be able to check the Analyticity of functions
	vi) Students can obtain Numerical solutions of differential
	equations by using numerical techniques.
	vii) Students can solve differential equations using Laplace
	transformations.
	2) Learning Objectives of Syllabus:
	i) To maintain updated curriculum.
	ii) To take care of fast paced development in the knowledge of
	mathematics.
	iii) To meet the needs and requirements of the society and to
	enhance the quality and standards of Mathematics Education.
	iv) To provide multidisciplinary profile and to allow a flexible
	cafeteria like approach including initiating new papers to
	cater to frontier developments in the subject like
	Mathematics.
	v) To create confidence in others, for equipping themselves
	with that part of Mathematics which is needed for various
	branches of Sciences or Humanities in which they have
	aptitude for higher studies and original work.
	vi) Strengthening the understanding of the students and
	substantiating the conceptual framework of Mathematics
	L

subject. vii) Introducing advanced theories in the subject in an orderly manner with a clearly defined path of interdependence. viii) Introducing the specializations in different areas of Mathematics and at the same time emphasizing the underlying interconnections in different branches of Mathematics.  ix) Generating more interest in the subject and motivating students for self learning beyond the realm of syllabi and examinations.  x) Inculcating the spirit of inquiry among the students and preparing them to take up the research in Mathematics.  xi) Exhibiting the wide range of applications of Mathematics
x) Inculcating the spirit of inquiry among the students and

**Department of Computer Science** 

r.	ourse	ourse outcome
0.		
	Sc. F.Y.	Paper No. I Programming Logic Concepts Course Objectives:  1. To develop understanding of problem solving using computers 2. To develop understanding of basic data structures such as arrays Course Outcome:  1. Student will be able to design algorithms to solve different problems 2. Student will understand how to solve problems using computer
2	.Sc. F.Y.	Paper No. II Designing of Web Pages Using HTML Course Objectives:  1. Develop skills in analyzing the usability of a web site. 2. Understand how to plan and conduct user research related to web usability. 3. Learn techniques of responsive web design, including media Course Outcome: 1. Be able to use the HTML programming language 2. Understand the principles of creating an effective web page.
8	Sc. F.Y.	Paper No.III Introduction to Data Structure Course Objectives:  1. To solve problems using data structures such as linear lists, stacks, queues, hash tables, binary trees, heaps, binary search trees, and graphs and writing programs for these solutions.  2. Able to write well-structured procedure-oriented programs Course Outcome:  1. To develop application using data structures.  2. Students develop knowledge of applications of data structures

		including the ability to
		implement algorithms for the creation, insertion, deletion, searching
		etc.
1	.Sc. F.Y.	
†	.SC. F.1.	Paper No. IV Programming in C Language
		Course Objectives:
		1. The course aims to provide exposure to problem-solving through
		programming.
		<b>2.</b> It aims to train the student to the basic concepts of the <i>C</i> -
		programming language.
		Course Outcome:
		<b>1.</b> Course is designed to provide complete knowledge of <i>C</i>
		language to develop logics
		which will help them to create programs, applications in C.
		<b>2.</b> Introduces the more advanced features of the <i>C</i> language.
5	.Sc. F.Y.	Practical (Annual) : Paper No.V
		Practical Based On Theory Papers – II & IV
		Course Objectives:
		1. To familiarize the students to the practical HTML, DHTML and
		JavaScript
		2. Give hands on training to the students and make them acquainted
		with various
		Real Time Applications implemented currently in the Industry
		Using
		Programming in C Language.
		Course Outcome:
		Practical approach to understand the principles of creating an
		effective web page.
		2. The course is designed to provide complete knowledge of C
		language to develop
		logics which will help them to create programs,
_		
	.SC. S. Y.	aper No.VI Operating System
		Course Objectives:
		1. To learn fundamentals of Operating System,
		2. To understand the structure and organization of the file system,
		3. To learn mechanism of OS.
		Course Outcome:
		Students will be able to the basic components of a computer Operating
		System.
