

Cri. II

COURSE	COURSE CODE	COURSE OUTCOME
PROGRAMME : B.A. Marathi		
SEMESTER I		
PAPER –I :	UAMAR1C1	C.O. 1) 'वडीलधारी माणसे' या ललितकलाकृतीचा अभ्यास करुन स्वतः विद्यार्थ्यांनीजीवनात तसे बनण्याचा प्रयत्न करणे. C.O. 2) व्यवहारीकजीवनात भाषा संज्ञापन कौशल्यआत्मसात करुन भाषांतर, वृत्तलेखन, वृत्तांत लेखनात, अर्ज करण्याचे कौशल्यसंपादन करुन, तसा जीवनातप्रयोग करणे.
PAPER –I मराठी (ऐच्छीक)	UAMAR101	C.O. 1) माणसाच्याजीवनातविनोदाचेमहत्त्व मनाला विरंगुळा देण्यासाठी, तसेच आपल्यातील दोष सुधारण्यासाठी 'कावळ्यांची शाळा' हे नाटकअभ्यासून हा नीतिबोधघेऊन तसे विद्यार्थ्यांनी कृती करणे. C.O. 2) कोणताही धर्म त्याच्या मुळाशीमाणुसकी आणि मानवताच असते. पण काही लोक आपल्या स्वार्थासाठी धर्माचा वापर करुन दुरुपयोग करतात. विश्वास,मानवता हाच सर्वश्रेष्ठ धर्म आहे हे शफाउतखानयालेखक 'राहिले दूर घर माझे' या नाटकातूनमांडले आहे.
SEMESTER II		
PAPER –I	UAMAR2C1	C.O. 1) 'नापास मुलांची गोष्ट' या ललित लेख संग्रहातूनजीवनातनैराश्य जीवन न जगतासापेक्षजीवनजगण्यासाठी प्रयत्न करणे, तसेचविद्यार्थ्यांनीभावीजीवनातचिकाटीने, जिद्दीनेयशाचेशिखरगाठले पाहिजे. C.O. 2) व्यवहारीकजीवनात भाषा संज्ञापन कौशल्यआत्मसात करुन इतिवृत्त लेखन, अहवाल लेखन, आकलनकौशल्यसंपादन करुन त्याचा प्रयोगजीवनातसेवाभावीकार्यातकरणे.
PAPER –I मराठी (ऐच्छीक)	UAMAR201	C.O. 1) कविता या साहित्य प्रकाराचासैध्दांतिक परिचय करुन देऊन विद्यार्थ्यांनाकवितेचेघटक व प्रकार, समजावून देणे. C.O. 2) अभ्यासासाठीनेमलेल्याकवींच्याकवितांचा परिचय करुन त्यांच्या काव्याची विविध स्वरुप वैशिष्ट्ये विद्यार्थ्यांना सांगणे व विद्यार्थ्यांचे मन कवितेकडे वळविणे.
SEMESTER III		
PAPER –II	UAMAR301	C.O. 1) कादंबरी साहित्य प्रकाराची विद्यार्थ्यांना ओळख करुन देऊन कादंबरीच्याघटकांचीविद्यार्थ्यांनामाहिती

मराठी (ऐच्छिक)		करुन देणे. C.O. 2) 'थॅक्यूमिस्टरग्लाड' व 'दिवे गेलेले दिवस' या कादंब-यामधून सामाजिक, राजकीय, आर्थिक बदलाचे तसेच जागतिकीकरणामुळे निर्माण होणा-या नवनवीन समस्यांचे ज्ञान विद्यार्थ्यांना करुन देणे.
PAPER –III मराठी (ऐच्छिक)	UAMAR302	C.O. 1) भाषा कशी निर्माण झाली याचे स्वरुप विद्यार्थ्यांना समजावून देणे. C.O. 2) लिपी, चिन्ह, अर्थरुप, भाषेची निर्मिती प्रक्रिया व भाषेचीकार्येविद्यार्थ्यांना माहिती करुन देणे. C.O. 3) महाराष्ट्रातील विविध बोलींचीओळख विद्यार्थ्यांना करुन देणे.
SEMESTER IV		
PAPER –II मराठी (ऐच्छिक)	UAMAR401	C.O. 1) आत्मचरित्र या वाङ्मयप्रकाराची माहिती देवून 'मन मेंहें विश्वास' व 'जसंघडलंतसं' या कादंब-यांची विद्यार्थ्यांना माहिती देवून अशा व्यक्तींचा काही बोध घ्यावा असा संदेश देणे. C.O. 2) थोर मोठ्या व्यक्तींचाआदर्शडोळ्यासमोर ठेवून स्वतःचीप्रगती करुन घेणे.
PAPER –III मराठी (ऐच्छिक)	UAMAR402	C.O. 1) 'मालवणीतल्यावाटा' - मालवणीबोली, संस्कृती, कवितेतून कशी अभिव्यक्त झाली आहे त्याची ओळख करुन देणे. C.O. 2) मालवणीगा-हाणी, म्हणी, वाक्प्रचार यांची ओळख करुन देणे C.O. 3) 'चाकरमानी' नाटकातीलकोकणातीलसमाजजीवनाची माहिती करुन देणे. C.O. 4) मालवणीबोलीतीलकवींच्याकवितांचा परिचय करुन देणे.
SEMESTER - V		
Paper No. IV मराठी (ऐच्छिक)	UAMAR501	C.O. 1) मराठी भाषा कशी निर्माण झाली, ताम्रपट व शिलालेख या आधारे विद्यार्थ्यांना समजावून देणे. C.O. 2) महानुभावीयपंथीयांच्यासाहित्याचीओळख करुन देणे. C.O. 3) वारकरी पंथीयांचेसमाजोन्नतीआत्मोन्नती कार्य याची ओळख करुन देणे. C.O. 4) संस्कृतसाहित्याच्याप्रभावातूनपंडितीसाहित्याची निर्मिती कशी झाली याविषयीची माहिती विद्यार्थ्यांना करुन देणे.
Paper No. V मराठी (ऐच्छिक)	UAMAR502	C.O. 1) प्राचीनभारतातीलसाहित्याचेस्वरुप, संकल्पना आणि सिद्धांत यांची माहिती करुन देणे. C.O. 2) साहित्याचाआस्वाद कसा घेतला जातो ते प्राचीनभाष्यकारांमार्फत विद्यार्थ्यांना समजावून देणे. C.O. 3) साहित्य भाषेचेस्वरुप आणि कार्य कसे असते ते विद्यार्थ्यांना सांगून साहित्य निर्मिती प्रक्रिया समजावून देवून लेखन करण्यास प्रवृत्त करणे.
Paper No. VI मराठी (ऐच्छिक)	UAMAR503	C.O. 1) साहित्य आणि समाज यांचा संबंध समजावून देणे. C.O. 2) स्त्रीवादीसाहित्याची माहिती आणि 'भिन्न'कादंबरीतून स्त्रीयांचे अनुभव विद्यार्थ्यांना समजावून देणे. C.O. 3) महानगरीयजाणीवेचे साहित्य विद्यार्थ्यांना समजावून देणे व 'दृश्य नसलेल्या दृश्यात' कवितासंग्रहाची

