# **Programme Outcomes 2018-2019** Faculty of Arts

## **Department of Marathi**

Programs offered: B.A. Marathi

Sr.	Program	Program objective	Program Specific Objectives
<u>No.</u>	B.A. Marathi	उच्च माध्यमिक शिक्षणानंतर विद्यार्थी महाविद्यालयीन शिक्षण घेतांना ऐश्चिक मराठी हा विषय अधिक स्वरुपात ज्ञान मिळावा ही अपेक्षा असते. विद्यार्थ्यांमध्ये भाषीक गोडी 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.	PSO1. मराठी साहित्य प्रकाराची आणि त्याच्या उपघटकांचा ची या माध्यमातून ओळख होते. PSO2. कथा, कादंबरी, नाटक कविता, आत्मचरित्र या साहित्यप्रकारा मुळे विद्यार्थ्यांमध्ये संवेदना व भावना या मूल्यांची पेरणी होते. PSO3. व्याकरणाच्या अभ्यासातून व्यवहारात उपयोजन लक्षात येते. PSO4. मराठी विषय घेतलेल्या विद्यार्थ्यांना मुद्रितशोधन, अनुवाद लेखन आणि जाहिरात, बातमी यासारख्या 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. No.	Course	Course outcome
1101	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

<b>B.A. S. Y.</b>	CO Paper V आधुनिक वाङ्मम प्रकार : आत्मचरित्र.
	४) अलंकार, ओवी, मुक्तछंद ,उपदेशपर कवितेची ओळख झाली
	३) मराठी कवितेच्या वैभवशाली परंपरा ची ओळख झाली.
	२) ओवी ते लावणी असा काव्याचा प्रवास समजला.
	आकलनाची पूर्तताझाली.
	१)विद्यार्थ्याच्या भाषिक
	CO Paper IV. मध्ययुगीन आणि आधुनिक मराठी पद्य वाङ्मय.
	अभ्यासातून विद्यार्थ्यांच्या लक्षात आला.
	६) साहित्याचा मानवी जीवनावर होणारा परिणाम या घटकाच्या
	लेखन अभिरुची वृद्धिं गतझाली.
	७) मराठी कथात्म साहित्य अभ्यासताना विद्यार्थ्यांची वाचन आणि
	विद्यार्थ्यांना माहिती झाली.
	४) कथात्म साहित्यातील विविध लेखन प्रकारांची यानिमित्ताने
	त्यांच्या जीवनात होत असल्याचे त्यांच्या लक्षात आले.
	३) चरित्र, आत्मकथनातून महान व्यक्तिमत्त्वाचा, अनुभूतीचा उपयोग
	परिचय झाला.
	२) अभ्यासक्रमातील घटकांच्या माध्यमातून महान व्यक्तिमत्त्वाचा
	प्रकारातून विद्यार्थ्यांना साहित्य आणि संस्कृतीची ओळख झाली.
	१) चरित्र आत्मकथन कथा प्रवास वर्णन ललित गद्य या वांग्मय
	CO Paper – III. मराठी कथात्म साहित्य
	४) कवितेचे रचना बंदाची ओळख झाली.
	३) कवितेचे विविध प्रकार, प्रवाह, प्रकृती व परंपरा यांचे आकलन झाले.
	२)कवितेच्या परंपरेचा अभ्यास करता आला.
	१)मध्ययुगीन व आधुनिक काव्यप्रकाराची ओळख झाली
	CO paper II मध्ययुगीन आणि आधुनिक मराठी पदय वाङ्मय
	विद्यार्थ्यांमध्येही कला काहीप्रमाणात अवगत झाली.
	६) भाषिक कौशल्यांचा या पेपरच्या अनुषंगाने
	) यो जन्यासाय्या नाय्यनातून विद्याच्याना विविध बालानापया परिचय झाला.
	अनेफ फैया त्याना निळून पायलल्या जाहत. ७) या अभ्यासाच्या माध्यमातून विद्यार्थ्याना विविध बोलीभाषेचा
	अनेक कथा त्यांनी मिळून वाचलेल्या आहेत.
	प्रकाराची ओळख झाली. ४) कथा साहित्यप्रकाराची अभिरुची निर्माण झाल्याने यासारखी

''आपुलाची वाद आपुणाशी'' चंद्रकांत वानखेडे.
१) अभ्यासक्रमातील घटकामुळे विद्यार्थ्यांमध्ये मराठी भाषा व साहित्य
संबंधित रुची निर्माण झाली.
२) आत्मचरित्र या साहित्य प्रकारांचा अभ्यास केल्यानंतर त्यांची
आस्वादक क्षमता तयार झाली.
३) आत्मचरित्र या साहित्य प्रकारा सोबतच कथा, कादंबरी, नाटक इत्यादी
साहित्य प्रकाराची ओळखही झाली.
४) आत्मचरित्र, आत्मकथन यातील वेगळेपण व स्वरूप विशेष लक्षात
आले.
७)चंद्रकांत वानखडे लिखित 'आपुलाचि वाद आपणाशी" या आत्मचरित्राचे
वेगळेपण आणि त्याचे विशेष विद्यार्थ्यांच्या लक्षात आले.
CO Paper VI- आधुनिक साहित्यप्रकार नाटक.
प्राचीन नाट्य परंपरेची ओळख झाली.
२) नाटकांची गौरवशाली परंपरा व आधुनिक परंपरे बरोबरच महाकाव्याचा
प्रभाव आहे हे निश्चित झाले.
३) नाटक हा वांग्मय प्रकार सुक्ष्मपणे अभ्यासता आला.
४) दृश्य आणि श्राव्य साहित्य प्रकाराचे आकलन झाले.
७) दलित नाटकाची परंपरा अभ्यासता आली
Co Paper VII आधुनिक वाङ्मम प्रकार: कादंबरी.
''कोयता'' सरदार जाधव.
१) कादंबरी या साहित्यप्रकाराची ओळख झाली.
२) कथा, कादंबरी व नाटक यातील भेद लक्षात आला.
3) कादंबरीत चित्रित झालेले जीवन समाजाला व्यापलेले कसे असते हे
लक्षात आले.
४) "कोयता" कादंबरीतून ऊस तोडी कामगाराची भयावह दुःख
विद्यार्थ्यांनी जाणून घेतले.
५) कादंबरी लेखनाची संरचनासूत्र लक्षात आले.
CO Paper – VIII मध्ययुगीन गद्य-पद्यांचा अभ्यास
१)मध्ययुगीन गद्य-पद्य साहित्य परंपरा, प्रवाह व त्याकाळातील भाषेची
रूपे यांचा परिचय विद्यार्थ्यांना झाला.
२) ओवी, अभंग, फटका ते लावणी या जुन्या व नव्या काव्यप्रकाराची

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	ओळख झाली.
	३) यादवकालीन ते बहामनी कालीन भाषेची रूपे अभ्यासता आली.
	४) साहित्याच्या परिशीलनातून व्यक्तिमत्त्व घडविण्याचे कार्य संत
	साहित्यातून घडते यांची जाणीव झाली.
	७) मराठी साहित्याची गौरवशाली परंपरा समजून घेता आली.
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.
	७) 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.
	७) भरत मुनीचा रस सिद्धांत आणि साहित्य सिद्धांताचे महत्त्व त्यांच्या
	लक्षात आले.
	CO Paper XI मध्ययुगीन मराठी वांग्मयाचा 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) मध्यय्गीन भाषेतील शब्दकळा व भाषिक सौंदर्य विदयार्थ्यांनी
	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.
<ul> <li>अर्थपरिवर्तन व ध्वनी परिवर्तन या भाषिक परिवर्तनाची माहिती</li> </ul>
मिळाली.
<li>६) प्रमाण लेखनाचे नियम व्यवहारात किती उपयोगी असतात हे लक्षात</li>
आले.
७) व्याकरणातील प्रयोग विचार व विभक्ती विचार यांचे स्वरूप समजून
घेतले.

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

Program	Program objective	Program Specific Objectives
D A	ik/\/WW/W famb dr inki	DSO I & III fash   kfall, dh dakuh
B.A. Hindi	jk'VNKki'kk fgmh ds ipkj rFkk id kj grqvfgmh insk ds Nk=kadksjk'VNKki'kk fgmh ds ifr vkdf'kir djuk rFkk fgmh Hkk'kk ea mPp f"k{kk xg.k djus dh ij.kk nsuk e([; y{; g% thou eV; ka dh f"k{kk ds l kFk l kFk orieku cjkstxkjh dh l eL; k dks /; ku ea j[krs gq fgmh Hkk'kk ds ek/; e l s jkstxkj ds vol j inku djuk egRoiwki mnns; g%	PSO I & III. fgnh   kfgR; dh dgkuh ∨k§ mill; kl fo/kk   s Nk=ka dk ifjp; dj Nk=ka ea fpru , oa ys[ku "kSyh dk fodkl djukA PSO II & IV. fgnh ukVd ∨k§ , dkadh fo/kk dk ifjp; dj ukVd ds ifr Nk=ka ea : fp mRillu djukA PSO (SL)I&II. ∨fgnh {ks= ds Nk=ka dks fgnh Hkk'kk dk 0; kogkfjd Kku nukA
	B.A.	ProgramProgram objectiveB.A. Hindijk'VHkk'kk fgnh ds ipkj rFkk id kj grqvfgnh ins'k ds Nk=ka dks jk'VHkk'kk fgnh ds ifr vkdf'kir djuk rFkk fgnh Hkk'kk ea mPp f"k{kk xg.k djus dh ij.kk nuk eq[; y{; g% thou ety; ka dh f"k{kk ds l kFk l kFk orèku cjikst xkjh dh l eL; k dks /; ku ea j[krs gq fgnh Hkk'kk ds ek/; e l s jkst xkj ds volj inku

	djokukA <b>PSO XI.</b> Nk=ka ea I kfgR; dk "kkL=h; i) fr Is v/; ; u djus dh nf'V fodfI r djukA <b>PSO XII.</b> Hkk'kk f"k{k.k ds egRo ds I kFk I kFk Hkk'kkb2 "kønrk , oa døkyrk ds }kjk jkst xkj ds volj miyC/k djukA

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

Sr. No.	Course	Course outcome
<u>INU.</u>	B.A. F.Y. Hindi	<ul> <li>CO Paper- I &amp; III: dFkk I kfgR;</li> <li>1. fgmh I kfgR; dh dgkuh vkj mill; kl fo/kk I s Nk=ka dk i fjp; gkxkA</li> <li>2. dFkk I kfgR; dh y{ku "kyh I si fjp; gkxkA</li> <li>3. Nk=ka ea fpru, oa y{ku "kyh dk fodkl gkxkA</li> <li>4. fofHklu i k=ka dh ekufl drk rFkk y{ku fdz k dyki kal s Nk=ka ea I gh vkj xyr dks i j[kus dh {kerk fodfl r gkxhA</li> <li>5. I kfgR; ds ek/; e I s fofo/k I eL; kvka I s voxr gkcdj mu I eL; kvka ds I ek/kku ds fy, Nk=ka dks i j.kk feyxhA</li> </ul>
		CO paper II & IV: UKVC rFkk, clkch 1. fgmh ukVcl vkj, clkch fo/kk ck i fjp; gkxkA 2. ukVcl clsifr Nk=kaea: fp mRillu gkxhA 3. lokn ys[ku rFkk okpu clkSky ck fockl gkxkA 4. Nk=kacksjæep Islocf/kr tkuckjh i kIr gkxhA 5. vfHku; clsifr : fp fuekZk gkxh I kFk gh vfHku; cls {ks= eaclfj; j cukusck volj i kIr gkxkA
		<ul> <li>CO Paper-I &amp; II: I kfgR; Hkgirh ½5L½</li> <li>1. vfgnh {ks= ds Nk=ka dks fgnh Hkk/kk dk 0; kogkfjd Kku i klr gkskk</li> <li>2. fnorh; Hkk/kk ds: Ik ea Nk=ka dks fgnh vkg I kfgR; dk I kekU; i fjp; gkskk</li> <li>3. vfgnh {ks= ds Nk=ka ea fgnh ds i fr : fp mRi Uu gkskh</li> <li>4. fofo/k I kfgfR; d jpukvka ds ek/; e I s Nk=ka ea u\$rd eW; ka dk fodkI gkskk</li> </ul>
	B.A. S.Y. Hindi	CO Paper V e/; ; <b>#hu dfork [k#], d</b> 1- Hkkjrh; HkfDr I k/kuk dk ifjp; gkxkA