7	.SC. S. Y.	Paper No. VII
		Object Oriented Programming using C++
		Course Objectives:
		1. To understand how C++ improves C
		2. To learn OOPS concepts
		3. To learn how to design C++ classes for code reuse.
		Course Outcome:
		Upon compilation of this course, students will able to do programming
		independently andwill also be able to built small applications.
		independently and will also be able to built small applications.
2	.SC. S. Y.	Skill Enhancement Course-I:
	.SC. S. Y.	
		A) PROGRAMMING USING SCILAB

	OR B) NETWORKING CONCEPTS Skill Enhancement Course-I: 204 (A) PROGRAMMING USING SCILAB
	Course Objectives: To learn basic functioning in SCILAB.
	Course Outcome: Students will be able to understand the main features of the SCILAB program development
	environment, to implement simple mathematical functions/equations in numerical computing environment such as SCILAB.
SC. S. Y.	Skill Enhancement Course-I: 204 (B) PC Installation & Networking Course Objectives:
	The course is designed to build practical skills in Assembling & maintenance of the personal
	desktop computer, installation of operating system and software's as well as to setup the
	network. Course Outcome:
	Students would have knowledge of computer hardware and peripherals , their installation, PC assembly, trouble shooting.
.SC. S. Y.	Paper No. VIII Computer Networks Course Objectives: Understanding basics of computer networking, connectivity techniques
	and related protocols.  This introduces the students to computer networks and concentrate on building a firm
	foundation for understanding data communication.  Course Outcome:  Students would be able to chose, escalate and establish a computer
	network
.SC. S. Y.	aper No. IX Java Programming Course Objectives:
	1. To learn why Java is useful for the design of desktop and web applications.
	<ul><li>2. To learn how to implement object-oriented designs with Java.</li><li>3. To identify Java language components and how they work together in applications.</li></ul>
	Course Outcome: On completion of the course the student would be able to use Java
	integrated development environment to write, compile, run, and test simple object-oriented Java programs. Further,
	they would be able to make elementary modifications to Java programs that solve real-world problems.
SC. S. Y.	Paper No. SEC-II Skill Enhancement Course-II:

	(A) Introduction to Web Applications
	OR (B) Digital Madia Concents
	(B) Digital Media Concepts Course Code: OCS-208 [Marks: 50]
	Skill Enhancement Course-II: 208 (A) Introduction to Web
	Applications
	Course Objectives:
	The course is designed to build practical skills of development of web
	applications. Learn
	how to setup a quick and easy website with the new free Google sites.
	Course Outcome:
	Knowledge of website development and design specialization
.SC. S. Y.	Skill Enhancement Course-II:
	(B) Digital Media Concepts
	Skill Enhancement Course-II: (B) Digital Media
	Course Objective:
	The course is designed to build practical skills in the creation and
	publication of digital
	technologies.
	Course
	Outcome:
SC. S. Y.	Student will be able to use essential skills for digital media  Practical: Paper No. X
.SC. S. 1.	Practical's based on theory papers-VI & VII (OS and C++)
	Course Code: OCS-203 [Marks: 50]
	Course Objectives:
	1. To understand the services provided by and the design of an
	operating system.
	2. To understand the structure and organization of the file system.
	3. To understand what a process is and how processes are
	synchronized and scheduled.
	4. To understand different approaches to memory management. To
	understand
	how C++ improves C with object-oriented features.
	Course Outcome:
	Student will be able to understand the basic components of a Linux
	operating system, and the
	interactions among the various components. Further, they will be able to
	independently
	program in C++.
	Practical's based on theory papers-VI & VII (OS & C++)
	At least 20 (10 from each paper) practical exercises
.Sc. T.Y.	aper No. XII Software Engineering
	After completion of this course students should be able to,
	1 Understand Software Engineering Process.
	2 Understand Requirements and components of Software
	Engineering.
0 - 70 37	3 Understand software design and software testing fundamentals.
Sc. T.Y.	aper No. XIII [A] Visual Programming
	1 To learn Graphical User Interface Language.

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	2 To develop an application using GUI Language.
	3 Implement VB programs to solve simple problems.
.Sc. T.Y.	aper No. XIII [B] Cloud Computing
	1 To Study basics of cloud computing, and comprehend the
	terminology, tools and technologies
	associated with today's top cloud platforms.