		माहिती देणे.
Paper No. VII मराठी (ऐच्छिक)	UAMAR504	C.O. 1) भाषाशास्त्राच्या विविध शाखा विद्यार्थ्यांना समजावून देणे. C.O. 2) स्वनिम्बिन्यास विद्यार्थ्यांना समजावून देणे. C.O. 3) रुपिमविन्यास आणि अर्थ विन्यास विद्यार्थ्यांना समजावून देणे.
Paper No. VIII मराठी (ऐच्छिक)	UAMAR505	C.O. 1) 'कांदाचिर' या कथासंग्रहाआधारेमहानगरीयजीवनातीलसामाजिक, राजकीय, आर्थिक, धार्मिक स्थित्यंतराची माहिती विद्यार्थ्यांना समजावून देणे. C.O. 2) 'भर चौकातीलअरण्यरुदन' या कादंबरीतूनपरंप्रतिांचेमहानगरातीलदुःख विद्यार्थ्यांना समजावून देणे. C.O. 3) मुंबईतीलसमाजजीवनाचावेध या साहित्य कलाकृतींच्या आधारे घेऊन विद्यार्थ्यांना महानगरीयजीवनाची माहिती समजावून देणे.
Paper No. IX मराठी (ऐच्छिक)	UAMAR506	C.O. 1) व्यावसायाभिमुखअभ्यासक्रमाचीओळख करुन देणे. C.O. 2) भाषांतर, अनुवाद, रुपांतर, अर्वाचिनीकरण या विषयी माहिती करुन देणे व जागतिकीकरणातील त्याचे महत्त्व सांगणे. C.O. 3) विद्यार्थ्यांना आकलनकौशल्य, भाषांतरकौशल्य समजावून देणे.
SEMESTER - VI		
Paper No. IV मराठी (ऐच्छिक)	UAMAR601	C.O. 1) शाहिरी वाङ्मयाची ओळख करुन देणे व विद्यार्थ्यांना तसे काव्य लिहिण्यास प्रवृत्त करणे. C.O. 2) नाथपंथ, दत्तपंथ यांची ओळख विद्यार्थ्यांना करुन देणे. C.O. 3) हिंदू धर्माखेरीज इतर पंथीयांनी निर्माण केलेल्या वाङ्मयाची माहिती विद्यार्थ्यांना करुन देणे. C.O. 4) बखरगद्याचीओळख करुन देणे.
Paper No. V मराठी (ऐच्छिक)	UAMAR602	C.O. 1) साहित्याबाबतपाश्चात्यसाहित्यिकांच्याविचारांची माहिती करुन देणे. C.O. 2) पाश्चात्यसाहित्यिकांचेसाहित्याविषयीचे विचार विद्यार्थ्यांना सांगणे. C.O. 3) प्राचीन आणि पाश्चात्य साहित्य विचारवंतांबाबतसाहित्याच्यासुरुवाती पासून ते आजपर्यंतचा अभ्यास विद्यार्थ्यांचा चांगला होण्यासाठी प्रयत्न करणे.
Paper No. VI मराठी (ऐच्छिक)	UAMAR603	C.O. 1) सामाजिकस्थित्यंतरे व मराठी साहित्य या विषयी विद्यार्थ्यांना माहिती देणे. C.O. 2) ग्रामीण साहित्य कलाकृती 'ऐसेकुणबीभूपाळ' या कादंबरीच्या आधारे विद्यार्थ्यांना ग्रामीण समस्यांची माहिती देणे. C.O. 3) दलित साहित्य संकल्पना समजावून सांगून 'जाता नाही ती जात' या नाट्यकलाकृतीच्या आधारे समाजातील जातीय समस्या किती भयावह आहे याची माहिती विद्यार्थ्यांना करुन देणे.

		C.O. 4) साहित्याचासमाज मनावर कसा परिणाम होतो, तसेच साहित्य निर्मिती ही कशी घडत असते, याची माहिती विद्यार्थ्यांना करून देणे.
Paper No. VII मराठी (ऐच्छिक)	UAMAR604	C.O. 1) मराठी व्याकरणव नियम याचे पालन विद्यार्थ्यांनी करावे याकरीता शब्दांचेवर्गीकरण, पारंपारिक व आधुनिकता विद्यार्थ्यांना समजावून देणे. C.O. 2) विकरण, लिंग, वचन, विभक्ती विद्यार्थ्यांना समजावून देणे. C.O. 3) शब्दसिद्धी व प्रयोग विचार विद्यार्थ्यांना समजावून देणे. यामुळे विद्यार्थ्यांचे भाषेविषयीचे ज्ञान वृद्धीगत होऊन व्यवहारात भाषाप्रयोग कसा करावा हे समजते.
Paper No. VIII मराठी (ऐच्छिक)	UAMAR605	C.O. 1) 'साकल्याच्याप्रदेशात' या कवितासंग्रहाआधारेनवकाव्यातीलसामाजिकतेचे, जागतिकतेचे, जागतिकीकरणाचे, बदलत्या पर्यावरणाचे दर्शन विद्यार्थ्यांना करून देणे. C.O. 2) 'किरवंत' या नाटकाआधारेसमाजामध्ये कशा अनिष्ट प्रथा परंपरेनुसार चालत आलेल्या आहेत याची विद्यार्थ्यांनाओळख करून देणे. C.O. 3) विद्यार्थ्यांना समाजात नैतिकतेचीओळख करून देणे, समाज सुसंस्कृत घडावा या संदर्भातील त्यांचे कर्तृत्वाची जाणीव करून देणे.
Paper No. IX मराठी (ऐच्छिक)	UAMAR606	C.O. 1) मुलाखत - महत्त्व विशद करून जीवनातमुलाखतीला कसे महत्त्व असते ते सांगणे. C.O. 2) प्रसारमाध्यमांमध्येमुलाखततंत्र कसे हाताळावे याचे कौशल्य समजावून देणे. C.O. 3) ग्रंथपरीक्षणाचेकौशल्य विद्यार्थ्यांना समजावून देणे. विद्यार्थ्यांना व्यावहारिकजीवनात या विषयांच्याअध्ययनामुळे स्वतःला दुभाषिक, भाषांतरकर्ता, रुपांतरकर्ता म्हणून प्रसारमाध्यमातून व शासकीय सेवा करता येते.
The level of attainment of B.A. Marathi programme :- 100%		
तृतीय वर्ष वाणिज्य मराठी		
SEMESTER - V		
	Paper No. 101	C.O. 1) 'इडली, ऑर्कीड आणि मी' या व्यावसायिक स्वरूपाच्याकादंबरीतून विद्यार्थ्यांना व्यवसाय करण्याची प्रेरणा देणे. C.O. 2) जीवनातकितीहीसंकटे आली तरी जिद्द, कष्ट व साहस असेल तर जगातनावलौकिकमिळवता येतो याची जाणीव विद्यार्थ्यांना करून देणे. C.O. 3) व्यावहारिक मराठी मधून विद्यार्थ्यांना भाषांतरकौशल्य, पत्रव्यवहाराचेकौशल्य समजावून देणे. C.O. 4) निबंधामुळेवैचारिकतावाढविणे.

SEMESTER - VI			
	Paper No. 201	C.O. 1) 'भोवळ' या कादंबरीतून शेअर्स मार्केटचीमाहिती विद्यार्थ्यांना करून देणे. C.O. 2) शेअर्स मार्केटच्याउलाढालीमध्ये कसे घोटाळे केले जातात याचे वास्तवदर्शनविद्यार्थ्यांना कादंबरीच्या आधारे करून देणे. C.O. 3) 'निवृत्त' झालेल्या नानांचे पतसंस्थेच्या घोटाळ्यामुळे लाखो रुपये बुडतात. अशा भ्रष्टाचारीप्रवृत्तीचे दर्शन विद्यार्थ्यांना करून देणे. C.O. 4) व्यावहारिक मराठी मधून समाजामध्ये, कंपन्यांमध्येसंवादकौशल्य कसे साध्य करावे याची माहिती विद्यार्थ्यांना देणे.	
PROGRAMME : B.A. Hindi			
SEMESTER I			
Hindi Compulsory PAPER –I	UAHINCOM101	CO - 1 आधुनिक हिंदी गद्य-पद्य साहित्य का परिचय हुआ। CO - 2 हिंदी कहानियों का महत्व समझा। CO - 3 मानक हिंदी का परिचय हुआ। CO - 4 हिंदी पद्य साहित्य से परिचय हुआ।	
Hindi Ancillary PAPER –I (Optional)	UAHIN101	CO - 1 हिंदी कहानीकारों से परिचय हुआ। CO - 2 हिंदी कहानी का महत्व समझा। CO - 3 कथेत्तर गद्य से परिचय हुआ।	
SEMESTER II			
Hindi Compulsory	UAHINCOM102	CO - 1 कहानी विधा का परिचय हुआ। CO - 2 हिंदी के प्रतिभाशाली कवियों का साहित्य परिचय हुआ। CO - 3 मानक हिंदी का परिचय हुआ।	
Hindi Ancillary	UAHIN201	CO - 1 हिंदी की विधाओं के संदर्भ में ज्ञान मिला। CO - 2 उपन्यास साहित्य की जानकारी मिली	
SEMESTER III			

मध्यकालीन एवम आधुनिक काव्य Paper II	UAHIN301	CO - 1 CO - 2 CO - 3 CO - 4	प्राचीन काव्य और आधुनिक काव्य का परिचय हुआ। संतों के विचारों से छात्र परिचय हुआ। राष्ट्र के प्रति गौरव तथा सर्वधर्मसमभाव जैसे नितीमुल्य का महत्व काव्यद्वारा समझाया। छात्रों को कविताएँ लिखने के लिए प्रेरणा मिली।
प्रयोजन मूलक हिंदी Paper III	UAHIN302	CO - 1 CO - 2 CO - 3	प्रयोजनमूलक हिंदी का ज्ञान मिला। अनुवाद विधा की जानकारी मिली। विज्ञापन प्रक्रिया को समझा।
SEMESTER IV			
आधुनिक हिंदी गद्य Paper II	UAHIN401	CO - 1 CO - 2 CO - 3	उपन्यास विधा की जानकारी मिली। निबंध विधा की जानकारी मिली। नाटक विधा की जानकारी मिली।
जनसंचार माध्यम Paper III	UAHIN402	CO - 1 CO - 2 CO - 3	जनसंचार माध्यमों से परिचय हुआ। समाचार क्षेत्र की जानकारी मिली। इलेक्ट्रॉनिक माध्यमों का महत्व समझा।
SEMESTER V			
हिंदी साहित्य का इतिहास Paper IV	UAHIN501	CO - 1 CO - 2 CO - 3 CO - 4	हिंदी साहित्य के इतिहास का परिचय हुआ। आदी कालीन हिंदी साहित्य का परिचय हुआ। भक्ति कालीन हिंदी साहित्य का परिचय हुआ। रीति कालीन हिंदी साहित्य का परिचय हुआ।
स्वातंत्र्योत्तर हिंदी साहित्य Paper V	UAHIN502	CO - 1 CO - 2 CO - 3	काव्य नाटक विधा का परिचय हुआ। रेखाचित्र से परिचय हुआ। संस्मरण की जानकारी मिली।
हिंदी में सूचना प्रौद्योगिकी Paper VI	UAHIN503	CO - 1 CO - 2 CO - 3	सूचना प्रौद्योगिकी की आवश्यकता समझी। इंटरनेट और हिंदी का महत्व समझा। सूचना प्रौद्योगिकी का प्रयोग किया।