<ul> <li>2. HkfDr I kfgR; ds v/; ; u ds ek/; e I s Nk=ka ea ekuork dk Hkko fodfI r gkskA</li> <li>3. Lkekftd I fg'.kqrk dh ofRr dk fodkI gkskA</li> <li>4. HkfDr rFkk uhfr dh f"k{kk I s Nk=ka dk vkfRed rFkk v/; kfRed fodkI gkskA</li> <li>5. Tkhou n"ku rFkk thou eW; ka dk fodkI gkskA</li> <li>Co Paper VI &amp; VIII : fucák rFkk dFkRrj x  </li> <li>1. fucák fo/kk dk i fjp; gkskA</li> <li>2. Nk=ka ea o\$pkfjd ixYHkrk rFkk ck6/nd i k\$rrk dk fodkI gkskA</li> <li>3. dFk8rj x   dh jpukvka ds v/; ; u I s fpru"khyrk dh of/n gksthA</li> <li>4. fofo/k dFkRrj x   dh fo/kkvka dk i fjp; gkskA</li> <li>Co Paper VII vWkfud dfork [kM nk</li> <li>1. vk/kfud fgnh dk0; dk i fjp; gkskA</li> <li>2. dk0; vkLoknu I sekuoh; I ønuk dk fodkI gkskA</li> </ul>
<ul> <li>3. Lkekftd I fg'. krjk dh ofRr dk fodki gkskki</li> <li>4. HkfDr rFkk uhfr dh f"k{kk I s Nk=ka dk vkfRed rFkk v/; kfRed fodki gkskki</li> <li>5. Tkhou n"ku rFkk thou eW; ka dk fodki gkskki</li> <li>Co Paper VI &amp; VIII: fucák rFkk dFkRrj x  </li> <li>1. fucák fo/kk dk ifjp; gkskki</li> <li>2. Nk=ka ea opkfjd i xYHkrk rFkk ck\$/nd i k\$rk dk fodki gkskki</li> <li>3. dFk&amp;rj x   dh jpukvka ds v/; ; u i sfpru"khyrk dh of/n gkskki</li> <li>4. fofo/k dFk&amp;rj x   dh fo/kkvka dk ifjp; gkskki</li> <li>Co Paper VII vk/kfud dfork [k&amp; nk</li> <li>1. vk/kfud fgnh dk0; dk ifjp; gkskki</li> </ul>
<ul> <li>4. HkfDr rFkk ühfr dh f"k{kk IsNk=ka dk vkfRed rFkk v/; kfRed fodkl gkskA</li> <li>5. Tkhou n"klu rFkk thou eW; kadk fodkl gkskA</li> <li>Co Paper VI &amp; VIII: fucak rFkk dFkRrj x  </li> <li>1. fucak fo/kk dk ifjp; gkskA</li> <li>2. Nk=ka ea o\$pkfjd ixYHkrk rFkk ckb/nd ik&amp;rk dk fodkl gkskA</li> <li>3. dFkBrj x   dh jpukvkads v/; ; u Isfpru"khyrk dh of/n gkshA</li> <li>4. fofo/k dFkBrj x   dh fo/kkvkadk ifjp; gkskA</li> <li>CO Paper VII vk/kfud dfork [kM] nk</li> <li>1. vk/kfud fgnh dk0; dk ifjp; gkskA</li> </ul>
<ul> <li>V/; kfRed fodkl gkxkA</li> <li>5. Tkhou n"ku rFkk thou eW; kadk fodkl gkxkA</li> <li>Co Paper VI &amp; VIII : fuc#k rFkk dFkRrj x  </li> <li>1. fuc#k fo/kk dk ifjp; gkxkA</li> <li>2. Nk=ka ea o\$pkfjd ixYHkrk rFkk ck\$/nd ik\$erk dk fodkl gkxkA</li> <li>3. dFkRrj x   dh jpukvkads v/; ; u l sfpru"khyrk dh of/n gkxkA</li> <li>4. fofo/k dFkRrj x   dh fo/kkvkadk ifjp; gkxkA</li> <li>CO Paper VII vk/kfud dfork [kM nk</li> <li>1. vk/kfud fgnh dk0; dk ifjp; gkxkA</li> </ul>
<ul> <li>5. Tkhou n"ku rFkk thou eW; kadk fodkl gkxkA</li> <li>Co Paper VI &amp; VIII: fucák rFkk dFkkrj x  </li> <li>1. fucák fo/kk dk ifjp; gkxkA</li> <li>2. Nk=ka ea o\$pkfjd ixYHkrk rFkk ck\$/nd ik\$<rk dk="" fodkl="" gkxka<="" li=""> <li>3. dFk&amp;rj x   dh jpukvkads v/; ; u l sfpru"khyrk dh of/n gkxhA</li> <li>4. fofo/k dFk&amp;rj x   dh fo/kkvkadk ifjp; gkxkA</li> <li>CO Paper VII vk/kfud dfork [k#1 nk</li> <li>1. vk/kfud fgnh dk0; dk ifjp; gkxkA</li> </rk></li></ul>
Co Paper VI & VIII : fucák rFkk dFk&rj x   1- fucák fo/kk dk ifjp; gkxkA 2- Nk=ka ea o\$pkfjd ixYHkrk rFkk ck\$/nd ik&rk dk fodkI gkxkA 3- dFk&rj x   dh jpukvkads v/; ; u I sfparu"khyrk dh of/n gkxhA 4- fofo/k dFk&rj x   dh fo/kkvkadk ifjp; gkxkA CO Paper VII Vk/kfud dfork [k& nk 1- vk/kfud fganh dk0; dk ifjp; gkxkA
<ul> <li>1. fucák fo/kk dk ifjp; gkxkA</li> <li>2. Nk=ka ea opkfjd ixYHkrk rFkk ck5/nd ik&amp;rk dk fodkI gkxkA</li> <li>3. dFk8rj x   dh jpukvkads v/; ; u Isfpru"khyrk dh of/n gkxhA</li> <li>4. fofo/k dFk8rj x   dh fo/kkvkadk ifjp; gkxkA</li> <li>CO Paper VII vk/kfud dfork [k81 nk</li> <li>1. vk/kfud fganh dk0; dk ifjp; gkxkA</li> </ul>
<ul> <li>2- Nk=ka ea o\$pkfjd ixYHkrk rFkk ck\$/nd ik\$</li> <li>rk dk fodkl gkxkA</li> <li>3- dFk&amp;rj x   dh jpukvkads v/; ; u lsfpru"khyrk dh of/n gkxhA</li> <li>4- fofo/k dFk&amp;rj x   dh fo/kkvkadk ifjp; gkxkA</li> <li>CO Paper VII Vk/kfud dfork [k&amp; nk</li> <li>1- vk/kfud fgnh dk0; dk ifjp; gkxkA</li> </ul>
fodki gkxkÅ 3- dFk&rj x   dh jpukvkadsv/;;u isfparu"khyrk dh of/n gkxhA 4- fofo/k dFk&rj x   dh fo/kkvkadk ifjp; gkxkA CO Paper VII Vk/kfud dfork [k& nk 1- vk/kfud fganh dk0; dk ifjp; gkxkA
<ul> <li>3- dFk&amp;rj x   dh jpukvka ds v/; ; u l sfparu "khyrk dh of/n gkxhA</li> <li>4- fofo/k dFk&amp;rj x   dh fo/kkvka dk ifjp; gkxkA</li> <li>CO Paper VII VK/kµd dfork [k&amp; nk</li> <li>1- vk/kµd fganh dk0; dk ifjp; gkxkA</li> </ul>
of/n gkschÅ 4- fofo/k dFk&rj x   dh fo/kkvkadk ifjp; gksckA CO Paper VII <b>VK/kfud dfork [k&amp;/ nk</b> 1- vk/kfjud fginh dk0; dk ifjp; gksckA
4- fofo/k dFk&rj x   dh fo/kkvkadk ifjp; gkxkACO Paper VII Vk/kfud dfork [kan nk1- vk/kfud fganh dk0; dk ifjp; gkxkA
<b>CO Paper VII VK/kýud dfork [kå/ nk</b> <b>1</b> - Vk/kýud fganh dk0; dk i fjp; gkxkA
<b>1-</b> vk/kų́ud fginh dk0; dk i fjp; gkxkA
3- vk/kų d dfork dh fofo/k i pfRr; kadk i fjp; gkxkA
4- oržeku ; oklu fofo/k leL; kvka ls ifjfpr gkodj
I eL; kvka dsfujkdj.k dsfy, ijj.kk iklr gkxhA
CO Paper- III : <b>dFk&amp;rj x   ½SL½</b>
<b>1.</b> $\sqrt{g}$ and $\sqrt{k} = ds$ Nk=ka dks fnorh; Hkk/kk ds : lk ea fg anh
Hkk'kk rFkk fginh I kfgR; dk Kku gkxkA
<b>2.</b> dFkgrj x   ds $v/$ ; ; u   s Nk=ka ea fparu"khyrk]
ofokfjdrk dk fodkli gkxkA
<b>3-</b> $\sqrt{g}$ and $\{k_s = ds Nk = fg$ and $dFk_r = x   dh fo/k_k v k_s$
rFkk jpukvkal sifjfpr gkaxA
4- dFk&rj x   dh fofo/k jpuk∨ka ds }kjk Nk=ka ea
nšklkfDr] I kekftd nkf; Ro] dr0; i jk; urk] u§rdrk
vkfn e¥; kadk fodkl gkxkA
CO Paper- IV : uk/d rFkk iz kt uew/d fgah %SL½
1- fnorh; Hkk/kk ds Nk=ka dks fganh ukVd I kfgR; dk
I kekU; ifjp; gkxkA
2- <b>Lo</b> kn y{ku rFkk okpu dk\$ky dk fodkl gkxkA
3- fnorh; Hkk/kk ds Nk=ka dks iz kstuenyd fganh dk
I kekU; ifjp; gksxkA
4- iz, kstuenyd fganh ds v/; ; u ls jkstxkj ds volj
iklr gkæk

	6-baVjuaV dhmi;kasxrk] osc Ifpāk] besy fuekZk rFkk isk.k ∨kfn dk Kku iklr gksxkA
B.A. T.Y.	CO Paper IX fgah   kfgR; dk bfrgkl
Hindi	1- fginh I kfgR; dscgr bfrgkI dk i fjp; gkxkA
	2- fginh I kfgR; ds I tu dh i 'BHkhe dk ck/k gkxkA
	3- I kfgfR; d i dfRr; kadk Kku gkxkA
	4- Nk=ka dks thou n"ku rFkk thou eW; ka dh f"k{kk ikir
	gkxhA
	5- I kfgR; ds bfrgkI dk ∨/;; u Hkfo'; dkyhu fuekZk ea egRoiwkZI kfcr gkxkA
	CO Paper X : fgah HKK
	1. fginh Hkk'kk dsifr Nk=kaea: fp mRiUu gkxhA
	2- fganh Hkk/kk dsiz, ¢Dr {k⊊kalsifjp; gksxkA
	3- ik kszah ds; ok esifginh Hkk'kk ah mi; kszrk is Nk=
	ifjfpr glaxa
	4- cgłaktićka forkky Hkkjr dh Liadz Hkkikkas: i esifginh
	Hkk/kk mi; kschrk fl/n gkschA
	5- fgmh Hkk'kk v/; ; u dsnokjk u; su; sjkst xkj dsvolj
	ikir gkaxa
	CO Paper XI :   KgR; "KL=
	1- $Nk=kaealkfgR;$ dk "kkL=h; i) fr $Isv/;$ ; u djusdh
	nf'V fodfl r gkxhA
	2- Nk= I kfgR; "kkL= ds egRo dks ∨kReI kr djæ&
	3- "kCn ∨k§j ∨FkZ ds L cc/kka dk ckg/k gksxkA
	4- Hkk/kkbZf"kYi dsifjorZukadk cksk gksxkA
	CO Paper XII : HK/k f″k(k.k
	1- Hkk/kk f"k{k.k dsegRo Isifjp; gkskA
	2- fganh Hkk/kk dh 0;kdjf.kd dksV;ka Isifjp; gksxkA
	3- Hkk'kkbZ "kynrk , oa dykyrk ds }kjk jkst xkj ds volj
	ikir gkaxa
	4- fganh Hkk'kk ds I kFk I kFk foKku rFkk 0; ki kj dh $v$   ru
	tkudkfj; kjiklr gkaxhA
	5- Nk=kaeay{ku dk%ky fodfl r gkxkA
Sr. Program	Program objective
No. B.A/B.SC Firs	t Objectives:
year	To introduce the students with short stories, essays on a variety
Compulsory	of important topics,
English	To encourage them to understand and appreciate prose

r	
	writings of well-known writers,
	To acquaint them with 'prose', its meaning and importance,
	To make them learn grammar items, such as antonyms,
	synonyms, etc.
	To enable them to write grammatically accurate sentences, by
	identifying common errors in writing,
	To encourage them to write short reports, personal and
	business letters,
	To prepare them to write short, precise, and meaningful e-mails
	for a variety of purposes,
	To prepare the students for competitive exams by encouraging
	them to learn English
	To encourage the students to understand and appreciate short
	lyrical poems,
	To motivate them to enjoy the inherent rhythmic beauty of
	lyrical poetry, To acquaint them with famous world poets such
	as Shakespeare, Blake, Tagore, etc,
	To prepare the students for competitive exams by encouraging
	them to learn English,
	To develop in the students communicative competence by
	encouraging them to learn to listen, speak, read and write
	properly,
	To develop the language skills of listening, speaking, reading
	and writing in the students so that they could use the English
	language in day to day, practical situations,
	To make the students understand the importance of non-verbal
	communication, i.e. body language so as to make
	communicative situations more meaningful, positive and
	effective
B.A/B.SC	Objectives:
second Year	To introduce the students with short stories, essays on a variety
Compulsory	of important topics,
English	To encourage them to understand and appreciate prose writings
Linghish	of well-known writers,
	To acquaint them with 'prose', its meaning and importance,
	To make them learn grammar items, such as Idioms, Phrases,
	and reported speech etc.
	To enable them to write grammatically accurate sentences, by
	identifying correct reported speech in writing English.
	To prepare the students for competitive exams by encouraging
	them to learn English.
	To encourage the students to understand and appreciate short
	lyrical poems,
	To motivate them to enjoy the inherent rhythmic beauty of
	lyrical poetry,
	To acquaint them with famous world poets such as Wordsworth,
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Blake, Keats, Byran, Browning, Lanston Hughes, Tagore etc,
To prepare the students for competitive exams by encouraging
them to learn English,
To develop in the student's communicative competence by
encouraging them to learn to listen, speak, read and write
properly,
To develop the language skills of listening, speaking, reading
and writing in the students so that they could use the English
language in day to day, practical situations,
To make the students understand the importance of non-verbal
communication, i.e. body language so as to make
communicative situations more meaningful, positive and
effective.