	2 To provide the programmer's perspective of working of Cloud
	Computing.
	3 Implement Simple Cloud programs to solve simple problems.
.Sc. T.Y.	Skill Enhancement Course-III (SECCS-III)
	Data Mining
	1 To create awareness about self-employment and motivate the
	students to go for self-employment
	by becoming Data Analytics.
	2 To familiarize the students to the practical world of business data
	processing and decision
	making.
Sc. T.Y.	Laboratory Course Work- IV
	Paper No. XVI
	Practical Based on theory papers – XII & XIII
	Give hands on training to the students and make them acquainted with
	various Real
	time Applications implemented currently in the Industry.
	at least 20 practical sessions based on paper no XII and XIII.
.Sc. T.Y.	aper No. XIV
	Relational Database Management Systems & PL/SQL
	1 To learn Relational Database Management system and database
	languages.
	2 To learn Relational Algebra and Calculus.
	3 To study Integrity Constraints and PL/SQL
	4 To develop an application using PL/SQL.
.Sc. T.Y.	aper No. XV [A] Computer System Security
	1 The Course shall introduce the Computer System Security Concepts
	and its use in the
	Information Technology industry.
	2 It also elaborates on various types of attacks and their mitigation.
	Paper No. XV [B]
	E-Commerce
	To learn Electronic Commerce market place and Internet.
	1 Understand Electronic Data Interchange.
.Sc. T.Y.	Skill Enhancement Course-IV (SECCS-IV)
~~~	Office Automation Tools
	1 Seek Jobs in emerging BPO/IT Support Sector.
	2 To familiarize the students in preparation of documents and
	presentations with office automation
	tools. Broadly, b learning the course, the students will be able to
	perform documentation, to perform accounting operations and to perform
	presentation skills
.Sc. T.Y.	kill Enhancement Course-IV (SECCS-IV)
.50. 1.1.	Android Programming
	Android Frogramming

	1 This course shall build a platform for students to start their own
	enterprise
	2 To gain an understanding of the processes that are involved in an
	Android developed application
	3 To become familiar with Android development tools and user
	interface.
	4 Ability to build two simple apps that you can share with your
	friends
Sc. T.Y.	Laboratory Course Work- V
	Paper No. XVII
	Give hands on training to the students and make them acquainted
	with various Real time Applications implemented currently in the
	Industry.

## Programs offered: M.SC. Zoology

I.Sc. Zoology  Be able to play leading role in industry, research  SO1. To expose students to upda curricula and to recent advances in
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role in industry, research and the public services;  2) Understand and appreciate major public concerns and issues associated with Zoology;  3) Have an understanding and grasp of international research environment where the frontiers of knowledge in Zoology are under research;  4) Be able to adapt and respond positively and flexibly to changing circumstances;  5) Develop the professional skills and personal attributes to deal with complex issues, both systematically and creatively;  6) Have the capacity for individual work and teamwork;  7) Be lifelong learners with intellectual and practical skills.  curricula and to recent advances in subject and enable the students to fisulpiect and enable the students to able twenty concerns subject and enable the students to five ty. SET and other competit subject and enable the students to able twenty international research environment where the frontiers of knowledge in Zoology are under research;  4) Be able to adapt and respond positively and flexibly to changing circumstances;  5)Develop the professional skills and personal attributes to deal with complex issues, both systematically and creatively;  6) Have the capacity for individual work and teamwork;  7) Be lifelong learners with intellectual and practical skills.

	economical	challenges	related	to
	animal sci	ences.		
	<b>PSO8.</b> To fa	cilitate stude	nts for tak	ing
	up and sh	naping a succ	essful car	reer
	in Zoolog	y.		