साहित्य समीक्षा : स्वरूप एवम् सामान्य परिचय Paper VII	UAHIN504	CO - 1 CO - 2 CO - 3	साहित्य समीक्षा, स्वरूप, साहित्य तत्त्व, हेतु, प्रयोजन की जानकारी मिली। काव्य के विभिन्न रूप (महाकाव्य, खंडकाव्य, मुक्तकाव्य, गीत, गजल) आदी से परिचय हुआ। छंदों की जानकारी मिली।
भाषा विज्ञान हिंदी भाषा और व्याकरण Paper VIII	UAHIN505	CO - 1 CO - 2 CO - 3 CO - 4	भाषा के विविध रूपों की जानकारी मिली। भाषा परिवर्तन के विभिन्न कारणों से परिचय हुआ। भाषा विज्ञान की उपयोगिता की जानकारी मिली। हिंदी व्याकरण की जानकारी मिली।
आधुनिक हिंदी साहित्य की वैचारिक पृष्ठभूमि Paper IX	UAHIN506	CO - 1 CO - 2 CO - 3	भारतीय नवजागरण आंदोलन समझा। सत्यशोधक समाज की जानकारी मिली। मार्क्सवाद से परिचय हुआ।
SEMESTER VI			
आधुनिक हिंदी साहित्य का इतिहास Paper IV	UAHIN601	CO - 1 CO - 2 CO - 3	आधुनिक हिंदी कविता के विकास की जानकारी मिली। आधुनिक हिंदी साहित्य पृष्ठभूमि प्रवृत्तियों की जानकारी मिली। आधुनिक हिंदी गद्य के इतिहास की जानकारी मिली।
स्वातंत्र्योत्तर हिंदी साहित्य Paper V	UAHIN602	CO - 1 CO - 2 CO - 3	हिंदी गीतों से लगाव बढ़ा। हिंदी गीतों का साहित्यिक महत्व समझा। हिंदी निबंध विधा का महत्व जान लिया।
सोशल मिडिया Paper VI	UAHIN603	CO - 1 CO - 2 CO - 3	सोशल मिडिया के प्रकार जान लिये। सोशल मिडिया और कानून को जान लिया। सोशल मिडिया का प्रयोग किया।
साहित्य समीक्षा : स्वरूप एवम् सामान्य परिचय Paper VII	UAHIN604	CO - 1 CO - 2 CO - 3 CO - 4	शब्द शक्ति, अर्थ, स्वरूप, प्रकार की जानकारी मिली। रस के विविध अंग, स्वरूप, भेद की जानकारी मिली। गद्य के विविध रूप (नाटक, उपन्यास, कहानी, निबंध, आत्मकथा) की जानकारी मिली। अलंकारों से परिचय हुआ।

भाषा विज्ञान हिंदी भाषा और व्याकरण Paper VIII	UAHIN605	CO - 1 CO - 2 CO - 3	प्राचीन और मध्यकालीन भारतीय आर्य भाषाओं की जानकारी मिली। हिंदी के विभिन्न बोलियों से सामान्य परिचय हुआ। हिंदी शब्दसमुह की जानकारी मिली।
आधुनिक हिंदी साहित्य की वैचारिक पृष्ठभूमि Paper IX	UAHIN606	CO - 1 CO - 2 CO - 3	मनोविश्लेषणवाद का स्वरूप समझा। दलित साहित्य से परिचय हुआ। हिंदी पत्र पत्रिकाओं से परिचय हुआ।
The level of attainment of B.A. Hindi programme :- 100%			
PROGRAMME :M.A. Hindi			
SEMESTER I			
हिंदी साहित्य का इतिहास PAPER -I	PAHIN101	CO - 1 CO - 2 CO - 3 CO - 4	हिंदी साहित्य के इतिहास का परिचय हुआ। आदी कालीन हिंदी साहित्य का परिचय हुआ। भक्ति कालीन हिंदी साहित्य का परिचय हुआ। रीति कालीन हिंदी साहित्य का परिचय हुआ।
काव्यशास्त्र एवम् साहित्यालोचन Paper 3	PAHIN103	CO - 1 CO - 2 CO - 3 CO - 4 CO - 5	भारतीय काव्यशास्त्र की जानकारी मिली। रस सिद्धांत की जानकारी मिली। हिंदी आलोचकों का सामान्य परिचय मिला। पाश्चात्य काव्यशास्त्र तथा सिद्धांतों की जानकारी मिली। पाश्चात्य विचारकों की जानकारी मिली।
भाषा विज्ञान एवम् हिंदी भाषा Paper 5	PAHIN105	CO - 1 CO - 2 CO - 3 CO - 4	भाषा के विविध रूपों की जानकारी मिली। भाषा परिवर्तन के विभिन्न कारणों से परिचय हुआ। भाषा विज्ञान की उपयोगिता की जानकारी मिली। हिंदी व्याकरण की जानकारी मिली।
प्राचीन एवम् मध्यकालीन काव्य Paper 7	PAHIN107	CO - 1 CO - 2 CO - 3	संत कबीरदास जी का साहित्य परिचय मिला। जायसी के महाकाव्य पद्मावत की जानकारी मिली। गोस्वामी तुलसीदास के साहित्य से परिचय हुआ।

SEMESTER II			
हिंदी साहित्य का इतिहास (आधुनिक काल) Paper 2	PAHIN102	CO - 1 CO - 2 CO - 3	आधुनिक हिंदी कविता के विकास की जानकारी मिली। आधुनिक हिंदी साहित्य पृष्ठभूमि प्रवृत्तियों की जानकारी मिली। आधुनिक हिंदी गद्य के इतिहास की जानकारी मिली।
काव्यशास्त्र एवम साहित्यालोचन Paper 4	PAHIN104	CO - 1 CO - 2 CO - 3	वक्रोक्ति सिद्धांत का सामान्य परिचय मिला। पाश्चात्य काव्यशास्त्र सिद्धांतों और विचारकों की जानकारी मिली। हिंदी के प्रमुख आलोचकों की जानकारी मिली।
भाषा विज्ञान एवम हिंदी भाषा Paper 6	PAHIN106	CO - 1 CO - 2 CO - 3 CO - 4	भाषा विज्ञान की विविध शाखाओं का परिचय मिला। रूप विज्ञान, वाक्य विज्ञान, अर्थ विज्ञान की जानकारी मिली। हिंदी की रूप रचना से परिचय हुआ। देवनागरी लिपी की जानकारी मिली।
प्राचीन एवम् मध्यकालीन काव्य Paper 8	PAHIN108	CO - 1 CO - 2 CO - 3	भ्रमरगीत सार साहित्यिक परिचय मिला। मीरा पदावली की जानकारी मिली। कवी भुषण के साहित्य से परिचय हुआ।
SEMESTER III			
आधुनिक गद्य Paper 9	PAHIN109	CO - 1 CO - 2 CO - 3	गोदान उपन्यास की जानकारी मिली। निबंध कला को समझा। कहानी साहित्य से परिचय हुआ।
आधुनिक काव्य Paper 10	PAHIN110	CO - 1 CO - 2 CO - 3	कामायनी काव्य समझा। अज्ञेय की कविता से परिचय हुआ। मुक्तिबोध की कविता की जानकारी मिली।
विविध विमर्श एवं साहित्य Paper 11	PAHIN111	CO - 1 CO - 2 CO - 3	मैत्रेयी पुष्पा के साहित्य से नारी विमर्श जाना। ओमप्रकाश वाल्मीकि जी की कविता विद्रोही है। आदिवासी जगत की वास्तविकता समझी।
मराठी संतो का हिंदी काव्य	PAHIN112.3	CO - 1 CO - 2	संत नामदेव के पदों का परिचय हुआ। संत तुकाराम के अभंग का महत्व समझा।