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

Sr.	Course	Course outcome
No.		
	B.A.	Optional English - First Year Semester I Paper No. I Title:
	F.Y.Paper No	Study of Fiction- Short Story
	I,II,III,IV	<b>Objectives of the Study</b> : To accusing the students with the literary conrest of 'fiction '
		To acquaint the students with the literary genre of 'fiction,'
		particularly short story,
		To introduce the meaning, types, features and functions of "short story,"
		To encourage them to read, understand, and appreciate short
		stories,
		To introduce them with the world famous short story tellers from
		England, USA, and India,
		To inculcate in the students the habit of reading short stories.
		Optional English - First Year Semester I Paper No. II Title:
		Study of Drama- One Act Play
		Objectives of the Study: • To acquaint the students with the
		literary genre of 'drama,' mainly One Act Play,
		• To introduce the meaning, types, features and functions of "One
		Act Play,"
		•To make them understand the mechanics of stage
		performance/acting/theatre direction, etc.,
		• To encourage them to understand and appreciate the literary art of
		play writing,
		• To encourage the students to watch and enact one act plays,
		•To develop among the students a liking for watching, enjoying
		and appreciating the art of drama.
		Optional English - First Year Semester II Paper No. III Title:
		Study of Fiction- Full Length Fiction

		Objectives of the Study:
		Objectives of the Study:
		To acquaint the students with the literary genre of 'fiction,'
		particularly full length fiction/novels,
		To introduce the meaning, features, functions and various types of
		fiction/novel,
		To encourage them understand and appreciate themes, motifs,
		symbolism and characters in the novels selected from diverse
		cultural milieu,
		To introduce them with the world famous novelists such as
		Conrad, Hemingway, and RK Narayan.
		To inculcate in the students the habit of reading novels for aesthetic
		pleasure.
		Optional English - First Year Semester II Paper No. IV Title:
		Study of Drama- Full Length Play
		Objectives of the Study:
		To acquaint the students with the literary genre of 'drama,' mainly
		Full Length Plays,
		To introduce the students with meaning, types, features and
		functions of full length drama,
		To make them understand the mechanics of stage
		performance/acting/theatre direction, etc.,
		To develop among the students a liking for watching, enjoying and
		appreciating the art of drama for artistic and aesthetic pleasure,
		To encourage the students to watch and enact/perform full-length
		plays during college gatherings/annual days/drama competitions,
		etc.
	<b>B.A. S. Y.</b>	Optional English - Second Year Semester III Paper No. V
	Paper No	Title: Study of Poetry- Sonnets & Elegy
	V,VI,VII,VIII	Objectives of the Study:
	Skill	To acquaint the students with the literary genre of 'poetry,'
	Enhancement	particularly sonnet & Elegy,
	course	To introduce the meaning, types, features and functions of "sonnet
		Elegy."
		To encourage them to read, understand, and appreciate sonnet,
		elegy
		To introduce them with the world famous sonnets and elegy.
		To inculcate in the students the habit of reading Sonnet & Elegy.
		Optional English - Second Year Semester III Paper No. VI
		Title: Study of Prose- Essays
		Objectives of the Study:
		To acquaint the students with the literary genre of 'prose,'
		particularly Essays.
		To introduce the meaning, types, features and functions of "Prose -
		Essays"
		To encourage them to read, understand, and appreciate Essays.
		To inculcate in the students the habit of reading Essays.
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	Optional English - Second Year Semester IV Paper No. VII
	Title: Study of Poetry- Odes and Ballads
	Objectives of the Study:
	To acquaint the students with the literary genre of 'poetry,' particularly Odes and Ballads.
	To introduce the meaning, types, features and functions of "Odes
	and Ballads" To encourage them to read, understand, and appreciate Odes and
	Ballads. To introduce them with the world famous Odes and Ballads.
	To inculcate in the students the habit of reading Odes and Ballads.
	Optional English - Second Year Semester IV Paper No. VIII Title: Study of Prose- Autobiography
	Objectives of the Study:
	To acquaint the students with the literary genre of 'prose,' particularly Autobiography.
	To introduce the meaning, types, features and functions of
	"Autobiography."
	To encourage them to read, understand, and appreciate
	Autobiography. To inculcate in the students the habit of reading Autobiography.
	Skill Enhancement Course (SEC) - Second Year Skills for
	Employability-I Semester III
	Employability-I Semester IV
	Objectives of the Course:
	To provide sound knowledge and training of 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>B.A. T.Y.</b>	DSE I - Semester V Title of the course: Literary Theory and
Paper NO.	Criticism (A) Introduction to Literary Criticism
IX,X,XI,XII	Salient features of the course:
Skill	1) The knowledge about classical masters of criticism is

Enhancement	disseminated
course	2) Critical ability to read texts in the light of past theories is
	introduced
	<b>Utility of the Course:</b> 1) The learners would develop a critical
	ability to judge literary texts
	2) Critical insight into the past theorists would be developed
	Objectives of the Course:
	1) To introduce the Greek and Roman literary critics to the learners
	2) To acquaint the learners with the English literary critics and
	criticism
	3) To understand the texts of major critics
	4) To identify and understand the literary terms, phrases and
	concepts in English related with the literary theories and criticism
	GE I –Semester V Title of the course: Modern English
	Structure (A) Introduction to English Speech Sounds
	Salient features of the course
	1) The practical aspects of the English language are demonstrated
	2) Ability to comprehend and reproduce Standard English is
	introduced
	Utility of the Course:
	1) The learners would be able to understand the system of
	speech with English sounds
	2) The ability to understand and reproduce standard patterns of
	speech is facilitated
	Objectives:
	1) To acquaint the learners with the English speech sounds,
	syllable and its structure
	2) To study the phonemic transcription and consonant clusters
	3) To understand the word accent and intonation in English
	speech
	4) To identify the dialects, idiolects and varieties of British
	English
	Prerequisites of the course
	1) Charts, diagrams, worksheets based on the course content
	2) The use of Language laboratory and audio-visual aids would be
	additionally beneficial to impart instructions
	DSE II Semester VI Title of the course: Literary Theory and
	<b>Criticism (B) Introduction to Literary Theory</b>
	Salient features of the course:
	1) The knowledge about contemporary theories of criticism is
	disseminated
	2) Critical ability to carry out practical criticism is introduced
	Utility of the Course:
	1) The learners would develop ability to analyze literary texts
	according to the rules of prosody
	2) Critical insight into the contemporary theories would be

developed
Objectives of the Course:
1) To introduce the prominent literary theories to the learners
2) To acquaint the learners with the global critical schools
3) To understand in depth the major literary theories
4) To enable the learners for undertaking practical criticism
GE II –Semester VI Title of the course: Modern English
Structure (A) Introduction to English Grammar
Salient feature of the Course
1) The course induces an understanding of the mechanism of the
English Language
2) The notion of grammatical correctness in practical usage is
highlighted
Utility of the course:
1) Learners are enabled to understand the logics and practices in
the field of English grammar
2) The foundational structure of English grammar is explained
3) Learners would be able to use the language with grammatical
correctness
Objectives:
1) To acquaint the learners with the English Word Classes.
2) To study word structures and affixes.
3) To study the basic clauses and phrases in English
4) To understand the sentence structure and forms and meaning
5) To identify the common errors and ambiguities in English
sentences
6) To comprehend the varieties of English language and its
dialects
Syllabus For Skill Enhancement Course (SEC) - Third Year Title of the course: Life Skills –I- Semester V
Title of the course: Life Skills -II - Semester VI
Salient Features of the Course
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 digital lifestyle 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
<b>Objectives:</b> 1) To assist the learners for a smooth transition from
student life into the world of work.
2) To develop the skills necessary for understanding oneself and
the sociocultural 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.

#### **Department of Geography** Programs offered: B. A. Geography

Progr	rams offered: B. A. C		
Sr.	Program	Program objective	Program Specific Objectives
No.			
	B. A. Geography	Inspire the students for	<b>PSO1.</b> To provide through knowledge
		pursuing higher studies	about various Geographical factors
		in Geography and for	<b>PSO2.</b> To make the students aware of
		becoming an	applications of Geography subject in
		entrepreneur and also	various sectors.
		enable students to get	<b>PSO3.</b> To highlight the potential of
		employed in the	various branches to become an
		Geography Related	entrepreneur.
		Sector & Institutes,	PSO4. To equip the students with
		Industries, Educational	skills related to laboratory as well as
		Institutes Research	field based studies
		Institutes and in the	<b>PSO5.</b> To make the students aware
		various concerning	about conservation and sustainable
		department of State and	use of Natural resources.
		Central Government	<b>PSO6.</b> To inculcate interest and
		based on Geography	foundation for further studies in
		subject.	Geography.
			<b>PSO7.</b> To address the socio-
			economical challenges related to
			Geography.
			<b>PSO8.</b> To facilitate students for
			taking up and shaping a successful
			career in Geography.
			<b>PSO9.</b> To create interest in nature
			conservation among the students
			<b>PSO10.</b> The life of all living creatures
			on earth depends on nature, so it is
			the duty of human beings to conserve
			nature.

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

Sr.	Course	Course outcome
No.		

<b>B. A. F.Y.</b>	CCGEOG- I: Geomorphology
	1) Students know about the creation and evolution of various earth
	forms.
	2) Students know the process, type and process of rock formation.
	3) By understanding the process of formation of internal and
	external forces of the earth, students get information about the
	forms formed by external factors and internal forces.
	4) Students get scientific information about disasters like
	earthquakes and thus remove misconceptions about them.
	CCGEOG - II: Climatology
	1) Students get information about the weather in different parts of the world.
	2) Students understand the importance of weather in human life by knowing the weather related factors
	3) Students understand the role of climate for human development.
	4) Students get scientific information regarding important factors like rainfall, temperature and storms, so various misconceptions
	about it are removed.
	5) Students get information about global climate change.
	CCGEOG – III: Practical Geography
	1) Students understand how standard is made and its importance in
	geography
	<b>2)</b> Students understand the importance of Scale for map and plan.
	<b>3)</b> Students are aware of various ReliefShowing methods
	4) Students are aware of the landforms in the land view map.
	CCGEOG – IV:Oceanography.
	1) Students know about the distribution of various oceans
	and seas on earth and their resources
	2) Students know the Surface configuration of ocean floor.
	3) Students understand the chemical and physical properties
	of sea water.
	4) Students understand the process of formation of various
	movements of sea water
	CCGEOG -V: Biogeography
	1) Students understand the process of creation of ecosystems
	on earth, so students develop a scientific view regarding the
	creation of ecosystems.
	2) Students understand the nature and elements of life on
	earth
	3) Students know about the types of animals and plants on

	earth, their distribution and the problems that have arisen with
	them.
	CCGEOG – VI: Practical Geography
	1) Students acquire the skills of reading Indian topographical map.
	2) Students get the skill to get information about various natural
	and cultural elements of the region on the basis of topographical
	map.
	3) Students acquire the skills of presenting geographical
	information with the help of line graphs and bar graphs.
	momenta win the ner of the graphs and our graphs.
<b>B. A. S. Y.</b>	CCGEO- VII:Human Geography
	1) Students know the real relationship between human and
	environment
	<ul><li>2) Knows the various functions of human beings</li><li>3) Knows about human life in different parts of the world</li></ul>
	· ·
	4) There is only one human being living in different regions of the
	earth but the geographical conditions of that region have created
	diversity in his way of life. Students get this message of national unity through human geography
	unity through human geography         CCGEO- VIII Economic Geography
	1) Students know about the economic activities of human beings in
	different regions of the earth
	2) Students have knowledge about agriculture, mineral resources,
	energy resources, industries, trade and transportation in different
	regions.
	3) Students understand the importance of having various natural
	<ul><li>resources for the development of human life</li><li>4) Students have knowledge about conservation and planning of</li></ul>
	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
	<ol> <li>Students know various aspects of tourism</li> <li>Students know the role of tourism center in the development of</li> </ol>
	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
<b>B.</b> A. T.Y.	DSE GEOG-I XIII: Development of GeographicalThought –
	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 ResearchMethodology
	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 GeographicalThought –
	Part II
	<ol> <li>Students know the basic concepts of geography</li> <li>Students get the skills to use various approaches to solve various</li> </ol>

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 have the skill to measure various statistical techniques
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 History Programs offered: B.A. History

No. B.A.	History		
		The programme educational objective of the undergraduate programme in history, WILL be able to: • To acquaint students with the past and present of India and the World. • Impart a critical understanding of Indian society, economy, polity, and culture through a historical perspective	<ul> <li><b>PSO1.</b> To understand the historical advancement of Ancient India from stone age to 647 A.D.</li> <li><b>PSO2.</b> To understand the historical events from 648 A.D. to 1526 A.D.</li> <li><b>PSO3.</b> To understand the most important and inspiring history of Chhatrpati Shivaji Maharaj and his times.</li> <li><b>PSO4.</b> Students WILL understand the historical advancement of Mughal period 1526 to 1707 A.D.</li> <li><b>PSO5.</b> To introduce Indian Freedom Struggle Movements in</li> </ul>

<ul> <li>To prepare students for a range of careers</li> <li>To stimulate intellectual curiosity and research attitude in the students</li> <li>To introduce the various Indian and foreign traditions of history writing</li> </ul>	broad manner. <b>PSO6.</b> To aware the students to know the contribution of Social Reformers & social change process in Modern Maharashtra. <b>PSO7.(SEC)</b> To introduce the students to the Indian art & Tourism. <b>PSO8. (SEC)</b> To introduce the students to the Indian art from past to present.

Sr.	Course	Course outcome
No.		
	<b>B.A. F.Y.</b>	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.
<b>B.A. S. Y.</b>	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
	<ul><li>Shivaji Maharaj and his times</li><li>5) Students will be understand the benevolent nature of</li></ul>
	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.
SEC	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
	creative sites for Tourist.
	7) To enable the students for their vocational careers.
	8) To get jobs in Tourism Department and Tourism Industries.
	9) To conserve the historical Monuments and places in their local
	areas
	B.A. S. Y.

B.A. T.Y.	CO Paper IX & X : History of Modern India (1857-1947 A.D.)
D.A. 1.1.	1. To introduce Indian Freedom Struggle Movements in broad
	manner. 2. To instil the spirit of nationalism among students.
	3. Make the students responsible Citizen of the nation.
	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.
	7. To support the spirit of competency.
	8. To inculcate 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
SEC	CO SEC III & IV : Appreciation of Indian Art
	1. To introduce the students to the Indian art from past to present.
	<ol> <li>To unfold aesthetic prosperity of the Indian art.</li> </ol>
	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
L	areas.

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

Sr. No.	Program	Program objective	Program Specific Objectives
	B.A. Sociology		<b>PSO1.</b> student learn basic concepts of
			Sociology andStudent could acquire
			scientific Knowledge of introductory
			Sociology
			PSO2. The Students learn societal
			objectives of Social integration Social
			reproduction and Social continuity
			<b>PSO3.</b> 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.
			Introduction Period
			<b>PSO8.</b> students will have an
			opportunity to learn philosophical
			Background of various social movements in India.
			<b>PSO9.</b> Students Know present era
			rural development programmers
			improvement of the living standards
			and providing them opportunities for
			rural peoples.
			<b>PSO 10.</b> Students will be made to
			elaborate a framework for the
			observation of the present problems.