## Courses offered: M.Sc. I Year Zoology, .M.Sc. II Zoology

r. O.	ourse	ourse outcome
0.	I.Sc. F.Y. emestser- I	<ul> <li>aper I: Invertebrates: Structure and Function</li> <li>1. Classify animals from different groups based on their features.</li> <li>2. Explain the similarity and differences in structure and function of organs in different groups of animals.</li> <li>3. Understanding about importance of integument and skeletal systems.</li> <li>4. Compare the functional morphology different groups of invertebrates.</li> </ul>
		aper: Lab Course - I: Invertebrates: Structure and Function
		<ol> <li>Paper II: Biosystematics, Taxonomy and Evolution</li> <li>Classify animals from different groups based on their features.</li> <li>Describe different taxa and elaborate on their anatomical and morphological features.</li> <li>Identify and describe homologies between different groups of animals.</li> <li>Identify and access taxonomic information in different online databases.</li> <li>Describe evolutionary relationship between different taxa.</li> <li>Explain about evolutionary distance between different taxa.</li> <li>Infer phylogenetic information and prepare phylogenetic trees.</li> </ol>
		Paper: Lab Course - II: Biosystematics, Taxonomy and Evolution
		Paper III: Economic Zoology and Animal Behavior  1. Identify animal pathogenic diseases in humans and suggest remedial measures.  2. Evaluate and describe the economic impact of animals on human society.  3. Describe different culture methods relevant to aquaculture.  4. Identify and describe economically important fish and other animals.  5. Identify and explain different types of behavior patterns in animals.  6. Describe the importance of different behaviors in animal husbandry.
		Paper: Lab Course - III: Economic Zoology and Animal Behavior
		Paper IV(Elective): Quantitative Biology and Bio-Informatics . 1) Describe different methods of data handling using computers.

	2) Feed and tabulate raw data using computer.
	3) Explain and perform data representation using digital methods.
	4) Access and download relevant information from different online
	databases of biological information.
	5) Perform basic operations of gene sequence retrieval and
	compare them using different software.
	6) Perform basic operations of protein structure retrieval and
	comparison using different software
	Paper: Lab Course – IV(Elective): Quantitative Biology and
	<b>Bio-Informatics</b>
	Paper V Seminar
I.SC. S. Y.	Paper VI: Animal Ecology, Toxicology and Environmental
emester- II	Pollution
	1. Describe the role of different gases in greenhouse effect.
	2. Identify and suggest remedial measures to deal with different
	types of pollution.
	3. Identify and describe adaptations of animals to different
	ecosystems.
	4. Suggest and develop conservation and management stategies for a
	particular ecological problem.
	Paper: Lab Course - VI: Animal Ecology, Toxicology and
	Environmental Pollution
	Paper VII: Gamete Biology and Animal Development
	1. Understand and describe the different developmental processes.
	2. Describe different techniques and methods used in experimental
	embryology.
	3. Elaborate on metamorphosis and regeneration in various and
	relate these processes to abnormalities in animals.
	4. Identify and evaluate application of different ART techniques to
	different infertility conditions.
	5. Describe different types of infertility in humans.
	Paper: Lab Course - VII: Gamete Biology and Animal
	Development
	Paper VIII: Biochemistry and Immunology
	1. Describe the structure and working of different components of
	vertebrate immune system.
	2. Elaborate about the innate and adaptive immune responses in
	vertebrates.
	3. Describe the different immunological disorders found in man.
	4. Explain the different techniques in immunology
	5. Elaborate about structure and application of antibodies in clinical
	therapy and biological research.
	Paper: Lab Course - VIII: Biochemistry and Immunology
	Paper IX (Elective): Pathobiology & Medical Zoology
	1. Explain about the different pathogens causing disease in man.
	2. Describe the different parasites causing disease and disability in
	man and animals.
	3. Ability to elaborate about the life cycle and biology of disease
	carrying vectors; suggest preventive and control measures for the said
	diseases.
<u> </u>	

	4. An understanding of the relationship between changes in physiology of host and progress of pathogenesis in human beings and animals.
	Paper: Lab Course - IX(Elective): Pathobiology/ Medical Zoology
	Paper X- Seminar
I.SC. II Year	Paper- XI: VERTEBRATES- STRUCTURE AND FUNCTION
emester- III	1. Able to explain the broad classification of vertebrates based on
	features.
	2. Describe relation between organ systems in different vertebrate
	groups.
	3. Explain the significance of integument and skeletal systems of vertebrates.
	4. Compare the structural and functional morphology of
	vertebrates.