Paper 12.3		CO - 3	संत नामदेव, संत तुकाराम का उपदेश आज अति आवश्यक हैं।
विशेष अध्ययन - कमलेश्वर Paper 13.3	PAHIN113.3	CO - 1 CO - 2 CO - 3	डाक बंगला उपन्यास के द्वारा नारी विमर्श समझा। प्रतिनिधी कहानियों का स्वरूप समझा। देश विभाजन की पीडा का वास्तव समझा।
SEMESTER IV			
मराठी से हिंदी अनुदित साहित्य का तुलनात्मक अध्ययन Paper 14.2	PAHIN114.2	CO - 1 CO - 2 CO - 3	जयंत नारलीकर के साहित्य से परिचय हुआ। विं. दा. करंदिकर की कविता प्रभावी हैं। कोकण के साहित्य, समाज का परिचय हुआ।
प्रयोजन मूलक हिंदी Paper 15.2	PAHIN115.2	CO - 1 CO - 2 CO - 3	प्रयोजन मूलक हिंदी का स्वरूप समझा। राजभाषा की जानकारी मिली। संविधान में राजभाषा संबंधी प्रावधान समझा।
प्रकल्प लेखन Paper 16	PAHIN116	CO - 1 CO - 2 CO - 3	अनुसंधान प्रक्रिया से परिचय हुआ। शोध का महत्व समझा। साहित्य का अनुशिलन करना आसान हुआ।
The level of attainment of M.A. Hindi programme :- 80%			
PROGRAMME : B.A. ENGLISH			
SEMESTER I			
Communication Skills in English PAPER –I	UACS101	C.O.1 Students understood language proficiency by providing adequate exposure to reading and writing skills C.O.2 Students were oriented towards the functional aspects of language	
Introduction to Literature Paper PAPER –I (Optional)	UAENG-101	C.O. 1 Students were acquainted with the characteristics of various literary genres. C.O. 2 Students understood to write clearly, coherently and effectively about various genres of literature	
SEMESTER II			

Communication Skills in English PAPER –I	UACS-201	C.O.1 Students improved listening, speaking, writing skills of the students. Students understood the process of communication and its effect on giving and receiving information
Introduction to Literature Paper: PAPER –I (Optional)	UAENG-201	C.O. 1 Students recognized the culture and context of the work of literature Students developed sensitivity to nature and fellow human beings
SEMESTER III		
Business Communication PAPER –II	UABC301	C.O. 1 Students developed awareness about the complexity of communication in a dynamic business environment. C.O. 2 Students were well acquainted with the effective use of communication.
Indian Literature in English PAPER –II (Optional)	UAENG301	C.O. 1 Students were introduced to the uniqueness of Indian Literature in English C.O. 2 Students were well acquainted to the pluralistic dimensions of Indian Literature in English
American Literature PAPER –III	UAENG302	C.O. 1 Students were well acquainted with the various genres and literary terms of twentieth century American Literature C.O. 2 Students understood various themes and styles of American Literature
SEMESTER IV		
Business Communication PAPER –II	UABC-401	C.O. 1. Students developed effective oral, writing and listening skills among learners. C.O. 2 Students developed Listening, Speaking, Reading and Writing skills and should be prepared to meet the challenges of Communication in the business world
Indian Literature in English PAPER –II (Optional)	UAENG-401	C.O.1. Students understood the different genres of Indian Literature in English C.O.2.. Students were familiarized with different perspectives of approaching this literature
American Literature, Paper III	UAENG-402	C.O. 1. Students were familiarized with the socio-cultural milieu of twentieth century America through literary texts C.O. 2 Students were introduced with cross-cultural perspectives and discussions on American Literature
SEMESTER - V		

16 th to 18 th Century English Literature: Paper No. IV	UAENG-501	C.O. 1. Students were introduced with English Literature of the 16 th , 17 th and 18 th centuries C.O. 2. Students understood the distinctive features of English literature of the 16 th , 17 th and 18 th centuries
Literary Criticism: Paper No. V	UAENG-502	C.O. 1. Students were familiarized with important critical terms C.O. 2. Students understood the nature and function of literature and criticism
A- Grammar and Art of writing: Paper No. VI	UAENG-503	C.O. 1. Students understood a basic of phonetics, morphology and word transformation C.O. 2. Students improved speaking skills.
19 th Century English Literature: Paper No. VII	UAENG-504	C.O. 1. Students were introduced with literary works in their dynamic interface with the background C.O. 2. Students understood the literature of the 19 th century.
20th Century British Literature: Paper No. VIII	UAENG-505	C.O. 1. Students were introduced with literary genres, trends, and literary movements of Britain in the 20th Century. C.O.2. Students were acquainted with comprehensive understanding of literary genres trends and movements in 20th Century British Literature.
B- Drama and Theatre: Paper No. IX	UAENG-506	C.O. 1. Students were introduced the social and artistic movements that have shaped theatre and drama. C.O. 2. Students were familiarized with the discipline-specific skills to the creation of drama.
SEMESTER - VI		
16 th to 18 th Century English Literature: Paper No. IV	UAENG-601	C.O. 1. Students were acquainted with how background influences shaped the writer's thinking. C.O. 2. Students understood how background influences shaped the writer's thinking.
Literary Criticism: Paper No. V	UAENG-602	C.O. 1. Students were familiarized with the technique of close reading of literary texts C.O. 2. Students understood the various literary theories and critical approaches
A- Grammar and Art of writing: Paper No. VI	UAENG-603	C.O. 1. Students were acquainted the rules of grammar, grammatical analysis and sentence transformation C.O. 2. Students understood to write effectively in various domains.

19th Century English Literature: Paper No. VII	UAENG-604	C.O. 1. Students learned to appreciate poetry as mirroring private personality, protest and subsequently, public concerns C.O. 2. Students were acquainted with the development of the Victorian Novel .
20th Century British Literature: Paper No. VIII	UAENG-605	C.O. 1. Students understood to create linkages between social and historical contexts and literary texts . C.O. 2. Students understood the skills for a critical and analytical understanding of the text.
Drama and Theatre: Paper No. IX	UAENG-606	C.O. 1. Students were acquainted with the difference between the concepts of drama and theatre. C.O. 2. Students understood the history of drama and theatre as a literature and performing art.
The level of attainment of B.A. English programme :- 86.66%		
PROGRAMME : M.A. ENGLISH		
SEMESTER - I		
Literary Theory and Criticism	PAENG-101	C.O. 1. Students were introduced to a wide range of critical methods and literary Theories. C.O. 2. Students understood to use the various critical approaches and advanced literary theories.
Linguistic and Stylistic Analysis of Text	UAENG-102	C.O. 1. Students understood the concept of style in literature. C.O. 2. Students understood the linguistic basis of literary criticism
Fiction	PAENG-103	C.O. 1. Students were familiarized with different genres in fiction. C.O. 2. Students were familiarized with different types of fictional narratives.
Drama	PAENG-303	C.O. 1. Students were introduced to a wide range of theatrical practices around the world. C.O. 2. Students were introduced to various theories of drama
SEMESTER - II		
Literary Theory and Criticism	PAENG-201	C.O. 1. Students understood to mobilize various theoretical parameters in the analysis of literary and cultural texts C.O. 2. Students were familiarized with the trends and cross-disciplinary nature of literary theories

Linguistic and Stylistic Analysis of Text	UAENG-202	C.O. 1. Students understood to use stylistic approach in teaching literature. C.O. 2. Students understood the impact of stylistic analysis on academic writing
Fiction	PAENG-203	C.O. 1. Students were well acquainted with an idea of the growth of fiction over the period of the last three centuries. C.O. 2. Students understood the social, cultural and psychological implications of Fiction.
Drama	PAENG-403	C.O. 1. Students understood the elements of drama and theatre C.O. 2. Students were introduced with the conventions of research papers
SEMESTER - III		
Poetry from Chaucer to the Present	PAENG-301	C.O. 1. Students were familiarized with the major representative poets of every age and movements therein. C.O. 2. Students were familiarized with different genres of poetry in the context of socio- cultural background of the age
Nineteenth Century American Literature	PAENG-302	C.O. 1. Students understood to appreciate American literature by reading aesthetically and not just for knowledge/information C.O. 2. Students understood to analyze the rhetorical strategies that American authors employ
Twentieth Century American Literature	PAENG-303	C.O. 1. Students were acquainted with the various genres and literary terms of twentieth century American Literature C.O. 2. Students were introduced to the socio-cultural milieu of twentieth century America through literary texts
Shakespeare	PAENG-304	C.O. 1. Students were familiarized with timeless dimensions of Shakespeare's works. C.O. 2. Students were familiarized with the contemporary relevance of Shakespeare with reference to modern versions and films based on his plays.
Indian Writing in Translation	PAENG-305	C.O. 1. Students were familiarized with the study of Indian literatures in the various Indian languages through English translation. C.O. 2. Students were acquainted with major movements, trends and tendencies beside major authors and literary texts in multiple languages in India through English translation.
SEMESTER - IV		
Research Methodology	PAENG-306	C.O. 1. Students understood the concept of 'research' C.O. 2. Students were familiarized with the procedures involved in research.