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

Sr. No.	Course	Course outcome
	<b>B.A. F.Y.</b>	CO Paper- I: Introduction to Sociology
		1. student will learn basic concepts of Sociology and Student could
		acquire scientific Knowledge of introductory Sociology

		CO 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.
		CO Paper – III. Basic Concepts in sociology
		1. The student will be able know about the basic concepts of
		sociology.
		CO Paper IV. Social Institutions and Its Problems
		1 Students know our culture and the society problems
]	B.A. S. Y.	CO Paper V- Indian Society : Structure & Change
		1 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
		Social Milieupresented in proposed course will enable students to
		gain a better understanding of their situation and region.
		Co 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.
		CO 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
		to it.
		CO 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.
		Skill Enhancement Course – I
		Rural Society and Development
		1.To understand Rural Society
		2 To Know the various Rural Development Programmes.
		- 10 Infow the various Ratar Development I rogrammes.

	2 To understand issues in process of implementation of mural
	3 To understand issues in process of implementation of rural
	development programmes.
	Skill 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
<b>B.A.</b> T.	Y. DSE – A : Western Sociological Thinkers – I
	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.
	DGE – A : Methods of Social Research – I
	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.
	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
	phenomena.
	SEC – III : Social Counseling – 1
	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.
	2. Students will able to which tools and techniques to the students
	for social counseling.
	DSE – 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
	level of society, by following multidisciplinary approach of
	thinking for getting solution of social problems.
	DGE – B: Techniques of Social Research – II 1 Students will able understanding of the nature of social
	<b>1.</b> 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
phenomena. There are no universally accepted methods.
SEC – 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.
This course has field work and field visit camp to provide
opportunities to students to understands issues and problem for
solutions and adopt the counseling skills.

Sr. No.	Program	Program objective	Program Specific Objectives
	B.A. Physical Education	Students are able to know about all physical education games and sports. Students are achieve the goal in physical education. Students will participate in the national and international games. Students will able to stand and improvement in carrier with the physical education.	<ul> <li>PSO1. student learn basic concepts of History of Physical Education</li> <li>PSO2. The Students learn Principle of Physical Education</li> <li>PSO3. The Students of Sociology must possess the Knowledge of various Health-related concepts and diseases.</li> <li>PSO4. Students know the Basic Anatomy, Physiologyand First Aid</li> <li>PSO5. The course may provide opportunity to higher education specially in the field of physical education</li> <li>PSO6 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, teaching, guidance &amp; Curriculum development etc.</li> <li>PSO7 The course is helpful to get knowledge and skills with respect to coaching, teaching, guidance &amp; Curriculum development etc. in physical education</li> <li>PSO8 The professional abilities and personality of the students may be enhanced</li> </ul>

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

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

Sr. No.	Course	Course outcome
	<b>B.A. F.Y.</b>	CO 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
		CO Paper II- Practical
		1.Students will understanding Skill and techniques in running
		2. The Students learn about the optional games
		3. Students will understand the Indian games
		CO 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
		<b>CO</b> Paper IV- Practical
		1 Students will able to understand the height measurement shot- put, Long jump, Table tennis, etc.
		2. students are able to understand the mentation the record in
		record book.
	<b>B.A. S. Y.</b>	CO 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.
		Co 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,
		Yoga/ weight lifting, Dand Baithak (Men), Bent Knee Sit-ups.
		SEC- I Fitness and wellness
		1. Students will able to understand the different fitness exercise .
		2.Students will know about Nature and Duties of Life Guard
		CO 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.
		CO paper-VIII External Practical
		1.Students areable to understand the fundamental skill in different
		games like Throwing event, Jumping event, Cricket, judo etc.
		Skill 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 dischlad rearly Denefits of massage
	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,
	Acupressure for lower body extremities, Precautions of acupressure
	Benefit of acupressure.
<b>B.A. T.Y.</b>	DSE – A : Paper-IX ORGANIZATION AND MANAGEMENT
	IN PHYSICAL EDUCATION
	Students are able to understand the basic management in physical
	education
	2. Students will be understand organize the games and tournaments.
	Paper- X Generic Elective, Physical Education Practical
	Srudents will know about the practically play the games as sports
	SKILL ENHANCEMENT COURSE -III
	Yogic Therapies and Sports Physiotherapy
	Students arre able to understand the Yoga, diet and physiotheropy
	Paper-XI Test measurement and Psychology in Physical
	Education and Sports
	Students are able to understand the Test and Measurement,
	Construction and classification of Test, Scope of Sports
	Psychology.
	Paper- 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
	SEC-IV Officiating and Coaching
	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
	Motor Fitness, Coaching for Kids and Children's

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

110510	r rograms offered: D.22. i official Science					
Sr. No.	Program	Program objective	Program Specific Objectives			
		B.A.I Year				

1	B.A.I	I Paper Title : Political Theory, Paper – I, III			
	Political	This is an introductory paper to the	i)	To study the various	
	Science	concepts; ideas and theories in political		Political concepts and	
		theory. It seeks explain the evolution and		Political analysis.	
		usage of these concepts, ideas and theories	ii)	To study the	
		with reference to individual thinkers both		introductory part of	
		historically and analytically. The different		Political concepts and	
		ideological standpoints with regard to		relevant issues.	
		various concepts and theories are to be	iii)	To study the Political	
		critically explained with the purpose of		concepts and its relevant	
		highlighting the difference in their		parts.	
		perspectives and in order to understand	iv)		
		their continuity and change. Furthermore	,	concepts of Political	
		there is a need to emphasize the continuing		theories or issues concern	
		relevance of these concepts today and		with Political ideas.	
		explain how in idea and theory of yester			
		years gains prominence in contemporary			
		political theory.			
2	B.A.I	Paper Title : Government and Politics of M	Iaha	rashtra, Paper – II, IV	
	Political	This paper gives an in depth insight to the	i)	To Study the various	
	Science	level of state politics in India. In this	-	Elements concern with	
		context it offers to study the patterns of		Maharashtra Politics and	
		state politics especially in the light of		State Activity.	
		politics of Maharashtra. It not only deals	ii)	To understand different	
		with evolution or formation of Maharashtra		political issues of	
		state but focus on the changing nature of		Maharashtra Politics.	
		political culture thereof, and the role of	iii)	To understand the	
		different regional parties in shaping states		Government of	
		political system. Followed by structure and		Maharashtra State and its	
		function of state government, state		organs.	
		legislature, and local self-government,	iv)	To understand various	
		followed by Electoral process which is		Administrative	
		responsible for stability or instability of		Machineries of Local	
		Maharashtra political system.		Government.	
		B.A.II Year			
3	<b>B.A.II</b>	Paper Title : Indian Constitution, Paper –	· ·		
	Political	Paper Title : Indian Government and Polit			
	Science	This course acquaints students with the		Γo prepare students for	
		constitution, design of state structure,		competitive exams like	
		institutions and their actual working over		UPSC, MPSC and other	
		time. The Indian constitution		Exams.	
		accommodates conflicting impulses of	-	Γo expose the students	
		liberty and justice, territorial		with basic concepts and	
		decentralization and a strong union for	-	political institutions like	
		instance within itself. The course traces the		Parliament, Supreme	
		embodiment some of these conflicts in	(	Court, Political Parties	

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		constitutional provisions and shows how	Constitution & Democracy	
		thus have played out in Political practices.	etc.	
		In further, encourages a study of state	iii)To introduce the students	
		institution in their mutual interaction with	with the administrative	
		the larger extra constitutional environment.	and Political setup and	
			Mechanism with roll and	
			functions.	
			iv)To develop sensitive	
			citizenship among the	
			students	
4	B.A.II	Paper Title : International Relations, Pape		
-	<b>D.A.H</b> Political			
		Paper Title : International Organizations &		
	Science	International Relations is the study of	· 1	
		interactions Students will acquire	competitive exams like	
		knowledge of the basic structure, processes	UPSC, MPSC and other	
		& trends of International Politics. To	Exams.	
		understand the conceptual framework	ii) To produce students with	
		needed to systematic analysis of World	Key Political concepts	
		Politics, understand and be capable of	like, power diplomacy,	
		evaluating the validity of constructivist	propaganda, International	
		approach, To understand theories &	Law, UNO National	
		concepts of International Relations,	Interest, National Power,	
		International Organization and non	Disarmament etc	
		government organizations, Role of UN,	iii) To introduce the basic of	
		International Law and contemporary critical	International Relations.	
		issues in World politics, study of	iv) The Prepare Students	
		International Relations and develop the	ready for different	
		<b>•</b>	•	
		ability to think critically above current	carriers like Political	
		issues and the future of the world order.	analyst, Politicians,	
			Media, Professionals and	
			Sensitive Citizens.	
5	B.A.II	Paper Title : Election Management- I Pap		
	Political	This course will give introduction to the	The main purpose of this	
	Science	students of the debates, principles &	paper is to educate students	
		practices of Election Management.	about the Elections of India.	
		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 &		
		measures of election management using		
		quantitative methods, with particular		
		attending being paid to development basic		
		skills pertaining to the collection, analyze		
		and utilization of data.		
6	<b>B.A.II</b>	Paper Title : Political Journalism, Paper :	SEC -II	

	Political	This course will give introduction to the	The main purpose of this
	Science	students of political journalism aims to	paper is to educate students
		provide voters with the information to	about the Political Journalism
		formulate their own opinion and participate	in India.
		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,	
		government status, election updates etc.	
		B.A.III Year	
7	<b>B.A.III</b>	Paper Title : Western Political Thinker, Pa	aper-IX
	Political	This paper focus on the Classical	The main purpose of this
	Science	ideas generated in the western world	paper is to acknowledge
		representation the ancient to the modern.	students with how the great
		The four thinkers have been selected who	masters explained and
		represent ideal, realistic and liberal	analyzed political events and
		tradition. The text are interpreted both in	problems of their time and
		the historical and Philosophical perspective.	prescribed solutions.
8	<b>B.A.III</b>	Paper Title : Government & Politics of Un	ited Kingdom, Paper-X
	Political	This course acquaints students with the	i) To prepare students for
	Science	constitution, design of state structure,	competitive exams like
		institutions and their actual working over	UPSC, MPSC and other
		time. Government & Politics of United	Exams.
		Kingdom accommodates conflicting	ii) To expose the students
		impulses of liberty and justice, territorial	with basic concepts and
		decentralization and a strong union for	political institutions like
		instance within itself. The course traces the	Parliament, Supreme
		embodiment some of these conflicts in	Court, Political Parties
		constitutional provisions and shows how	Constitution & Democracy
		thus have played out in Political practices.	etc.
		In further, encourages a study of state	<b>iii</b> )To introduce the students
		institution in their mutual interaction with	with the administrative
		the larger extra constitutional environment.	and Political setup and
		the harger extra constitutional environment.	Mechanism with roll and
			functions.
			iv)To develop sensitive
			citizenship among the
			students
9	<b>B.A.III</b>	Paper Title : Indian Political T	
,	<b>Political</b>	This is an introductory paper to the	The main objective to
	Science	concept, ideas and theories developed in	study this paper is to
	Science	India. It deals with the main sources of the	<b>5 1 1</b>
			understand key thinker's seminal contribution to the
		political traditions in modern India and	
		focuses the development of social Institution and as well as various patterns of	evolution of political theorizing in India.
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politics that emerged in modern India.	
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. It	students with change and
seeks to search and ascertain the he major	continuity, major issues and
issues and debates in the field of Indian	debates in India's foreign
foreign policy and probe India's complex	policy.
relationship, both bilateral and multilateral	
with other countries.	

### **Courses offered:**

	B.A.F.Y. P	Political Science, B.A.S.Y. Political Science, B.A. T.Y. Political Science	
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Sr. No.	Course	Course outcome
		SEMESTER I & II
01	<b>B.A. F.Y.</b>	Political 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	<b>B.A. F.Y.</b>	Government 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
		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 Indian Constitutions
		with their Fundamental Rights and Duties.
04	B.A.S.Y.	Paper Title : International Relations, Paper-VI,
		Paper Title : International Organizations & Issues, Paper-VIII
		The Utility of the course Lies in the course Constitution in raising the
		student's awareness about the global International Politics with Key
		concepts approaches and Political Institutions like UNO. It will also

helps students to prepare themselves for competitive exams like MPSC etc. moreover it will career like Political analyst Professionals and Ideal Politicians.	e UPSC,
•	
Professionals and Ideal Politicians	Media,
05 B.A.S.Y. Paper 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	
<b>iv</b> ) Students will understand the how to face General Elections	s.
06 B.A.S.Y. Paper 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 B.A.T.Y. Paper Title : Western Political Thinker, Paper-IX	
The course will narrate students the legacy of the thinkers and o	rient
them about continuity and change within the western political tr	adition.
It helps them to study historical aspects western state and society	у.
08 B.A.T.Y. Paper Title : Government & Politics of United Kingdom, Pa	•
The outcome of course lies in building ideal citizens competition	-
skilled, man power mass awareness about the political structure	•
functionary among the youth. It will also go a long way in build	
Democracy and mass awareness among with about Government	-
Politics of United Kingdom with their Fundamental Rights and	
09 B.A.T.Y. Paper Title : Indian Political Thinkers, Paper-XI	
This course will encourage students to understand and decipher	the
diverse and often contesting ways in which the ideas of national	
democracy and social transformation were discussed in Pre and	
independence India.	1050
OR	
Paper Title : India's Foreign Policy, Paper-XI	
This Course will encourage the student to undertake an n depth	analysis
of India's foreign policy.	
epartment of Public Administration	