	Laboratory Course- XI- VERTEBRATES: STRUCTURE
	AND FUNCTION
	Theory Paper- XII: MOLECULAR CELL BIOLOGY
	1. Elaborate about contemporary developments in the field of
	molecular biology.
	2. Explain the differences between prokaryotes and eukaryotes. 3.
	Describe the processes of cell communication and carcinogenesis.
	4. Learn about latest in gene and genome structure, functions and
	organization.
	Laboratory Course: XII- MOLECULAR CELL BIOLOGY
	Paper- XIII-B Fishery Science- I Fish Morphology, Anatomy
	and Physiology- I
	1. Explain the inter-relation between different groups of fish.
	2. Be able to identify and broadly classify fish.
	3. Appreciate the relation between environment and feeding and
	digestion in fish.
	4. Describe the respiratory mechanisms in different groups of fish.
	5. Explain the significance of biological rhythms in fish growth and
	reproduction.
	Laboratory Course- XIII-B: Fish Morphology, Anatomy and
	Physiology- I
	Theory Paper- XIV-B Fishery Science- II: Fish Morphology,
	Anatomy and Physiology- II
	1. Ability to describe the structure and functions of the nervous &
	reproductive systems.
	2. Elaborate the migration patterns, growth & age determination
	methods of fish species.
	3. Describe the specialized organs like swim bladder, electric &
	acoustic organs in fish.
	4. Explain the working of endocrine and venom glands in fish.
	Laboratory Course XIV-B: Fishery Science- II
	Theory Paper - XV: Seminar
I.SC. II Year	<b>Theory Paper - XVI Genetics and Genetic Engineering</b>
emester- IV	1. Explain the principles of Mendelian inheritance.
	2. Describe gene and chromosomal inheritance and their disorders.

3. Elaborate about different tools and techniques used in
recombinant DNA technology.
4. Discern the different tools used in cloning and gene transfer
technology.
aboratory Course XVI- GENETICS AND GENETIC
ENGINEERING
heory Paper - XVII Mammalian Endocrinology
1. Appreciate the nature, functions and classification of hormones.
2. Describe general structure and functions of endocrine glands in
mammals.
3. Trace the relation between pituitary and other endocrine glands.
4. Elaborate about endocrine role of adrenal, pancreatic and pineal
tissue in humans.
5. Explain about functions of gastro-intestinal and reproductive
hormones in humans. 6. Elaborate about the different endocrine
disorders in humans.
Laboratory Course XVII: MAMMALIAN
ENDOCRINOLOGY
Theory Paper XVIII-B Fishery Science – I Fisheries and Fish
Culture – I
1. Knowledge of capture and culture fishery practices of India and
methods adopted.
2. Suggest design and management procedures for a fish farm. 3.
Carry out artificial fish breeding and weed control in a fish farm.
4. Identify various fish diseases and suggest treatments.
5. Elaborate about different fish preservation methods.
6. Evaluate suitability of different fish for making by-products.
aboratory Course XVIII-B: Fisheries and Fish Culture- I
Theory Paper XIX-B Fishery Science – II Fisheries and Fish Culture – II
<ol> <li>Describe the fishery resources of India.</li> <li>Knowledge about culturable organisms and different culture</li> </ol>
methods.
3. Identify and assess the anthropogenic threats to fishery industry.
4. Knowledge of marine capture and culture fishery of India and
legislative framework to regulate it.
aboratory Course XIX-B: Fisheries and Fish Culture- II
heory Paper - XX: Seminar
mora ruper title communication

## P.G. Department of Marathi Programme offered: M.A. Marathi

Sr. No.	Program	Program objective	Program Specific Objectives
	M.A. Marathi	पदवी शिक्षणानंतर विद्यार्थी पदव्युत्तर महाविद्यालयीन शिक्षण घेतांना ऐश्चिक मराठी हा विषय अधिक स्वरुपात ज्ञान मिळावा ही अपेक्षा असते.	PSO1. मराठी वाङ्मयाचा इतिहास अभ्यासताना मराठी साहित्य आणि संस्कृती जोपासण्यासाठी विवेक जागा होतो.