Political Reading of Literature	PAENG-307	C.O. 1. Students were familiarized with literature as an institution embedded in cultural politics C.O. 2. Students were introduced with literary texts, mediate dominant ideologies.
Project Based Courses		C.O. 1. Students were familiarized with critical competence, logical reasoning and scholarly composition regarding to the research. C.O. 2. Students learned to develop the skills of identifying an area of their research.
The level of attainment of M.A. English programme :- 87.50%		
PROGRAMME : B.A. ECONOMICS		
SEMESTER - I		
Micro Economics		CO1 Students will be aware about principles of economics and role of government in economy. CO2 Students will be aware about scientific method, study of micro economics and basis of growth. CO3 Students will be aware about the study of market, demand and supply, and relationship between price elasticity of demand and revenue. CO4 Students will be aware about specialization and trade opportunity cost and comparative cost.
SEMESTER - II		
Macro Economics		CO1 Students will be were aware about circular flow of income and understand the concept GDP, GNP, NNP. CO2 Students will be aware about national income identity and study the concept of consumption saving and investment. CO3 Students will be aware about source of tax revenue and non tax revenue, public expenditure. CO4 Students will be understood balance of payments and concept of FOREX.
SEMESTER - III		
Demography-I		CO1 Students will be aware about nature and scope of demography and theories of population. CO2 Students will be aware about scientific features of census and demographic survey. CO3 Students will be aware about techniques of analysis and study of fertility.
Indian Economy: Contemporary Concerns		CO1 Students will be aware of fiscal framework fiscal rules impact on deficits. CO2 Students will be aware of demonetization benefits, analysis short term impact and success. CO3 Students will be aware of the concept of universal basic income. CO4 Students will be aware of the terminologies of income health and fertility.
Micro-		CO1 Students will be aware about utility as representation of preference.

Economics		CO2 Students will be aware about production function in short and long run. CO3 Students will be aware about cost and revenue relationship in short and long run. CO4 Students will be aware about with competitive market such as perfect competition and monopoly competition.
SEMESTER - IV		
Macro Economics		CO1 Students aware familiar supply of money CRR, CDR in India CO2 Students aware familiar market equilibrium derivation of LM Curve CO3 Students aware familiar saving and investment function with derivation of the IS Curve. CO4 Students aware familiar money market related monetary policy and its instruments.
Development Issues Of Maharashtra's Economy		CO1 Students will be aware of Maharashtra's Economy. CO2 Students will be aware of tribal era with present status poverty overviews of nutrition and health education. CO3 Students will be aware of water resources, government policy overview of rural and urban water supply. CO4 Students will be aware of committee approach to health, regional disparities, health care system and connectivity.
SEMESTER - V		
Micro Economics - III	ECOMIE501	CO1 The students will be well acquainted with the microeconomic theory in respect to the study of perfect competition, general equilibrium and welfare economics.
Economics Of Development – VIII	ECOMIE502	CO1 The students will be aware about the policy options with special emphasis on the path of development such as inequity, poverty and technological aspects.
Economics Of Agriculture And Co-Operation	ECOEAC503	CO1 The students will be able to learn the role of agriculture in economic development of the country with understanding of agricultural productivity and agricultural labour. Also, the students will be able to understand the aspects of agricultural credit, agricultural marketing and the global problems.
Research Methodology: Paper X	ECOEAC504	CO1 The students will be acquainted with the concepts, principles and methods of economic research based on qualitative and quantitative data. Also, the students will be able to get insight into the application of modern analytical tools and techniques related economics decision making.
Environmental Economics: Paper Xi	ECOEAC505	CO1 The students will be able to understand the economics causes of environmental problems. Also, economic implication of environmental policy will be addressed and will be acquainted with the valuation of environmental improvement.

History Of Economic Thoughts: Paper XII	ECOEAC506	CO1 The students will be able to know the economic thoughts of the celebrated economists starting from the classical period. Also, they will be able to study the noble laureates of recent period.
SEMESTER - VI		
Macro Economics – III: Paper XIII	ECOMA-601	CO1 The students will be able to understand the macro economic theory with analytical tools with the understanding of goods market with fixed exchange rate, the money market uncovered interest rate parity and the benefits and costs of fixed and flexible exchange rates.
International Economics: Paper XIV	ECOINT-602	CO1 The students will be able to know the systematic exposition of models which explains the composition, direction, and consequences of international trade and the determinants and effects of trade policy. They will also learn the national and international monetary system.
Economics Of Agriculture And Co-Operation	ECOEA-603	CO1 The students will be acquainted with the various aspects related to the principles of co-operation and co-operative organization in the globalized economy.
Research Methodology: Paper XVI	ECORM-604	CO1 The critical thinking and listening skills will be strengthened in conducting economic research among the students.
Indian Economic Thoughts Paper XVII	ECOIET-605	CO1 The students will be acquainted with the history of Indian economic thoughts with special reference to the economic issues and the workings of the Indian mind in the field of economics.
International Trade Policy And Practice: Paper XVIII	ECOITPP-606	CO1 The students will be exposed to the changing phase of international trade policy and practice also they will be acquainted with the correct trends in international development.
The Level of Attainment For B.A. (Economics) Programme Is :- 80.00 %		
Course: Business Economics for Commerce		
SEMESTER – I		
Micro Economics	UBCOMFSI.3	CO1 Students are aware about basic tools, opportunity cost principle and use of marginal analysis in decision making.

		CO2 Students are aware about relationship between elasticity of demand and revenue. CO3 Students are aware about law of variable proportions and laws of returns to scale. CO4 Students are aware about accounting cost and economic cost and relationship between short run and long run.
SEMESTER - II		
Micro Economics	UBCOMFSII.3	CO1 Students are aware about perfect competition and monopoly competition in short run and long run. CO2 Students are aware about oligopolistic markets. CO3 Students are aware about cost-oriented pricing methods under product pricing, transfer pricing in business world. CO4 Students are aware about importance of capital budgeting and its type.
SEMESTER - III		
Elements Of Macro Economics Preamble		CO1 Students will be aware with the measurement of national product. CO2 Students will be aware with features and phases of trade cycles. CO3 Students will be aware with investment functions and marginal efficiency of capital. CO4 Students will be aware with money supply demand for money price and inflation.
SEMESTER - IV		
Foundation Of Public Finance		CO1 Students will understand sources of public revenue. CO2 Students will understand effects of taxation. CO3 Students will understand significance of public expenditure. CO4 Students will understand intergovernmental fiscal relations.
SEMESTER - V		
Macro Economics Aspects of India		CO1 Students will be aware about overview of new economic policy 1991 in India. Also, sustainable development goals and foreign investment policy in India. CO2 Students will be aware about overview of national agricultural policy, price, and financial system. CO3 Students will be aware about small and medium enterprises and disinvestment policy. CO4 Students will be aware about recent trends, challenges in Banking and insurance industry.
SEMESTER - VI		
International Economics		CO1 Students will be aware about theories of international trade, Ricardo's and Heckscher-Ohlin theory and terms of trade.

		<p>CO2 Students will be aware about commercial trade policy, free trade and protection, tariff and non-tariff barriers.</p> <p>CO3 Students will be aware about balance of payments and international economic organization.</p> <p>CO4 Students will be aware about foreign exchange market and role of central bank in foreign exchange rate management, managed flexible exchange rate system of India.</p>
PROGRAMME : M.A. ECONOMICS		
SEMESTER - I		
Micro Economics –I		<p>CO1 Students will be able to know the consumer's behaviour, income and substitution effects and indirect utility.</p> <p>CO2 Students will be able to understand the concept of production function, law of variable proportions and problem of profit maximization for a firm.</p> <p>CO3 Students will be able to know the price and output determination under perfect competition market failure.</p> <p>CO4 Students will be aware about features of monopoly and welfare effects of monopoly.</p>
Macro Economics		<p>CO1 The students were able to know the macroeconomics accounting stocks and flows, the determination of natural economics, the open economy, macro foundation of macroeconomics.</p>
Statistical Methods In Economics		<p>CO1 Students will be aware about basic laws of probability and some main theorems of covariance correlation.</p> <p>CO2 Students will be aware about various tests of hypothesis (t, f, z test)</p> <p>CO3 Students will be aware about linear regression with respect to R.</p> <p>CO4 Students will be aware about problems in simple linear regression model.</p>
Economics Of Development – I		<p>CO1 Students will be aware about economic growth and structural changes in capabilities, entitlements and deprivation and measurement of development.</p> <p>CO2 Students will be aware about modern theories of growth and distribution Harrod- Domar, Solow Model, Roomer and Lucas Model.</p> <p>CO3 Students will be aware about micro-economics of development segmentation of rural land, labour capital, credit, micro finance.</p> <p>CO4 Students will be aware about macro-economics of development environmental problems and</p>