## Programs offered: B.A. Public Administration

Sr. No.	Program	Program objective	Program Specific Objectives

01 B.A. I Public	Public Administration is one of the	
A diministruction		<b>PSO1.</b> The Course introduces and
Administration		provides knowledge of Public
	Humanities. With the expansion of the	Administration.
	activities of modern state, public	<b>PSO2.</b> To provide knowledge of the
	administration has assumed great	new trends in public administration
	significance in modern society. The	<b>PSO3.</b> To understand the relations
	Public Administration and	of public administration with other
	Administrative Officers playing	humanities
	impartment role in social and	<b>PSO4.</b> To know District
	economic development of the Nation.	Administration.
	Administration is as old as mankind. It	<b>PSO5.</b> To understand Structure and
	has acquired all spheres of human life	function of various Administrative
	right from birth to death. It is very	offices of District Administration.
	close to the daily life of any person in	<b>PSO6.</b> To provide knowledge of the
	practical. Public Administration	Revenue Administration, Police
	Studies the systematic implementation	administration and Judiciary system
	of Laws and Government policies,	at district and taluka level.
	theories principles and its controlling	<b>PSO7.</b> After studying the course
	system. The subject stands as an	students will have a capacity to
	integral element of democratic system	understand the Basic Knowledge of
	of the nation.	administrative Organization and its
	The Present system of district	principles.
	administration owes its origin to the	<b>PSO8.</b> To provide knowledge of
	time of the Mauryan Empire. But	the Functions and qualities of chief
	modern structure of district	executive
	administration in India developed in	<b>PSO9.</b> To understand the
	Colonial Period (1772). At that time	importance of public relations in
	was district administration established	administration.
	for collection of revenue. In the	<b>PSO10.</b> After studying the course
	present era, district is the basic	students will have a capacity to
	territorial unit of administration in	understand :
	India. District administration is the	<b>PSO11.</b> To Understand the Role of
	total functioning of Government in a	Chief Minister and State Secretariat
	district level. In this paper focus on	in Maharashtra state.
	providing knowledge of district	<b>PSO12.</b> To understand Structure and
	administration for the Students.	function of State Legislature
	Public Administration is one of the	<b>PSO13.</b> To provide knowledge of
	youngest branches of Faculty of	the state government and
	Humanities. With the expansion of the	Administration.
	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 etc. Administrative	
	Organization and its principles is an	
	important part of public	
	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	
		democratically elected houses, the	
		Legislative Assembly (Vidhan Sabha)	
		and Legislative Council (Vidhan	
		Parishad).The Government of	
		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 Minister, Council	
		of Ministers, M.P.S.C., state Election	
		Commission etc.	
02	B.A. II Public	Personnel administration is an	<b>PSO14.</b> To familiarize the students
	Administration	important part of Public	with basic process of Civil Service
		administration. Personnel	Recruitment in Indian Personnel
		administration is the art and science	Administration.
		of planning, organizing, directing,	<b>PSO15.</b> To understand how to Train
		controlling and motivating human	Civil Servants for their Better Role
		resources. The main thing is to give	in Indian Governance and
		knowledge of personnel system in	Administration.
		Indian administration, specially how	<b>PSO16.</b> To know the Systematic
		to process of Recruitment, Training,	process in Personnel Administration
		Promotion and Retirement of the	(Recruitment to Retirement of the Personnel).
		Government Sector Employees; and	<b>PSO17.</b> To familiarize the students
		understands all new issue in	with basic process of Public Service
		personnel administration.	Recruitment in
		India is a Democratic Republic with	Indian Administration.
		a Parliamentary form of government	<b>PSO18.</b> To throw light on how the
		which is federal in structure with	public Servants are trained, made
		unitary features. There is a Council of	professional &skilled
		Ministers with the Prime Minister	so that they work towards
		as its head to advice the President who	development.
		is the constitutional head of the	<b>PSO19.</b> To brief them about the
		country. Similarly in states there is a	Systematic process in Personnel
		Council of Ministers with Chief	Administration
		Minister as its head, who advices the Governor. In this paper focus is on the	(Recruitment to Retirement).
		Governor. In this paper focus is on the Structure of State Government and	(Recruitment to Retirement). <b>PSO20.</b> To acquaint the students about how the human resource

Administration with special reference	planning is done.
to Maharashtra. The course is designed	<b>PSO21.</b> The Course introduces and
to provide knowledge to the students	provides knowledge of State
about formation of state in India, State	Government and Administration.
Legislature, State executive and State	<b>PSO22.</b> To understand process of
judiciary.	State Judiciary.
Rural development programmes are	<b>PSO23.</b> To know perceive
designed to facilitate a multi-faceted	Constitutional and Statutory
growth of the rural poor people by	Agencies.
extending the benefits of development	<b>PSO24.</b> To understand Rural
to them. The main aim of rural	Development and Empowerment.
development programmes is to	<b>PSO25.</b> To study various Rural
improve the living standards of the	Development Programmes.
people and providing them	<b>PSO26.</b> To understand various
opportunities. In the present era,	issues in rural development
various rural development programmes	<b>•</b>
	programmes
have been newly defined by Prime	<b>PSO27.</b> The students would learn
Minister. This course designed to	about the Three tier system of
create awareness of rural development	Panchayati Raj
in the students.	Institutions in Maharashtra state.
Everyone knows what is meant by	<b>PSO28.</b> It will help the students
an 'Office' but very few are able to	understand do the local self
define it. Office Administration is a	government function for the
part of general management. The main	overall well being .
aim of the paper Office Administration	<b>PSO29.</b> It would demonstrate a
is to introduce the process of the work	basic understanding for various
method. What is role of head of the	aspects of Three tier
office in office administration? How to	system of Panchayati Raj
keep safely and smoothly maintain	Institutions.
office records & environment.	<b>PSO30.</b> The students would be
The Present system of district	enlightened about the role of
administration owes its origin to the	Panchayati Raj Institutions in
time of the Mauryan Empire. But	Development of India.
modern structure of district	<b>PSO31.</b> To understand the meaning
administration in India developed in	of Office Administration.
	<b>PSO32.</b> To introduce the Office
Colonial Period (1772). At that time	
was district administration established	Procedure and Method.
for collection of revenue. In the	<b>PSO33.</b> To identify various
present era, district is the basic	problems in Office Administration.
territorial unit of administration in	<b>PSO34.</b> It Introduce and Provides
India. District administration is the	the students with the Knowledge of
total functioning of Government in a	Administrative
district. In this paper stress is on	Skills.
providing knowledge of district	<b>PSO35.</b> The students are acquainted
administration for the Students.	with the work of Good
The E-Governance is basically	Administrator
associated with carrying out the	<b>PSO36.</b> The enhances the ability of
functions and achieving the result of	the Students to understand the work
governance through the utilization of	of the good Administrator .
ICT (Information and Communications	<b>PSO37.</b> To know what is District
Technology). World Bank explained	Administration means.
romotogy). worth Dalik explained	A varianti su autori mealis.

		the "E-Governance as the use by 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 information and Communication technology to transform the efficiency, effectiveness, transparency and accountability 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.	<ul> <li>PSO38.To understand Structure and function of various departments of District Administration.</li> <li>PSO39.To provide knowledge of the revenue system, Judiciary system and Police administration at district level.</li> <li>PSO40. To Understand the Role of Urban Local Government in the Development of the Nation.</li> <li>PSO41.To Develop a Local Leadership in urban area.</li> <li>PSO42. To Understand the Role of urban local Institutions in urban development.</li> <li>PSO43. To acquaint the students with the basic local governing system.</li> <li>PSO44. To familiarize the students with concept of E-Governance and digital technology in service delivery.</li> <li>PSO45.To understand how to use of E-Governance in various administrative departments.</li> <li>PSO46.To know the application of E-Governance and various issues.</li> <li>PSO47. The Course would introduce and Provide Knowledge of E-Administration to the students.</li> <li>PSO48.To familiarize the students with the concept of E-Administration to the students.</li> <li>PSO49.It will acquaint the students the way ICT (Information and Communication technology) would be applied on Administration.</li> </ul>
03	B.A. III 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.	<ul><li><b>PSO51.</b> After studying the course students will have a capacity to understand the basic knowledge of various administrative Theories.</li><li><b>PSO52.</b> The approaches of study of public administration.</li></ul>

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	Administrative Thinkers and their	e
	contribution is an important	in organizations.
	part of public administration. The main	<b>PSO54.</b> To provide basic
	thing is to impart knowledge of Indian	Knowledge of financial
	and western administrative theories .	administration.
	Financial administration thus forms	<b>PSO55.</b> To Understand the Indian
	a crucial aspect of public	Budgetary process.
	administration. Financial machineries	<b>PSO56.</b> To Familiarize the students
	may be designed to promote and	with basic Knowledge of Budget
	develop particular public policies.	and financial administration.
	Government raises fund from the	<b>PSO57.</b> To Understand the Three
	public to meet maintenance	tire system of panchayati Raj in
	expenditure or the running expenses of	Maharashtra state.
	public administration. The course	<b>PSO58.</b> Understand to how to help
	*	-
	focuses on the important branch of	to Zilla parishad, panchayat samiti
	public administration.	and Gram Panchayat improve
	One of the most significant	their overall well being .
	development in India since	<b>PSO59.</b> To develop awareness of
	independence in the field of local	the basic Governing system to
	government has been the establishment	students.
	of a net-work of Panchyayati Raj	<b>PSO60.</b> The Course Introduce and
	Institutions. It is a Three tire system of governance at village ,tahsil and	Provides Knowledge of Disaster
		Management
	5 5	<b>PSO61.</b> To understand the role of
	Institutions playing impartment role in	various factors in Disaster
	social and economic development of	
	Maharashtra state .The course	Management.
	will throw light on details of the	<b>PSO62.</b> To Understand the
	formation and working of Panchayati	emerging and recent trends in public
	Raj institutions and powers and	administration.
	responsibilities. The course covers the	<b>PSO63.</b> To Know the Importance of
	part which is commonly added in	Information Technology in Public
	U.P.S.C.,M.P.S.C. and other	Administration.
	competitive exams. This course would	
	focus on the panchyayati Raj	knowledge of Right to Information
	institutions and their administration.	Act.
	Disaster Management is very	<b>PSO65.</b> To provide basic
	significant to survive in the case of a	Knowledge of various modern
	natural or a man made disaster. and	administrative
	can be defined as the organization and	. theories
	management of resources and	<b>PSO66.</b> To Understand the Views
	responsibilities for dealing with all	of Human Relation theory .
	humanitarian aspects of emergencies in	<b>PSO67.</b> To Familiarize the students
	particular preparedness response and	with basic Knowledge of modern
	recovery.	e
	•	administrative thoughts.
	Public Administration is one of the	<b>PSO68</b> To Understand the Role of
	youngest branches of Faculty of	Urban Local Government in
	Humanities. With the expansion of the	Development of Nation.
	activities of modern state, public	<b>PSO69.</b> Develop a Local
	administration has assumed great	Leadership in urban area.
	significance in modern society. The	<b>PSO70.</b> To Understand the Role of

	impact of Information Technology has	urban local Institutions in urban
	given to many new trends which have	development.
	all branches in public administration.	<b>PSO71.</b> To develop of the basic
	Recent trends is an important part of	Governing system to students.
	public administration. The main thing	<b>PSO72.</b> To Introduce and Provides
	is to impart knowledge of recent trends	Knowledge of Non Government
	in public administration.	Organization and their.
	Public Administration is one of the	Administration.
	youngest branches of Faculty of	<b>PSO73.</b> To understand the work of
	Humanities. With the expansion of the	N.G.Os in Nation building.
	activities of modern state, public	<b>PSO74.</b> The ability of Students to
	administration has assumed great	understand the Non Government
	significance in modern society.	organization and its works.
	Western 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	
	independence 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.	
	The 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	
	also participate fully in their	
	implementation. Citizens participation	
	through NGOs make the	
	administration responsive to the needs	
	auministration responsive to the needs	

is on the NGOs, their functions and responsibilities.
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#### **Courses offered:**

#### B.A.F.Y. Public Administration, B.A.S.Y. Public Administration, B.A. T.Y. Public Administration

Sr. No.	Course	Course outcome
01	<b>B.A. F.Y.</b>	CO 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
		society and sustainable development.
		CO 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.
		CO 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 .
		CO 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.
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02	B.A.S.Y.	CO 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.
		CO 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.
		<b>CO Paper- VII: Rural Development and Empowerment Programmes</b>
		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 Parished
		functioning of several democratic institutions suchas 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.
		CO 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
		Administration .
		CO 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.
		CO 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.
		3. Awareness of the basic E- administrative system as well as various issues in
		•
		E administration.
02		E administration.
03	B.A.T.Y.	E administration. CO Paper- XI: Administrative Thinkers
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Maharashtra state.
4. Understand the role of Panchyat Raj Institutes as the main instrument of
State to achieve its Rural developmental goals.
CO Paper- XIV: Disaster Management
In the recent years the branch of Disaster Management has attained unique
importance. The course will teach the students the utility of the disaster
management.
CO Paper- XV: Recent Trends in Public Administration
The era of Information Technology has given to many new trends which have
all 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.
CO Paper- XVI: (OR) Administrative Thoughts
The 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
Elton Meyo, Abraham Maslow about Human Relations Theory.
CO Paper- XVII: Urban Local Government in Maharashtra
The 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
the students will be motivated to develop interest towards urban development
of Maharashtra state.
CO Paper- XVIII: Administration of N.G.O.
In the country like India, the role of NGO is very significant. The purpose of
the 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.