		विद्यार्थ्यांमध्ये भाषीक गोडी	PSO2. मानवी भाषा आणि साहित्य याचे

	सोबतच वाङ्मयीन प्रकाराची ओळख व्हावी व या विषयात रोजगार संधी तयार व्हावी हा मुख्य उद्देश मराठी विषय अभ्यासण्यापाठीमागे आहे.तसेच भावनिक क्षमता व संवेदनशीलता विद्यार्थ्यांनी आत्मसात करावी हा उद्देश आहे.	PSO3. वाङ्मय प्रकाराचे महत्व

Courses offered: F.Y.M.A. Marathi, S.Y.M.A.

Sr.	Course	Course outcome
No.	M.A. F.Y.	CO Paper- I: स्वातंत्र्यपूर्व काळातील मराठी वाङ्मयाचा इतिहास.
		<ol> <li>मराठी साहित्याचा अभ्यास करण्यासाठी अभिरुची निर्माण झाले.</li> </ol>
		२) आधुनिक मराठी वाङ्मयाच्या इतिहासातील परंपरा लक्षात आली.
		३) विविध वाङ्मय प्रकाराचा उद्गम आणि विकास लक्षात आले.
		४) स्वातंत्र्य चळवळीचे पडसाद साहित्यामध्ये कसे उमटले आहेत,
		याचा शोध लागला.
		५) ब्रिटिश सरकारच्या प्रभावांचा आणि इंग्रजी साहित्याच्या संपर्कातून
		मराठी साहित्यात कोणती स्थित्यंतरे घडली याबद्दल साहित्यिक आणि
		साहित्यिकृती यांचे अवलोकन घेता आले.
		६) मराठी भाषा आणि साहित्य यांच्या कालसुसंगत कसे अनुबंध
		आहेत, हे लक्षात आले.
		CO paper II ऐतिहासिक भाषाविज्ञान
		१) भाषाविज्ञान ही संकल्पना लक्षात आली
		२) भाषेचा इतिहास समजून घेता आला.
		३) भाषेच्या शास्त्रशुद्ध अभ्यासाचे इतिहासातील प्रमुख टप्पे लक्षात आले.
		४) बोलीभाषेविषयीचे गैरसमज दूर झाले.
		CO Paper – III. वाङ्मयप्रकारांचा अभ्यासः कथा आणि कादंबरी.
		१) कथा आणि कादंबरी या वाङ्मयय प्रकाराची ओळख करून घेतली.
		२) स्वातंत्र्योत्तर काळातील कथा आणि कादंबरीचे स्वरूप वैशिष्ट्ये लक्षात आले.
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		३) निवडक कथाकार आणि कादंबरीकार यांच्या साहित्यकृतीची ओळख करून घेता आली.
		४) कथा आणि कादंबरीचे घटक, विशेष, प्रकार आणि रचनाबंद इ.परिचय
		झाला.
		KIIVIII

	५) कथा आणि कादंबरी या साहित्यप्रकाराबद्दल अभिरुची विकसित झाली.
	६) अभ्यासक्रमातील साहित्यकृतीचे आकलन, आस्वाद व मूल्यमापन करता
	आले.
	CO Paper IV. लोकप्रिय साहित्य.
	१) लोकप्रिय साहित्य ही संकल्पना समजून घेता आली.
	२) वाचकांची अभिरुची आणि साहित्य निर्मिती यांचा अनुबंध स्पष्ट करता
	आला.
	३) लोकप्रिय साहित्य, अभिजात साहित्य आणि श्रेष्ठ साहित्य यातील
	सीमारेषा लक्षात आली.
	४) लोकप्रिय साहित्य वाचण्याची गोडी निर्माण झाली.
	CO Paper V स्वातंत्र्योत्तर काळातील मराठी वाङ्मयाचा इतिहास.
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	१) स्वातंत्र्योत्तर काळातील मराठी वाङ्मयाची वाटचाल लक्षात आली.
	२) विविध साहित्य प्रवाहांचा उदय आणि विकास कसा झाला हे लक्षात आले.
	३) स्वातंत्र्योत्तर चळवळीचे प्रभाव साहित्यामध्ये कसे पडले हे लक्षात आले.
	४) मराठी लेखनातील ठळक प्रवृत्ती आणि ग्रंथकार आणि साहित्यिक कृती
	यांचा अनुबंध लक्षात आला.