		sustainable development.
SEMESTER - II		
Public Economics		CO1 Students will be aware about the role of government in market economy of social welfare. CO2 Students will be aware about public expenditure. Also why the government is increasing public expenditure in economy? CO3 Students will be aware about basic concept of tax theory. Also what are the benefits of direct and indirect tax for constructing social welfare? CO4 Students will be aware about new concept of tax in Indian economy.
Mathematical Techniques For Economics		CO1 Students will be aware about set theory related to economics. CO2 Students will be aware about derivative, integration and its application in economics. CO3 Students will be aware about constrained optimisation, language multiplier application in economics. CO4 Students will be aware about basic operations of matrices and simultaneous equations with matrices
Micro Economics –II		CO1 Students will be aware about introduction to game theory and certainty equivalence. CO2 Students will be understood the market oligopoly and law of Cournot, Bertrand and Stackelberg model. CO3 Students will be aware about moral hazard adverse selection, principle agent model and asymmetric information. CO4 Students will be able to understand theories of the firm.
Macro Economics –II		CO1 Students will be aware of various concepts like imperfectly flexible prices, price setting under imperfect competition, menu costs, real rigidity and quadratic price adjustments. CO2 Students will be aware of DGGE model, wealth effects and government budget constraint, money/bond finance and riparian equivalence. CO3 Students will be aware of new keynesian economics, disequilibrium, multiple equilibrium, hysteresis reconstructing the keynesian multiplier, the nk model of inflation. CO4 Students will be aware of macroeconomic policy, rules versus discretion, credibility and reputation, dynamic inconsistency and unconventional monetary policy inflation targeting and exchange rates.
SEMESTER - III		
International Trade: Theory And Policy		CO1 Students will be aware about the theoretical exposition of business, effects and the restriction on free flow in international trade with the empirical evidence is depending advantage of trade. CO2 Students will be aware about classical and non-classical international trade theory with advantages

		and disadvantages of international trade. CO3 Students will be aware about modern theory of international trade, module providing information, concept of international-industry trade role in economy.
Economy Of Agricultural Product And Rural Market		CO1 Students will be aware about the course aims at providing utilization on natural resources in agricultural production for increase production and productivity of agricultural sector. CO2 Students will be able to understand financial problem in agricultural sector. Also provide information about organised banking sector, role after established bank sector in India. CO3 Students will be able to understand concept and problems of agricultural labour. CO4 Students will be aware about agricultural and land reforms in India.
Economics Of Labour Market		CO1 Students will be aware about nature of the labour market and theory of human capital. CO2 Students will be aware about the theory of labour, theory of demand and supply. CO3 Students will be aware of the wages issues in labour market, wages structure and components of wages. CO4 Students will be able to understand employee turnover linkages in labour markets and social security and infant and child mortality rate. CO5 Students will be able to understand migration and population projections.
Agricultural Development And Policy		CO1 The students will be able to understand the concept of agricultural development, the factors leads to agricultural development and the share of agriculture in GDP.
Environmental Economy		CO1 Students will be aware about the knowledge of economic growth that is depending on natural resources. Also about the concept of sustainable development. CO2 Students will be aware about role of environment for human man well- being, protection through micro foundation on environmental economy. CO3 Students will be aware about types of pollution. Also about world pollution impact on human well - being. CO4 Students will be aware about the concept of save environment, Also regarding kind of policy government declared for save environment.
SEMESTER - IV		
Economics Of Human		CO1 Students will be aware about growth and development compared to human development, basic needs, quality of life, and capability approach.

Development		CO2 Students will be aware about aware the concept of dimensions of human development and measurement of HDO and PQLI CO3 Students will be aware about the concept of measurement of economic and social measurement of human equality of life. CO4 Students will be aware about social security with education and health.
Demography: Theory And Basic Analysis		CO1 Students will be aware about population science, demography and economic development, theory of demography transition CO2 Students will be aware about the basic concepts of nuptiality and fertility. CO3 Students will be aware about the basic concepts of morbidity, mortality, and infant and child mortality rate. CO4 Students will be able to understand the concepts of migration and population projection.
Projects		CO1 Students will gain first-hand information on various topics of their project work. They will get exposure to application of various research techniques, interview techniques, drafting of reports. They will understand about various social issues prevailing in the society. This will help them while pursuing their higher studies.

The Level of Attainment For M.A. (Economics) Programme Is :- 71.42 %

PROGRAMME : B.A. GEOGRAPHY

SEMESTER - I

Geomorphology	UAGEO101	CO1 To know the fundamentals of Physical Geography. CO2 Understand latitudes, longitudes and international dead line. CO3 Acquire knowledge about origin of various landforms. CO4 Understand the work of internal coeres. CO5 Acquire knowledge of external forces. CO6 Study the land forms and process.thermodynamic process.
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SEMESTER - II

Human Geography	UAGEO201	CO1 To understand the Human Geography as a basic branch of Geography along with the Dichotomy Environmentalism and Possibilisum CO2 It aims to understand the Racial groups in the world and man- environment conflict and Ecological crises CO3 To understand world population growth and distribution and it also aims to familiarize the students
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		to the population policies.
SEMESTER - III		
An Introduction To Climatology	UAGEO301	CO1 Students should know the fundamental branches of Geography in general and Climatology in particular. CO2 Students should get acquainted with the climatologically Concepts. CO3 Students should know the basis of Human development by studying these Physical branches of geography
An Introduction To Oceanography	UAGEO302	CO1 Understand importance of ocean. CO2 Knowledge about effect of ocean Currents. CO3 Understand human impacts on Ocean. CO4 Study about types of tides. CO5 To make aware about jadeites use of water. CO6 To understand Watershed management and water harvesting Structure.
SEMESTER - IV		
Physical Geography Of India	UAGEO401-	CO1 To acquaint the students with distinct dimensions of India. CO2 To focus the climate of India and mechanism of monsoon of India. CO3 To make students aware of the magnitude and nature of problem & Prospectus of national & state level on geographical basis. CO4 To understand the physical setup of the country.
Agricultural Geography Of India	UAGEO402-	CO1 To understand the concept and development of Agriculture. CO2 To examine the role of agricultural determinants towards the changing cropping pattern. CO3 To study the Green Revolution. CO4 The course also aims to familiarize the students with the Agricultural concepts and modern technologies used in Agriculture
SEMESTER - V		
Geography Of Settlements	UAGEO501	CO1 To Study the basic of Urban & Rural Geography. CO2 To Study the types of Urban & Rural Settlements, site & Situation. CO3 To get the ideas of relationship between human activities & urban development. CO4 To make the students capable for handling the present problematic situation in Urban and rural areas. CO5 The students studying this syllabus will become good planner and environmental Conservator.

Population Geography	UAGEO502	CO1 Understand the history of population CO2 Understand the types of data CO3 Study of distribution and density of population. CO4 Get knowledge of population theories
Tools And Techniques In Geography For Spatial Analysis	UAGEO503-	CO1 To introduce the students with the importance of field work & advanced Techniques in Geography. CO2 To provide training in application of modern tool & techniques in Geography. CO3 To enhance the skill of the students in instrumental survey. CO4 To enable the students to understand the use of computer for analysis of Geographical data. CO5 To give basic information to the students about Arial Photographs, Remote Sensing, GIS and GPS.
Refional Planning And Development	UAGEO504	CO1 Understand the concept of regional planning and development CO2 Understand the process and politics in regional planning CO3 Study and Problems of urban development CO4 Study the value of regional planning and development
Geography Of Resources	UAGEO505	CO1 Understand Structure, Components of Atmosphere. CO2 Study about Nutrient cycling. CO3 Understand the value of Resource. CO4 Understand the types of Resource. CO5 Get knowledge about environmental hazards and management. CO6 Make aware about conservation of resources.
Geospatial Technology	UAGEO506	CO1 To introduce the students with the importance of field work & advanced Techniques in Geography. CO2 To provide training in application of modern tool & techniques in Geography. CO3 give basic information to the students about Arial Photographs, Remote Sensing, GIS and GPS.
SEMESTER - VI		
Environmental Geography	UAGEO601	CO1 Understand Structure, Components of Atmosphere. CO2 Study about Nutrient cycling. CO3 Acquire knowledge about biodiversity. CO4 Understand environmental problems there Cause, Effect and Remedies. CO5 Get knowledge about environmental hazards and management. CO6 Understand the various environmental protection acts.
Geography Of Tourism And Recreation	UAGEO602	CO1 Understand the history of tourism CO2 Understand the types of tourism