#### Department of Geography Geography Programs offered: M. A. Geography

Sr. No.	Program	Program objective	Program Specific Objectives
	M. A.	Inspire the students for	<b>PSO: 01</b> To familiarize the students
	Geography	pursuing higher studies	with the understanding of the society
		in Geography and for	through concepts and social theory,
		becoming an	philosophical approaches and spatial
		entrepreneur and also	processes.
		enable students to get	<b>PSO:02</b> To examine the process of
		employed in the	social region formats in India with the
		Geographical research	help of social cultural factors.
		Institutes,Forest	<b>PSO:03</b> To Understand diversity of
		Department,	cultures and its diffusion.
		Metrological	To introduce GIS (Geographic
		Department, Survey of	Information System) as a tool of
		India and Educational	spatial science.
		Institutes and in the	<b>PSO:04</b> To indicate the basic

various	concerning	elements of GIS and methodology of
department	of State and	GIS.
Central	Government	To outline the steps and areas of
based or	n subject	application of GIS.
Geography.		<b>PSO:05</b> The aim of this course is to
		introduce the students with the
		fundamentals of regional planning
		<b>PSO:06</b> To provide in depth
		knowledge about agriculture
		geography
		<b>PSO:07</b> To nurture scientific and
		research approach among the students

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

Sr.	Course	Course outcome
No.		
	<b>F.Y.M.</b> A.	Paper IGeomorphology
	SEMESTER-I	• The course will provide an understanding of the conceptual
		and dynamic aspects of landform development.
		• Students will also learn the relevance of applied aspects of
		Geomorphology in various fields.
		• Understanding crustal mobility and tectonics; with special
		emphasis on their role in landform development
		paper IIClimatology
		• 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.
		• Students will learn the process of interaction between the
		atmosphere and the earth's surface.
		Paper – IIIEconomic Geography
		• Students will become sensitized to concept and
		classification of resources, use or misuse and will learn
		conservation methods and techniques.
		• 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.
		• Assessing the importance of economic activities around the
		world. Discussing the locational factors for development of
		industries
		Paper IVPractical
		• Will be able to represent relief features of the plateaus,
		hills, foothills, valleys, plains and flood plains through
		superimposed / composite/ serial or projected profiles.
		• Determining the area, the height and making of the plan of

	the land using dumpy level and prismatic compass in the
	field Survey, Methods of Slope Analysis.
	• Conducting field excursions and preparation of field report
	on research on problem in nearby different areas.
<b>F.Y. M. A.</b>	paper VOceanography
SEMESTER-	• Describing and analyzing the concepts of Oceanography
II	• Understanding the variations of global hydrological cycle
	• Emphasizing the significance of groundwater quality and its circulation
	paper VI Urban Geography
	• Understand the trends and patterns of world urbanization.
	• Know about different theories of urban growth
	• Demonstrate an understanding of the concept, principles
	and theories in the field of Urban Geography.
	• Identify and explain the patterns of urbanization in developed and developing countries.
	Paper VIIPolitical Geography
	• Emphasizing the significance of different political systems.
	• Analyzing different political ideologies, Developing an
	<ul><li>understanding of geopolitics,</li><li>Global geostrategic views and functioning of political</li></ul>
	systems.
	• Student will understand the history and development of
	political geography
	Paper 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
M.A.S.Y	Paper IXGeography of regional planning
SEMESTER- III	• Analyzing the concept of regions and regionalization.
	Studying the indicators of economic development
	<ul> <li>Paper X Biogeography</li> <li>Introducing ecosystem and biosphere concepts. Analyzing</li> </ul>
	the importance and role of biogeochemical cycles.
	<ul> <li>Learn about concept and relevance of biogeography,</li> </ul>
	ecosystem and ecology responsible for global trend of
	distribution of major plants and animals.
	• Learn about bio diversity, types of bio diversity, role of
	human in ecological disturbances and conservation issues.

	<ul> <li>Paper XI Agricultural Geography</li> <li>To introduce students Agricultural activities and its relation</li> </ul>
	<ul> <li>To familiarize the students with new modern technical methods and their applications in Agricultural activities.</li> <li>To enable students to apply Previously knowledge in Problems and Prospects in agriculture</li> </ul>
	<ul> <li>Paper XII Practical in Human Geography</li> <li>The practical use of this paper is that students are able to show different objectives like population growth, population distribution, density etc on maps.</li> <li>So that the student can develop knowledge regarding different mapping procedure like choropleth, thematic mapping etc.</li> </ul>
M.A.S.Y SEMESTER- IV	<ul> <li>Paper XIIIPopulation Geography</li> <li>Identifying habitable parts of the world and different global population dynamics.</li> <li>Understand the distribution of population.</li> <li>Population distribution and its problems.</li> <li>Students aware about the population policies</li> </ul>
	<ul> <li>Paper XIVSocial and Cultural Geography</li> <li>Explaining the concept and dynamics of human society.</li> <li>Analyzing the unity in the vast cultural background of India.</li> <li>Establishing the correlations between man and his natural and cultural landscape</li> </ul>
	<ul> <li>Paper XV Geography of Maharashtra</li> <li>Understand the location of physiographic, natural, historical and political of Maharashtra.</li> <li>Understand the geographical area and administrative division of Maharashtra.</li> <li>To understand the major rivers and dams of Maharashtra.</li> <li>To understand the climate, soils, and natural vegetation's.</li> </ul>
	<ul> <li>Paper XVI Practical in Field work &amp; Remote sensing.</li> <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> </ul>

• Training in the use. Geographic Information System (GIS)
software's for contemporary mapping skills.
• Student demonstrate their knowledge of physical
geography, the methods and techniques for observing,
measuring recording and reporting geographical
phenomenon.
• Student will be familiar with modern techniques in
geography. Student will be prepared the apply their skill in
professional careers.
• They understand about Aerial photography and Satellite
Remote Sensing
Paper XVIIProject work
• 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.
Overall this paper gives research based knowledge

## Faculty of Science

#### **Department Of Chemistry**

**Programs offered: B.Sc. Chemistry** 

Sr. No.	Program	Program objective	Program Specific Objectives
	B.Sc. Chemistry		<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:** 

F.Y. B.Sc. Chemistry
 S.Y. B.Sc. Chemistry

3) T.Y. B.Sc. Chemistry

Sr.	Course	Course outcome
No.	course	
01	B.Sc. F.Y.	CCC-I (Section A), P-I:Organic + 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.
02	B.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.
03	B.Sc. F.Y.	CCC II (Section A) P-III: Organic + Inorganic Chemistry
00	2.0001111	After completion of syllabus students will be able to understand
		following outcomes.
		1. Student should learn the concept of aromatic hydrocarbons,
		Aromaticity and antiaromaticity.
		2. Student should understand the phenols and synthesis of phenols
		3. Student knows about the haloalkene and haloarenes compounds.
		4. To know the concepts of carboxylic acids and their derivatives.
		5. To know about the types of alcohols and reaction of epoxide.
		6. To study the different properties of P- block elements.
		7. To know the acids & Bases by different concepts.
04	B.Sc. F.Y.	CCC- II (Section B), P-II: Physical + Inorganic Chemistry
		After completion of syllabus students will be able to understand

		following outcomes.
		1. 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.
05		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.
06	<b>B.SC. S. Y.</b>	CCC III (Section A) P-VI: Organic + Inorganic Chemistry
		After completion of syllabus students will be able to understand
		following outcomes.
		1. Learn the mechanism of name reactions.
		2. Know the Synthesis and Reactions of Aromatic Carboxylic and
		Sulphonic acids.
		3. Know the Synthesis and Reactions of Organometallic
		compounds.
		4. Learn the synthesis, mechanism, applications of active
		methylene compounds.
		5. Gathering basic knowledge of Oils, Fats, Soaps and Detergents.
		6. Understand the basic principle and application of Qualitative
		Analysis.
		7. Know the Classification, Properties of Non- aqueous solvents.
07	B.SC. S. Y.	CCC III (Section B) P-VII: Physical + Inorganic Chemistry
		After completion of syllabus students will be able to understand
		following outcomes.
		1. After completion of these courses students should be able to,
		2. Write an expression of Davisson-Germer experiment.
<u> </u>		

		3. Derive Schrodinger wave equation.
		4. Understand De-Broglie's hypothesis and uncertainty principle.
		5. Solve the numerical problems based on De-Broglie.
		6. Understand concept of entropy.
		7. Understand statements of first, second and third law of
		thermodynamics.
		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.
08	B.SC. S. Y.	CCC IV (Section A) P-VIII: Organic+ Inorganic Chemistry
08	D.SC. S. 1.	
		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.
		3. Know the Synthesis, and Reactions of Nitrogen Compounds.
		4. Gathering applications of Reagents in Organic Synthesis.
		5. Understand the Characteristics of d-Block Elements.
		6. Know the Characteristics of d-Block Elements.
09	B.SC. S. Y.	CCC IV (Section B) P-IX: Physical + Inorganic Chemistry
		After completion of syllabus students will be able to understand
		following outcomes.
		1. Know the rate constant and factors affecting rate of reactions.
		2. Write an expression for rate constant (K) for first order, second
		order reaction.
		3. Know the terms cell constant, specific conductivity, equivalent
		conductivity and molar conductivity.
		4. □Know the applications of Kohlrausch's law.
		5. Compare between thermal and photochemical reactions.
		6. Discuss different types of photochemical process.
		7. Know the preparation, properties, structure & application of
		different compounds.
		8. Discuss different inter halogen compounds by preparation,
		properties, structure and uses.
10	<b>B.SC. S. Y.</b>	CCCP II (CCC III & IV, Section A) Practical based on P-VI &
		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.
11	B.SC. S. Y.	CCCP III (CCC III & IV, Section B) Practical based on P-VII
11		& 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.
12	B.Sc. T.Y.	DSEC- 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
		6. Know the application of elements in Medicine
13	B.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
		<ol> <li>Analyze Rotational, Vibrational and Raman Spectra</li> <li>Interpret the theoretical and experimental methods of chemical</li> </ol>
		2. Interpret the theoretical and experimental methods of chemical
		2. Interpret the theoretical and experimental methods of chemical kinetics
		<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> </ol>
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		<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> </ol>
14	D So T V	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV)</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV) After completion of syllabus students will be able to understand</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV) After completion of syllabus students will be able to understand following outcomes.</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV)         After completion of syllabus students will be able to understand following outcomes.         To learn the basic principle and terms used in UV, IR &amp; NMR     </li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <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>To learn the basic principle and terms used in UV, IR &amp; NMR Spectroscopy</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <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>To learn the basic principle and terms used in UV, IR &amp; NMR Spectroscopy</li> <li>Acquire the fundamental knowledge of classification and</li> </ol>
14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <li>DSEC-VI (Section A) Organic &amp; Inorganic Chemistry (P-XIV)         After completion of syllabus students will be able to understand following outcomes.         To learn the basic principle and terms used in UV, IR &amp; NMR Spectroscopy         Acquire the fundamental knowledge of classification and Synthesis of Amino Acid and Peptides     </li> </ol>
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14	B.Sc. T.Y.	<ol> <li>Interpret the theoretical and experimental methods of chemical kinetics</li> <li>Know the theory and application of Distribution law</li> <li>Explain the Nomenclature, classification and application of Organometallic Compounds</li> <li>Illustrate the classification and application of Metal Carbonyls</li> <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>To learn the basic principle and terms used in UV, IR &amp; NMR Spectroscopy</li> <li>Acquire the fundamental knowledge of classification and Synthesis of Amino Acid and Peptides</li> <li>Describe the types of Rearrangement</li> <li>Postulates and limitations of VBT and CFT</li> <li>Calculation of CFSE for Tetrahedral and Octahedral Complexes</li> </ol>

15	B.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
16	B.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
17	B.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 conductories of a strong electrolyte at
		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
		7. morganic preparations and estimation of metarion

# **Department of Botany B.Sc. Programme Objectives**

Sr. No.	Program	Program objective	Program Specific Objectives
1	B.Sc. Botany		<b>PSO1.</b> To expand and increase current knowledge about plants
			<b>PSO2.</b> to ensure up-to-date level of Understanding of plant sciences.

in the research and development and Knowledge of mode and applied plant scien and excellent care prospects.	nd including agriculture, ecology, medicine, biotechnology and ce horticulture
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#### Courses offered: F.Y.B.Sc., S.Y.B.Sc and T.Y.B.Sc. Botany

Sr.	Course	Course outcome
No.		
2	B.Sc. F.Y.	CO Paper- I: Diversity of Microbes
		1. to expose themselves to the diversity of life forms
		2. To make aware of Natural resources
		3. To appreciate and apply ethical principles to plant science
		research
		4. To develop ability to work on their own and make them fit for
		society
		CO paper II: Cell and molecular biology
		1. The student will be able to distinguish the Prokaryotic and
		eukaryotic cell
		2. Ability to understand Cell organelles.
		3. The students will be able to understand macromolecules of cell.
		CO Paper – III. Diversity of Cryptogams
		1. The student will be able to identify and understand different
		cryptogams
		2. The learner will be able to understand habitat and developmental
		aspects of cryptogams
		3. Understand the anatomical structures of cryptogams.
		CO Paper IV. Genetics and Plant Breeding
		1. The students know the process of inheritance of characters .

		2. Ability to describe dominant and recessive characters.
		3. Know the plant breeding techniques.
		4. Describe the functions Hybridization .
		5. Understanding the process of plant introduction and
		acclematization.
		CO 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.
3	B.SC. S. Y.	CO Paper VI- Morphology and Taxonomy of Angiosperms
		On successful completion of the course, the students able
		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.
		5. Learn the structure and functions of Endocrine glands.
		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
		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
		1. 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
4	B.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
		CO Paper XVI Plant Metabolism, Biochemistry and Biotechnology
		CO Paper XVIPlantMetabolism,BiochemistryandBiotechnology1. Students understand aspects of photosynthesis and respiration
		CO Paper XVIPlantMetabolism,BiochemistryandBiotechnology1. Students understand aspects of photosynthesis and respiration2. Students will be able to find out mean of any kinds of routinely
		CO Paper XVIPlantMetabolism,BiochemistryandBiotechnology1. Students understand aspects of photosynthesis and respiration2. Students will be able to find out mean of any kinds of routinely used items.
		CO Paper XVIPlantMetabolism,BiochemistryandBiotechnology1. Students understand aspects of photosynthesis and respiration2. Students will be able to find out mean of any kinds of routinelyused items.3. Student Know the role of enzymes
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		<ul> <li>CO Paper XVI Plant Metabolism, Biochemistry and Biotechnology         <ol> <li>Students understand aspects of photosynthesis and respiration</li> <li>Students will be able to find out mean of any kinds of routinely used items.</li> <li>Student Know the role of enzymes</li> <li>Students get knowledge of Nitrogen metabolism</li> <li>Understand the basic aspects of Biotechnology.</li> <li>Aware of tools and techniques of Genetic engineering</li> </ol> </li> <li>CO Paper XV Plant Pathology-II         <ol> <li>Students will obtain knowledge on defence mechanism in plants.</li> <li>Students able to create awareness on plant diseases.</li> <li>Students get knowledge on plant disease controle.</li> </ol> </li> <li>CO Practicals based on theory papers- XII &amp; XIV         <ol> <li>Students learn to determine osmotic potential</li> <li>Study effect of light colours on photosynthesis.</li> </ol> </li> </ul>

<ol> <li>Students Study different laboratory equipments</li> <li>Students able to isolate fungal pathogen</li> <li>Students able to differentiate plant diseases</li> <li>Acquire knowledge on control measures of plant diseases</li> </ol>
<ol> <li>Students able to differentiate plant diseases</li> <li>Acquire knowledge on control measures of plant diseases</li> </ol>