	५)अभ्यास घटका आधारे तत्कालीन परीस्थितीवर प्रकाश टाकता आला
	CO Paper VI- वर्णनात्मक भाषाविज्ञान.
	१] भाषेच्या संरचनात्मक बाब लक्षात आली.
	२] विसाव्या शतकातील भाषाविज्ञानाच्या संकल्पनाचा परिचय झाला.
	३] भाषेच्या एककालिक अभ्यासाची तत्वे समजून घेता आली.
	४]. मराठी भाषेच्या व्यवस्थेचे आकलन लक्षात आले
	५] भाषा अभ्यासाचा नवा दृष्टिकोन विकसित झाला.
	Co Paper VII वाङ्मयप्रकाराचा अभ्यासः कविता आणि नाटक .
	१] नाटक आणि कविता या साहित्य प्रकाराची वैशिष्ट्ये लक्षात आली.
	२] मराठी साहित्य प्रकारांची वाटचाल योगदान व वेगळेपण समजून घेता
	आले.
	३] विशिष्ट कलाकृतीचे साहित्याच्या इतिहासातील स्थान कसे निश्चित होते ते
	समजून घेता आले.
	४] निवडक कलाकृतींचा सूक्ष्म पातळीवरील अभ्यास करता आला.
	५) नाटक आणि रंगभूमी यांचा सहसंबंध लक्षात आला.
	CO Paper – VII मराठी बाल-कुमार साहित्य.
	१] बाल साहित्य या संकल्पनेची ओळख करून घेता आली.
	२] प्रोढ साहित्य आणि बाल साहित्य यातील भेद लक्षात आला.
	३] मराठी आणि जागतिक भाषेतील प्रमुख बालसाहित्यकृतींचा स्थूल परिचय
	करून घेता आला.
	४] बालसाहित्य आणि इतर कलाप्रकारांचा अनुबंध लक्षात आला.
MAGN	५] बालकुमार वाङ्ममयाचा परिचय घडला.
M.A. S.Y.	CO paper-IX साहित्य समीक्षाशास्त्र.
	१) साहित्याचे स्वरूप,प्रयोजने आणि निर्मिती प्रक्रिया लक्षात आली.
	२) साहित्याची भाषा आणि आस्वाद प्रक्रिया समजून घेता आली.
	३) साहित्य आणि समाज यातील परस्पर संबंध लक्षात आला.

४) साहित्याचे आकलन मूल्यमापन आणि विश्लेषण करण्याची समीक्षादृष्टी
निर्माण झाली.
CO Paper X सामाजिक भाषाविज्ञान.
१) सामाजिक भाषाविज्ञान या अभ्यासशाखेचा परिचय झाला.
२) सामाजिक भाषाविज्ञान पायाभूत संकल्पनाची ओळख झाली.
३) सामाजिक भाषाविज्ञान भाषा आणि लिंगभेद याचा अभ्यास झाला.
४) भाषा विचार आणि संस्कृती याचा अनुबंध लक्षात आला.
५) बोली भाषेचा संबंध सामाजिक भाषाविज्ञानाची जोडता आला.
CO Paper XI लोकसंस्कृती व मराठी लोकसाहित्य
१) साहित्य संस्कृतीचे वैभव समजून घेता आले.
२) लोक साहित्यातील समाजवास्तवाचा परिचय झाला.
३) लोक जीवनाकडे पाहण्याची नवीदृष्टी मिळाली.
४) लोकसंस्कृतीचे वेगळेपण लक्षात आले.
CO Paper XII एका लेखकाचा अभ्यास -मध्ययुगीन-संत तुकाराम
१) संत तुकारामाच्या समकालीन परिस्थितीचे अवलोकन झाले.
२) संत तुकारामाचे जीवनचरित्र लक्षात आले.
३) अभंग आणि काव्य या छंद प्रकाराचा परिचय झाला.
४) संत तुकारामाचे अभंग रचनेतील वैविध्यपूर्णतेचा परिचय झाला.
५) मध्ययुगीन मराठी कवितेचे निखळ सौंदर्य समजावून घेणे शक्य झाले.

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