		CO3 Study of new trends of tourism CO4 Get knowledge of tourism law
Tools And Techniques In Geography For Spatial Analysis	UAGEO603	CO1 To introduce the students with the importance of field work & advanced Techniques in Geography. CO2 To provide training in application of modern tool & techniques in Geography. CO3 To enhance the skill of the students in instrumental survey. CO4 To enable the students to understand the use of computer for analysis of Geographical data. CO5 To give basic information to the students about Arial Photographs, Remote Sensing, GIS and GPS.
Economic Geography	UAGEO604	CO1 To acquaint the students with distinct dimensions of India. CO2 To understand the economic setup of the country. CO3 To get information about air ways, railways, and road ways in India. CO4 To get information about transport and trade in India
Social Geography	UAGEO605	CO1 Understand the nature, scope, and concept, relationship between culture and social environment, and right of information act. CO2 Evolution to civilization and various cultural development and cultural system according to religion, language and geography, and global cultural changes. CO1 Understand the concept of space and social process and present status. CO2 Understand the concept of space and social process and present status
Research Methodology	UAGEO606	CO1 To understand the concepts in research methodology. CO2 To give basic information to the students about research. CO3 To get familiar with principles and techniques of research. CO4 To understand the process and value of geographical research. CO5 To develop skills for applying ICT in geography. CO6 To aware the students research methodology with recent technology.
The level of attainment of B.A. Geography programme:- 100%		
PROGRAMME : B.A. PSYCHOLOGY		
SEMESTER – I		
Fundamental of Psychology I & II	UAPSY-101 & UAPSY- 102	CO1 Aware oneself of basic concepts and modern trends in Psychology CO2 Create an interest in further studies in psychology CO3 Apply the psychological concepts in different areas of day to day life
SEMESTER – II		

Social Psychology I & II	UAPSY - 201 & UAPSY - 202	CO1 Demonstrate a familiarity with key concepts in social psychology and research method of social psychology. CO2 Apply social-psychological theories to understand a range of human social behaviour CO3 Communicate social psychological theory and research both orally and in writing.
SEMESTER – III		
Developmental Psychology I & II	UAPSY - 301 & UAPSY - 302	CO1 Construct and interpret an overview of developmental psychology. CO2 Interpret evidence through typical research methods used to understand human development. CO3 Explain and evaluate the major psychological theories as they apply for human development. CO4 Analyse the change that occurs through physical, cognitive and psychosocial development from conception to adolescence.
SEMESTER – IV		
Psychology of Adjustment I & II	Applied Component- UAPA4A1 & UAPA4A2-	CO1 Understand the basic concepts and modern trends in Psychology of Adjustment CO2 Take interest in Psychology of Adjustment as a field of study and research CO3 Apply various concepts in Psychology of Adjustment in the Indian context
SEMESTER – V		
Psychological Testing and Statistics I	UAPS- 504	CO1 Understand the nature, uses, technical features, and the process of construction of psychological tests CO2 Become aware about the measurement of intelligence and personality CO3 Understand the concepts in statistics and the various measures of Descriptive Statistics
Abnormal Psychology I	UAPS-505	CO1 Understand the basic concepts in Abnormal Psychology and the theories of abnormality CO2 Understand the different psychological disorders – their symptoms, diagnosis, causes and treatment CO3 Aware about mental health problems in society CO4 It will laid a foundation for higher education and a professional career in clinical psychology
Industrial – Organizational Psychology- I Paper No. – VI	UAPS-506	CO1 Understand the basic concepts in and various facets of Industrial and Organizational Psychology CO2 Aware about the role and importance of psychological factors and processes in the world of work CO3 It will create a foundation of post graduate specialization in Industrial and Organizational Psychology and professional career in the same domain.

Cognitive Psychology-I Paper No. - VII	UAPS 507	CO1 Understand the fundamental concepts of Cognitive Psychology and the basic cognitive processes CO2 Aware about the various applications of cognitive processes in everyday life and applications in other fields CO3 Provide the theoretical orientations and background for the courses in Practicum in Cognitive Processes CO4 It will laid foundation specialization at post graduate level in cognitive psychology and a career in the field of Cognitive Psychology
Counselling Psychology- I Paper No. –VIII	UAPS -508	CO1 Understand the nature, process, goals, techniques, ethical issues and major theories in Counselling Psychology CO2 Take interest in the various applications and fields of counselling CO3 It will laid foundation for higher education in Counselling and a career as a professional counsellor
Practicals in Cognitive Processes and Psychological Testing- I Paper No. – IX	UAPS-509	CO1 Use experimental designs, apply methodology to conduct experiments, statistical analysis, interpretation and discussion of data CO2 Equip oneself with psychological testing : test administration, scoring and interpretation of test scores. CO 3 Familiarize with computer-based experiment (Coglab)
SEMESTER – VI		
Psychological Testing and Statistics -II	UAPS-604	CO1 Understand the nature, uses, technical features, and the process of construction of psychological tests CO2 Become aware about the measurement of intelligence and personality CO3 Understand the concepts in statistics and the various measures of Descriptive Statistics
Abnormal Psychology -II	UAPS 605	CO1 Understand the basic concepts in Abnormal Psychology and the theories of abnormality CO2 Understand the different psychological disorders – their symptoms, diagnosis, causes and treatment CO3 Aware about mental health problems in society CO4 It will laid a foundation for higher education and a professional career in clinical psychology
Industrial – Organizational Psychology - II Paper No. – VI	UAPS -606	CO1 Understand the basic concepts in and various facets of Industrial and Organizational Psychology CO2 Aware about the role and importance of psychological factors and processes in the world of work CO3 It will create a foundation of post graduate specialization in Industrial and Organizational Psychology and professional career in the same domain.

Cognitive Psychology -II Paper No. - VII	UAPS -607	CO1 Understand the fundamental concepts of Cognitive Psychology and the basic cognitive processes CO2 Aware about the various applications of cognitive processes in everyday life and applications in other fields CO3 Provide the theoretical orientations and background for the courses in Practicum in Cognitive Processes CO4 It will laid foundation specialization at post graduate level in cognitive psychology and a career in the field of Cognitive Psychology
Counselling Psychology - II Paper No. – VIII-	UAPS- 608	CO1 Understand the nature, process, goals, techniques, ethical issues and major theories in Counselling Psychology CO2 Take interest in the various applications and fields of counselling CO3 It will laid foundation for higher education in Counselling and a career as a professional counsellor
Practicals in Cognitive Processes and Psychological Testing – II: Paper No. – IX	UAPS- 609	CO1 Use experimental designs, apply methodology to conduct experiments, statistical analysis, interpretation and discussion of data CO2 Equip oneself with psychological testing : test administration, scoring and interpretation of test scores Familiarize with computer-based experiment (Coglab)
The level of attainment of B.A. Psychology programme:- 100%		
Course: T.Y. B.Com (Applied Component –Psychology)		
Applied Component – Psychology of Human Behaviour at Work (PHBW)		CO1 Understand the basic concepts and modern trends in the field of Psychology of Human Behaviour at Work and take interest in the field CO2 Aware oneself about the role and importance of psychological factors and processes in the world of work

PROGRAMME : B.Com

SEMESTER I

AFM-I	UBCOMFSI.1	CO1. Understand ethical issues related to the accounting profession. CO2. Prepare Financial Statements in accordance with generally accepted accounting principal .
COM – I	UBCOMFSI.2	The students will gain knowledge about- CO1. Introduction to Business CO2. To acquaint the students with the recent development in the trade and industry and its environment. CO3. To induce students towards entrepreneurship.
B.C.	UBCOMFSI.4	CO1: To create awareness about the concept, meaning, definition of communication. CO2: To educate students about the objectives and channels of communication CO3: To impart knowledge about various methods and modes of communication CO4: to explain the barriers in communication and ways to effectively overcome these barriers. CO5: to emphasise the importance of listening skills and technique to cultivate good listening skills
Environmental Studies	UBCOMFSI.5	CO1. To create an environmental awareness among commerce students. CO2. Make aware students about various environmental factors and its relation to the field of Commerce. CO3. To highlight functional and spatial links between environment, economy and society. CO4. To create an insight into various environmental issues at various levels and environmental movements towards making environment sustainable.
Mathematical and Statistical Techniques	UBCOMFSI.6	CO1. After successful completion of the course, students get able to use concepts base on mathematics and statistics in the field of commerce and industry to solve the real life problems.
SEMESTER II		
AFM-II	UBCOMFSII.1	CO1. To develop critical thinking and problem solving competencies at both individual and group levels. CO2. Ability to organize analyse and interpret numerical and financial data .
COM – II	UBCOMFSII.2	The students will gain knowledge about- CO1. To acquaint the students with the service sector like Banking, Insurance and Information Technology. CO2. To develop analytical skills & managerial skills.
B.C.	UBCOMFSII.4	CO1. To comprehend the concept and techniques of interviews, meetings and conferences. CO2. To gain insight to the concept of public relations, know the functions of PR department. CO3. To develop awareness of crisis management and ways to dealb with crisis. CO4. To develop effective writing skills that will enable students to effectively write trade letters and