Sr. No.	Program	Program objective	Program Specific Objectives
	B.Sc. Zoology	Inspire the students for pursuing higher studies in Zoology and for becoming an entrepreneur and also enable students to get employed in the Biological research Institutes Industries, Educational Institutes and in the various concerning department of State and Central Government based on subject Zoology.	<ul> <li>PSO1. To provide through knowledge about various animal sciences from primitive to highly evolved animal groups.</li> <li>PSO2. To make the students aware of applications of Zoology subject in various Industries.</li> <li>PSO3. To highlight the potential of various branches to become an entrepreneur.</li> <li>PSO4. To equip the students with skills related to laboratory as well as field based studies</li> <li>PSO5. To make the students aware about conservation and sustainable use of Biodiversity.</li> <li>PSO6. To inculcate interest and foundation for further studies in Zoology.</li> <li>PSO8. To facilitate students for taking up and shaping a successful career in Zoology.</li> </ul>

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

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

Sr.	Course	Course outcome	
No.			
	B.Sc. F.Y.	<ul> <li>CO Paper- I: Life and diversity animal –I</li> <li>1. The student will be able to identify a given invertebrate upto class level.</li> <li>2. Ability to understand the contribution of Invertebrates in the biodiversity index of any given habitat.</li> <li>3. Ability to understand and appreciate the ecological and economic importance of invertebrates and vertebrates.</li> <li>4. Ability to identify and describe external morphology and internal anatomical features of</li> </ul>	

	representative invertebrate species.	
	CO paper II: Cell Biology	
	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.	
	CO Paper – III. Life and diversity of animal II (Chordata)	
	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 IV. Developmental Biology	
	1. The students will able to identify and understand the	
	development of animals	
	2. Ability to understand the identify particular developmental	
	stages along with any kinds of anomalies if present.	
	3. The learner will be able to understand the developmental stages	
	in different animals.	
B.SC. S. Y.	CO Paper VI- Genetics	
	1. Understand the organization and functions of genetic material in	
	the living world.	
	2. Students will be able to understand the inheritance and variation	
	from generation after generation	
	3. Students will be able to understand the chromosomal	
	abnormalities at cellular level.	
	4. Students will be able to understand the behavior of gene and	
	their expression in the for of external characters.	
	Co Paper VII Comparative Anatomy And Physiology	
	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.	
	<b>CO Paper – VIII Genetic Engineering And Evolution</b>	
	1. The student will be able to identify the suspected person which	
	is suspected in any kind of criminal case.	
	2. The learner will be able to understand paternity of suspected	
	child.	
	3. Students will be able to understand inheritance and variations	
1	with respective evolution.	

		CO paper-IX Endocrinology, Histology And Biochemistry
		1. The student will be able to identify the different gland is located
		in the body of animal.
		2. The learner will be able to understand the hypo secretion and
		hyper secretion of endocrine gland.
		•••
		3. students will be able to understand different disease causes due
		to the deficiency of gland
		4. Students will bale to understand the histological structure and
		function of different organ in the body.
		5. Students are able to understand the different biological reaction
		•
		related to the metabolism of food.
	B.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
<u> </u>		
		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
L		12. Statendo will octain hilowrouge of libitery betenee, with u

<ul><li>particular emphasis on the biology, assessment, and management of fish and invertebrate fisheries.</li><li>3. Students will able to create awareness about manmade hazards to aquaculture.</li><li>4. Students will know about the important species for public health.</li></ul>
<ul><li>5. Students will know about the important species for public health.</li><li>5. Students acquire knowledge of Mariculture.</li><li>6. Students will able to understand and appreciate the role of Government in aquaculture development.</li></ul>

### **Department of Microbiology**

Sr. No.	Program	Program objective	Program Specific Objectives
	B.Sc.	Inspire the students for	<b>PSO1.</b> To provide through
	Microbiology	pursuing higher studies	knowledge about various microbial
		in Microbiology and for	diseases and their effects on
		becoming an	humans.
		entrepreneur and also	<b>PSO2.</b> To make the students aware of
		enable students to get	applications of Microbiology subject
		employed in the	in various pharma
		Biological research	Industries, pathological labs.
		Institutes Industries,	<b>PSO3.</b> To highlight the potential of
		Educational	various branches of Microbiology to
		Institutes,Pharma	become an entrepreneur.
		industry,Pathology labs	1 1
		and in the various	skills related to laboratory as well as
		concerning department	field based studies in the field of
		of State and Central	microbiology.
		Government based on	<b>PSO5.</b> To make the students aware
		subject Microiology.	about different useful
			microorganisms.
			<b>PSO6.</b> To inculcate interest and
			foundation for further studies in
			Microbiology.
			<b>PSO7.</b> To address the socio-
			economical challenges related to
			Microbial challenges.
			<b>PSO8.</b> To facilitate students for
			taking up and shaping a successful
			career in Microbiology.
Come		G. M. L.L. GYDG.	Microbiology and T.Y.B.Sc Mici

Sr.	Course	Course outcome
No.		

B.Sc. F.Y.	CO Paper-I: Introductory Microbiology	
	<ol> <li>To study scope of microbiology.</li> <li>To study development of microbiology.</li> </ol>	
	2. To study development of microbiology.	
	3. Characteristics of microorganisms.	
	CO Paper- II: MICROBIOLOGICAL TECHNIQUES (P-II)	
	1. The student will be able to use different types of miceoscopes	
	with their principle.	
	2. Ability to understand the micerobial staining techniques.	
	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 Basic concepts of shape,	
	arrangement, and size of prokaryotes cells, Importance of cell	
	shape, cell	
	size in rods and cocci	
	2. Ability to understand Classification 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.	
B.SC. S. Y.	CO 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 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.
		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.
	B.Sc. T.Y.	CO Paper XII Microbial Genetics DSEMB I (Section A)]
	D.50. 1.1.	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)
		1. Students will be able to study Physicochemical properties of
		enzymes.
		2. Students understand Role of nucleotides in metabolism.
		3. Students and tote of indeformers in inetabolism. 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.
		<ol> <li>Students will be understand Oble expressions.</li> <li>Students will be understand DNA repair.</li> </ol>
		3. Student will understand gene regulation.
		CO 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
1	1	tecniques

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

Sr.	Program	Program objective	Program Specific Objectives
Sr. No.	B.Sc. Environmental Science	>Enable to understand key concepts	<ol> <li>Students will assess necessary scientific concepts and data, consider likely social dynamics, and establish integral cultural contexts.</li> <li>Students will able to solve problems systematically, creatively, and reflexively, ready to assemble knowledge and formulate strategy.</li> <li>Students will have mastered foundational knowledge enabling them</li> </ol>
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Courses offered: B.Sc. F. Y., S.Y., and T. Y., Environmental Science

Sr.	Course	Course outcome	
No.			
	B.Sc. F.Y.	CO Paper- I: CCENV I (Section A)	
		Fundamentals of Environmental Science	
		Acquaint the students about the basic concepts of Universe,	
		Biosphere and its components , Biogeochemical Cycles and total	
		Environmental Science.	
		After completion of paper students will understand the Universe,	
		total factors in Environmental	
		CO paper II: CCENV I (Section B)	
		Fresh Water: Sources and Uses	
		Prime aim of the paper is to understand the Hydrosphere, sources	
		of water and its various types of uses	
		To understand the importance of water, its sources its global	
		availability	

	<b>CO Paper – III</b> CCENV II (Section A)	
	Environmental Ecology	
	Acquaint the students about the concepts of ecology, relations of	
	animals with their surroundings.	
	Students will come to know the importance of ecology and	
	relations of plants and animals with their surroundings	
	<b>CO Paper IV.</b> CCENV II (Section B)	
	Fresh Water Treatment	
	Purpose of this paper is the methods of analysis of Water, Water	
	Softening Methods, Water Treatment Methods, Water and water	
	Conservation practices	
	Students will able to treat the water, according to the need and	
	place of use of water.	
<b>B.SC. S. Y.</b>	CO Paper VI- CCENV III (Section A)	
	Basic concepts in Environmental Microbiology	
	Aim of this paper to know about the microbes, their life and their	
	relationship with environment	
	Students will come to know about Diversity and Scope of Microbes	
	and its Importance, Microscopy and Staining, Classifications and	
	different environmental factors	
	<b>CO Paper VII</b> _CCENV III (Section B)	
	Air pollution and Meteorology The course examines the	
	Atmosphere & Meteorology ,Structure of Atmosphere, Economic	
	Atmosphere & Meteorology ,Structure of Atmosphere, Economic effects of Air Pollution.	
	Students will understand Atmosphere & Meteorology Types of Air	
	Pollutants and Their Sources ,Mechanism of action of air	
	pollutants, Effects of Air pollution on Plants:	
	CO Paper – VIII CCENV IV (Section A)	
	Applied Environmental Microbiology	
	Acquaint the students about the Methods in Microbiology, Concept	
	of Sterilization and sources of microbes and its applications in	
	various Environmental processes	
	Students 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	
	Students will come to know about Ambient Air Pollutants	
	Sampling, Analysis and Measurement: Noise Pollution: Sources of	
	Noise, Effects of Noise Pollution and control measure	
B.Sc. T.Y.	CO Paper XII DECENV I (Section A)	
	Water pollution and Waste water Analysis	
	To understand scientific reasons of point and non point source of	
	water pollutants which enable to give correct suggestions for it's	

	proper treatment
	proper treatment. Students will come to know that
	01. Various sources of water and waste water.
	02. It's quality through physico – chemical and biological
	<b>CO Paper XIV</b> DECENV [(Section – B) Elective – II]:
	Environmental education and biodiversity.
	Environmental education for better understanding and upliftment
	of biodiversity and natural resources.
	The outcome of this paper is To understand the goals and
	objectives of Environmental Education., to understand the
	importance of Biodiversity and natural resources
	<b>CO Paper - XVI</b> DECENV II (Section A)
	Waste Water Engineering
	To give the proper treatment on the basis of load of waste water.
	Students will understand 01. The scientific process of treatment of
	waste water.
	02. To know the load of waste water for appropriate primary /
	secondary / tertiary treatment
	<b>CO Paper</b> – <b>XVIII</b> DECENV II [(Section B) Elective II]:
	Environmental Management
	To understand various movements of environmental protection
	management through software tools and environmental laws.
	Students will understand the principles of environmental
	management and various historical movements in environmental
	protection. And various laws and legislations of environmental
	protection
SKILL E	NHANCEMENT COURCES B.Sc.II and III YEAR
1. Skill	CCENV-I (A) Soil Testing Analyst
Enhancement	The main objective of the course is to provide the student with a
Course	formalized way to build their fundamental knowledge and skills
	within the different areas of soil science to enhance their
	professional skills
	testing or similar topics that provide information about soil
	Soil 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.
2. Skill	CCENV II (Section B)
Enhancement	Composting from Solid Waste
Course	The 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.
	Soil testing analyst will able to Use of instruments and their

	general maintenance, interpretation of analytical data and		
	formulation of reports/recommendations		
3.Skill	DECENV III Paper - XV		
Enhancement	Soil conservation Practices		
Course	The main objective of the course is to imbibe the importance of soil		
	and its development.		
	Student will acquire the soil management skill, will know how to		
	check the nutrient contents, deficiencies and its impact on food		
4.Skill	DECENVP- IV Paper - XXII		
Enhancement	Training course on waste water Analysis		
Course	The 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.		
	This 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**

Sr. No	Program	Program objective	Program Specific Objectives
0	B.Sc. Physics	· ·	
			deeper level. This also enables the students to develop their keen interest
			<b>PSO6.</b> To inculcate interest and foundation for further studies in Physics.
			<b>PSO7.</b> Tohelp the students to develop their skills through hands-on

	activities as they progress in the
	program
	PSO8. To facilitate students for
	taking up and shaping a successful
	career in Physics.

Courses offered: F.Y.B.Sc. Physics, S.Y.B.Sc.Physics, T.Y.B.Sc. Physics

Sr.	Course	Course outcome	
No.			
	B.Sc. F.Y.	CO 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	
		1. 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.	
		2. After completion of this course students will be able to apply the	
		concept of vectors and complex variables to various physical	
		quantities.	
		3. This course will also enable the students to solve the problems related to partial differentiation.	
		4. Fourier Analysis unit will enable the studeths to analyze the	
		periodic functions	
		CO Paper – III. Heat and Thermodynamics	
		1. This course will introduce the students to the world of heat	
		and thermodynamics and the behaviour of the physical	
		systems at different thermodynamical conditions.	
		2. After completing this course students will understand the	
		difference in the behaviour of the ideal and real gases,	
		transport phenomenon in gases.	
		3. Students will also understand the working of various heat	
		engines and the ways to increase their working efficiency.	
		CO Paper IV. Electricity and Magnetism	
		1. The students will be able to understand the concepts of	
		static and dynamical electrical magnetic fields, the sources	

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	<ul> <li>for generating such fields, polarization and induction effects, understand the basic difference between the DC and AC circuits and their functioning.</li> <li>2. 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> </ul>
	CO 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> <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</li> </ol>
	the basis of formulating the problem.
B.SC. S. Y.	CO Paper VI- Waves and Oscillations
	<ol> <li>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.</li> <li>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.</li> <li>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</li> </ol>
	Co Paper VII– Statistical Physics, Electromagnetics and theory
	of Relativity
	1. The students will be able to understand the concepts of macroscopic world, statistical approaches for understanding properties of the macroscopic bodies, ensembles, their

<ul> <li>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>2. This course is the prerequisite for several advanced courses in physics, chemistry, life sciences and the modern communication systems.</li> <li>3. Pre-requisite for this course is the knowledge of elementary mathematics and calculus.</li> <li>4. 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> </ul>	
CO Paper – VIII– Optics and Lasers	
<ol> <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</li> </ol>	
 required to study this course.	
<ul> <li>CO paper-IX- Basic Electronics <ul> <li>After completing this course students will be able to</li> </ul> </li> <li>1. Identify and understand construction and properties of different types of P-N junction diodes</li> <li>2. Apply knowledge of semiconductor devices to use them in different combinations to see their applications as amplifiers and oscillators</li> <li>3. Design different circuits using semiconductor devices and demonstrate their usage.</li> </ul>	
<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</li> </ul>	

	the computational methods applicable for solving problem in physical situations.		
	<b>3.</b> 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		
	importance and applications of the courses.		
	CO Paper XI (Practical) – Laboratory Course (Practical based		
	on P-VIII & IX)		
	<ol> <li>This Laboratory course introduces the students to the practical applications of the core courses Section B of CC.</li> <li>III &amp; IV in Physics that the students have studied in Semester III and IV.</li> </ol>		
	<ol> <li>This laboratory course also includes experiments based o the computational methods applicable for solving problem</li> </ol>		
	in physical situations.		
	3. After completing this course students will get insight of th		
	theory course they have undergone and will understand th		
	importance and applications of the courses.		
B.Sc. T.Y. CO Paper XII - Quantum Mechanics			
D.SC. 1.1.	1. This course introduces the students to the world of		
	microscopic particles such as molecules, atoms, atomi		
	nuclei and elementary particles, study their dynamic		
	employing wave analogy, and also to make the connection		
	between the rules governing the microscopic particles wit		
	that of the macroscopic bodies around us.		
	2. This course is the pre-requisite for several advance courses in physics and chemistry and is necessary for		
	understanding the behavior of molecules, atoms an elementary particles.		
	3. The pre-requisite for this course is knowledge of calculus		
	wave theory and modern physics.		
	4. This course is the core course and every student pursuing 1		
	Sc with physics as one of the optional is required to stud		
	this course.		
	CO Paper XIII – A – Solid State Physics 1. This course provides fundamental knowledge of the		
	crystallography, principles behind the formation of matter,		
	their structure and physical properties.		
	2. 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 materia		
	for the device applications.		
	<b>3.</b> At the end of this course, students will be able to classify the materials in different classes based on their physical,		
	the materials in unreferit classes based on their physical,		

r			
	thermal, electrical, and magnetic properties.		
	CO Paper XIV - Atomic , Molecular and Nuclear Physics		
	1. 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.		
	2. Students will be able to acquire adequate knowledge on the		
	nuclear energy sources and reactions with its application in		
	establishing nuclear reactors.		
	CO Paper XV– Digital and Communication Electronics		
	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 H $\alpha$ line in the hydrogen spectrum.		
	CO Paper XVII - A – (Physics Practical) – Laboratory Course		
	1. Students will be able to construct and identify the truth		
	tables of various gates.		
	2. Students will be able to observe modulated waves and		
	demodulation on the C.R.O.		
	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		

#### **Department of Electronics** Programs offered: B.Sc. Electronics

FIOSI	Programs offered: B.Sc. Electronics		
Sr.	Program	Program objective	Program Specific Objectives
No.			
	<b>B.Sc. Electronics</b>	Inspire the students for	<b>PSO1.</b> To provide through
		pursuing higher studies	knowledge about various electricity
		in Electronics and for	principles
		becoming an	<b>PSO2.</b> To make the students aware of
		entrepreneur and also	applications of Electronics subject in
		enable students to get	various Industries.
		employed in the	<b>PSO3.</b> To highlight the potential of
		Electrical research	various branches to become an
		Institutes ,Industries,	entrepreneur.
		Educational Institutes	<b>PSO4.</b> To equip the students with
		and in the various	skills related to laboratory as well as

concerning department of State and Central Government based on subject Electronics.	PSO5. To introduce learners to

Courses offered:

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

Sr.	Course	Course outcome	
No.			
	B.Sc. F.Y.	CO 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 resonant	
		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 Dener IV. Digital Lagia Cinquita	
	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.	
B.SC. S. Y.	CO Paper VI- Amplifiers	
<b>D.</b> 5C. 5. 1.	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.	
	CO Paper XI (Practical) Laboratory Course (Practical based	
	on P-VII & IX)	

of microprocessor and microcontroller.         B.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.         4. To study the Digital pulse modulation.         4. To study the Digital pulse modulation.         7. 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	I		
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CO Paper XV- A Power Electronics – II           1.To understand the operation of single phase half controlled and		5. To understand the optical fibres and study the optical fibre	
1.To understand the operation of single phase half controlled and		communicationsystems.	
		1.To understand the operation of single phase half controlled and	
Turiy controlled converters.		fully controlled converters.	
2) To understand working of choppers and inverters.		2) To understand working of choppers and inverters.	
3) To construct & study working of some power control circuits		3) To construct & study working of some power control circuits	
used in industry.		used in industry.	

# **Department of Mathematics** Courses offered:

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

Sr.	Course	Course outcome	
No.			

01	B.Sc. F.Y.	Paper – 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 infnite 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.
02	B.Sc. F.Y.	Paper II: Algebra and Trigonometry
02	D.SC. F.1.	After successful completion of the course student will be
		able to
		1. Add, Subtract and Multiply two Matrices.
		<ol> <li>Recognize the different types of Matrices.</li> <li>Find the Inverse of invertible Matrices.</li> </ol>
		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.
03	B.Sc. F.Y.	Paper 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 defnite 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.
04	B.Sc. F.Y.	Paper 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.

		<ul> <li>5. Transform the equation of a plane to the normal form.</li> <li>6. Transform equation of line from the unsymmetrical to the symmetrical form.</li> <li>7. Find the length of perpendicular from a point to a plane.</li> <li>8. Find the angle of intersection of two spheres.</li> <li>9. Understanding concepts of plane of contact.</li> </ul>
05		<ul> <li>CCCP-1 Paper V (Practical): Practical's based on Section A &amp; Section B of CCC-I &amp; CCCC-II</li> <li>After completion of syllabus students will be able to understand following outcomes.</li> <li>To impart knowledge of basic of chemistry practical.</li> <li>Learning of inorganic qualitative analysis</li> <li>Student will learn the basic knowledge of organic preparation and their method of preparation.</li> <li>Learning and understanding of Surface tension, Viscosity, Hardness.</li> <li>To understanding the basics of acid base titration.</li> <li>Learning the Concept of equivalent and molecular weight and their determination.</li> </ul>
	B.Sc. F.Y.	<ul> <li>Paper V: (PRACTICAL PAPER) After successful completion of the course student will be able to </li> <li>1. Vertify associativity of matrix addition, left distributive law and right distributive law of matrices. </li> <li>2. Find determinant, eigen values, eigen vectors, inverse, powers and characteristics polynomial of a square matrix.</li> <li>3. To draw the graph of different functions with the help of MATLAB software and related Freeware.</li> </ul>
06	B.SC. S. Y.	<ul> <li>Paper VI: Real Analysis-I</li> <li>Outcomes: <ul> <li>After successful completion of the course student will be able to</li> </ul> </li> <li>1. Understanding the basic concept of sets and their properties.</li> <li>2. Understanding the concept of a neighborhood of a point, interior points of a set, open set.</li> <li>3. Understanding concept of limit points of a set, closed set, closure of a set, dense set.</li> <li>4. Understanding the basic concept of sequences, subsequences, bounds of sequences, limit point of sequences, general principle of convergence, different types of sequences.</li> <li>5. Understanding the concept of infinite series, different types of series, the generalprinciple of convergence</li> <li>6. Use the results to solve some problems.</li> </ul>

		7. Understanding the difference between different types of
		sequences, series, and comparison tests.
07	B.SC. S. Y.	Paper VII: Group Theory
	2.5 0. 5. 1.	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.
08	B.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.
		<ul><li>9. Find the solution of linear equation with variable coefficients.</li><li>10. Transform the equations to the homogeneous linear form.</li></ul>
		1 0
		11. Transform the homogeneous linear equation with constant coefficient by changing the independent
		variable x to z
09	B.SC. S. Y.	Paper IX: Real Analysis-II
0)	<b>D.SC. S. 1</b> .	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	
	h
4. Acquire the idea about Riemann Integrability	and
Riemann Integration	D'
5. Understand various theorems associated with	Riemann
Integration	
6. Develop a knowledge about Riemann Integrat	ion and
applies to problems	
7. Understand the meaning of improper integral.	
8. Determine convergence of improper integrals	with
discontinuities in their domain or infinite limit	s of
integration.	
9. Develop skill in checking the convergence of	improper
integral using various tests of convergence	1 1
10. Understanding distinguishes between conver	gence and
absolute convergence of improper integral.	Seriee and
11. Use comparison test with a corresponding im	proper
integral with other improper integral to decid	
improper integral converge or diverge	
12. Use the results to solve some problems.	
12. Use the results to solve some problems.	
10 <b>B.SC. S. Y.Paper X: Ring Theory</b>	
After successful completion of the cours	e student
will be able to	e student
	ornot
1. Understand given algebraic structure is a Ring	
2. Construct the examples of ring with known ex	amples of
ring.	1
3. Differentiate between zero-divisors and non-z	ero-divisors
in a given ring.	
4. Check whether given two rings are isomorphic	
5. Check whether the given ideal of a ring is a pr	rincipal ideal
or not.	
6. Understand the concepts on principal ideal rin	g
7. Understand concepts on Euclidean rings.	
11 <b>B.SC. S. Y.Paper XI: Partial Differential Equ</b>	
After successful completion of the court	se 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 appro	oximately
from the perspective of PDE.	-
5. Mathematical formation of real problem preci	-
	sely.
6. Solve problem using boundary conditions.	sely.

		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
		6. Know the application of elements in Medicine
13	B.Sc. T.Y.	1) Utility of Syllabus:
	2.000 2020	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
		for furthering their potential and capabilities in the
L		subject.

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

## Department of Computer Science: Department of Computer Science

Sr.	Course	Course outcome
No.		
01	B.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
02	B.Sc. F.Y.	Paper No. II Designing of Web Pages Using HTML
		Course Objectives:
		<b>1.</b> Develop skills in analyzing the usability of a web site.
		<b>2.</b> Understand how to plan and conduct user research related to web
		usability.
		<b>3.</b> Learn techniques of responsive web design, including media
		Course Outcome:
		<b>1.</b> Be able to <i>use</i> the HTML programming language
		<b>2.</b> Understand the principles of creating an effective web page.
03	B.Sc. F.Y.	Paper No.III Introduction to Data Structure
		Course Objectives:
		<b>1.</b> To solve problems using <b>data structures</b> such as linear lists,
		stacks, queues, hash
		tables, binary trees, heaps, binary search trees, and graphs and
		writing programs for
		these solutions.
		<b>2.</b> Able to write well-structured procedure-oriented programs
		Course Outcome:

		1. To devialon application using data structures
		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.
04	B.Sc. F.Y.	Paper No. IV Programming in C Language
		Course Objectives:
		<i>1.</i> The course aims to provide exposure to problem-solving through
		programming.
		2. It aims to train the student to the basic concepts of the C-
		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.
		2. Introduces the more advanced features of the <i>C</i> language.
05	B.Sc. F.Y.	Practical (Annual) : Paper No.V
05	<b>D</b> .50.111	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:
		1. 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,
06	<b>B.SC. S. Y.</b>	Paper 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.
07	B.SC. S. Y.	Paper No. VII
•••		<b>Object Oriented Programming using C++</b>
		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.
		3. To learn now to design C++ classes for code reuse.

		Course Outcome:
		Upon compilation of this course, students will able to do
		programming independently and will also be able to built small
		applications.
08	B.SC. S. Y.	Skill Enhancement Course-I:
		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.
09	B.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.
10	B.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
11	B.SC. S. Y.	Paper No. IX Java Programming
		Course Objectives:
		1. To learn why Java is useful for the design of desktop and web
		applications.
		2. To learn how to implement object-oriented designs with Java.
		3. To identify Java language components and how they work
		together in applications.

	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.
B.SC. S. Y.	Paper No. SEC-II
	Skill Enhancement Course-II:
	(A) Introduction to Web Applications
	OR
	(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
B.SC. S. Y.	Skill Enhancement Course-II:
<b>D.SC. S. 1</b> .	
	(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:
	Student will be able to use essential skills for digital media
B.SC. S. Y.	Practical: Paper No. X
	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
12	B.Sc. T.Y.	Paper 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.
		3 Understand software design and software testing fundamentals.
13	B.Sc. T.Y.	Paper No. XIII [A] Visual Programming
		1 To learn Graphical User Interface Language.
		2 To develop an application using GUI Language.
		3 Implement VB programs to solve simple problems.
	B.Sc. T.Y.	Paper 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.
	B.Sc. T.Y.	Skill Enhancement Course-III (SECCS-III)
		Data Mining
		1 To create awareness about self-employment and motivate the
		1 To create awareness about self-employment and motivate the students to go for self-employment
		students to go for self-employment
		students to go for self-employment by becoming Data Analytics.
		<ul><li>students to go for self-employment</li><li>by becoming Data Analytics.</li><li>2 To familiarize the students to the practical world of business data</li></ul>
	B.Sc. T.Y.	<ul><li>students to go for self-employment</li><li>by becoming Data Analytics.</li><li>2 To familiarize the students to the practical world of business data</li><li>processing and decision</li></ul>
	B.Sc. T.Y.	<ul> <li>students to go for self-employment</li> <li>by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data</li> <li>processing and decision</li> <li>making.</li> </ul>
	B.Sc. T.Y.	<ul> <li>students to go for self-employment</li> <li>by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data</li> <li>processing and decision</li> <li>making.</li> </ul> Laboratory Course Work- IV
	B.Sc. T.Y.	<ul> <li>students to go for self-employment</li> <li>by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data</li> <li>processing and decision</li> <li>making.</li> </ul> Laboratory Course Work- IV Paper No. XVI
	B.Sc. T.Y.	<ul> <li>students to go for self-employment</li> <li>by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data</li> <li>processing and decision</li> <li>making.</li> </ul> Laboratory Course Work- IV Paper No. XVI Practical Based on theory papers – XII & XIII
	B.Sc. T.Y.	<ul> <li>students to go for self-employment</li> <li>by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data</li> <li>processing and decision</li> <li>making.</li> </ul> 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.
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		<ul> <li>students to go for self-employment by becoming Data Analytics.</li> <li>2 To familiarize the students to the practical world of business data processing and decision making.</li> <li>Laboratory Course Work- IV Paper No. XVI</li> <li>Practical Based on theory papers – XII &amp; XIII</li> <li>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.</li> <li>Paper No. XIV</li> <li>Relational Database Management Systems &amp; PL/SQL 1 To learn Relational Database Management system and database languages.</li> </ul>
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	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.
B.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
B.Sc. T.	
	Android Programming
	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
B.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.