		<p>letters to various government and non-government agencies.</p> <p>CO5. To be able to draft various types of reports and business proposals.</p>
Environmental Studies	UBCOMFSI.5	<p>CO5. To create an environmental awareness among commerce students.</p> <p>CO6. Make aware students about various environmental factors and its relation to the field of Commerce.</p> <p>CO7. To highlight functional and spatial links between environment, economy and society.</p> <p>CO8. To create an insight into various environmental issues at various levels and environmental movements towards making environment sustainable.</p>
Mathematical and Statistical Techniques	UBCOMFSI.6	<p>CO2. After successful completion of the course, students get able to use concepts base on mathematics and statistics in the field of commerce and industry to solve the real life problems.</p>
SEMESTER III		
AFM-III	UBCOMFSIII .1	<p>CO1. Apply foundation knowledge and skills necessary to identify problems and generate feasible alternatives.</p> <p>CO2. Ability to develop role as sole trader and create partnership firm.</p>
B.LAW	UBCOMFSIII .2	<p>CO1. To get aerial view of the legal frame work with special reference to various business laws.</p> <p>CO2. To develop awareness of the Indian Contract Act</p> <p>CO3. To gain knowledge of special contracts with reference to Law of Indemnity and Guarantee, Law of Bailment and Pledge and Law of Agency</p> <p>CO4 To develop awareness of Sale of Goods Act</p> <p>CO5 To acquaint with Negotiable Instruments Act</p>
COM – III & IV	UBCOMFSIII .3	<p>On completion of the course learners will be able to understand,</p> <p>CO1. To make the learners aware about conceptual knowledge and evolution of management.</p> <p>CO2. To familiarize the learner with the functions in management</p>
Management Accounting Auditing	UBCOMFSIII .4	<p>CO1. Encourage and occlusions of knowledge and Skill relating to the application of concepts and Techniques of management accounting.</p> <p>CO2. Able to decision making of Business short and long period</p>
Marketing Management BM-III	UBCOMFSIII .5	<p>CO1. To understand the concepts of marketing management features importance functions and scope of marketing</p> <p>CO2. To comprehend marketing environment, its types and emerging opportunities.</p> <p>CO3. To understand competition, strategic marketing and SWOT analysis</p>

		CO4. To give insight to the concept of Product- its levels classification, PLC, Product positioning CO5. To elucidate the term Pricing – its objectives, factors affecting pricing decisions, methods of pricing and steps in pricing
Advertising	UBCOMFSI II.6	The course enables the learners will be able to understand. CO1. Fundamental of Advertising. CO2. Different role of Advertising in Marketing, economy and society. CO3. Development and issues concerning contemporary advertising. CO4. The Regulatory framework of Advertising. CO5. Advertising in India.
CSP	UBCOMFSI II.7	CO1. To understand the vital role of company secretary in management of companies. CO2. To gain knowledge about, company secretary practices, company documentation and formation CO3. To create awareness about role of company secretary as advisor, liaison officer, representative CO4. To familiarise with the important company documents and procedure of company formation. CO5. To explicate secretarial correspondence with various stake holders of the company
SEMESTER IV		
AFM-III	UBCOMFSIV. 1	CO1. Describe the Financial environment within Organisation. CO2. Critically evaluate the financial objectives of company.
B.LAW	UBCOMFSIV. 2	CO1. To give insights into Indian Companies Act CO2. To give glimpse of Corporate Law and IPR CO3. To develop awareness Indian Partnership Act CO4. To realise the importance of Consumer Protection Act CO5. To get knowledge of Competition Act
COM –IV	UBCOMFSIV. 3	The course enables the students to understand, CO1. To acquaint the learners with the basic concepts of production management, Inventory management and Quality management. CO2. To provide basic knowledge about Indian Financial System. CO3. To update the learners with the recent trends in Finance.
Management Accounting Auditing	UBCOMFSIV. 4	CO1. Basic knowledge of auditing vouching , verification and valuation of asset & Liabilities. CO2. Able to play role of Auditor in firm ,Bank, Company etc.
Marketing	UBCOMFSIV.	CO1. To understand Distribution channels, types, functions of middlemen, logistics e-marketing

Management	4	CO2. To give insight to the concept of Promotion mix, objectives, factors affecting promotion mix, steps in designing marketing communication plan, Role of social media in marketing communication CO3. To understand the buyer behaviour CO4. To educate about Marketing of services CO5. To emphasise the emerging issue rural marketing and its importance.
Advertising	UBCOMSSI V.5.01	Learners are able to get vital knowledge about , CO1. To get the students acquainted with the working and role of advertising agency. CO2. Media and aspects of media planning. CO3. Advertising techniques and practices. CO4. Creativity in Advertising.
CSP	UBCOMFSIV. 6	CO1. To give broad overview of Management of Companies CO2. To make aware about Company Meetings CO3. To recognize the importance and application Dematerialization CO4. To familiarise with the concept and technique of Online Trading CO5. To introduce various concepts of Dividend, Dividend Reinvestment Plan (DRIP) Company Reports
SEMESTER V		
B.M – I Management and Organization Development	UBCOMTSVI .1.3	On completion of the course learners will be able to, CO1. acknowledge the need for formal management education. CO2. Acquire skills for becoming effective managers. CO3. To help students to gain insight into the contemporary issues in management. CO4. To help students understand the managerial functions of motivating, directing, coordinating and controlling.
Cost Accounting	UBCOMTSVI .2.3	CO1. Able to express the place and role of cost accounting. CO2. Describe the fundamental concepts of cost accounting
Marketing	UBCOMTSVI .3.3	CO1. To gain insight into the fundamentals of marketing, marketing research, MIS, consumer behaviour, market segmentation and CRM CO2. To get familiarized with the terminologies of marketing mix, product, product mix, PLC, Branding. Packaging, product positioning, service positioning and pricing. CO3. To understand concept of physical distribution, supply chain management, promotion, integrated marketing communication, sales management and personal selling. CO4. To emphasize the key marketing dimensions like marketing ethics, competitive strategies rural

		marketing, digital marketing and green marketing. CO5. To create awareness about the challenges faced by marketing managers, careers in marketing, factors responsible for success and failure of brands in India.
Financial Accounting	UBCOMTSVI .4.3	CO1. Knowledge of International Accounting Principles and impact of global issues . CO2. Ability to evaluate financial results through examination of relevant data i.e income statement and Balance sheet.
Financial Management (B.M – II)	UBCOMTSVI .5.3	On completion of the course learners will be able to, CO1. To help students understand the various sources of finance. CO2. To enable the students to understand basic concepts, functions and objectives of financial management.
Marketing Research	UBCOMTSVI .6.4	On completion of the course learners will be able to, CO1. Students should understand the Research Methodology process. CO2. Students should be able to identify the overall process of designing a research study from its inception to its report.
Entrepreneurship and management of micro, small scale and medium entrepreneur	UBCOMTSVI .7.7	On completion of the course learners will be able to, CO1. To equip them with a platform to develop an entrepreneurial venture. CO2. Get insight in to their creative, entrepreneurial and team skills.
SEMESTER VI		
B.M – I Management and Organisation Development	UBCOMTSV .1.3	On completion of the course learners will be able to, CO1. To equip them with a platform to develop an entrepreneurial venture. CO2. Get insight in to their creative, entrepreneurial and team skills.
Cost Accounting	UBCOMTSV .2.3	CO1. Apply cost accounting methods to identify profitable . CO2. Recognize and understand ethical issues related to the accounting profession.
Marketing	UBCOMTSV .3.3	CO1. To introduce the concepts of human resource management- its nature importance and functions CO2. To create awareness about the terminologies of human resource planning, job analysis, recruitment and selection, importance of placement and induction.

		CO3. To know the importance of human relations, leadership, motivation and employee morale. CO4. To understand Concepts of human resource accounting, human resource audit CO5. To instil significance of group dynamics, team building, emotional quotient, mentoring, career planning, managing workforce diversity, downsizing outsourcing, safety and security management
Financial Accounting	UBCOMTSV .4.3	CO3. Ability to prepare a federal Individual tax return. CO4. Accounting graduates will be professionally competent in C A ,C .S and ICWA etc
Financial Management (B.M – II)	UBCOMTSV .5.3	On completion of the course learners will be able to, CO1. To acquaint students with basics of risks and returns, Capital Structures. CO2. Understand the issues involving cash management and receivables management
Marketing Research	UBCOMTSV .6.4	On completion of the course learners will be able to, CO1. The students should be able to organize and conduct research in a more appropriate manner. CO2. The students should be able to write a research proposal, research report and thesis.
Entrepreneurship and management of micro, small scale and medium entrepreneur	UBCOMTSV .7.7	On completion of the course learners will be able to, CO1. Understand the issues involved in entrepreneurial development. CO2. Demonstrate the ability to prepare a business plan for a venture.
The level of attainment of B.Com. programme is :-		
PROGRAMME : M.Com		
SEMESTER I		
Strategic Management		CO1. To enable the learners to understand new forms of strategic management concepts and their use in business. CO2. To provide information pertaining to bus, corporate and global reforms. CO3. To develop learning & analytical skills of the learners to enable them to solve cases and to provide strategic solutions. CO4. To acquaint the learners with recent developments and trends in the business corporate world.

Economics For Business Decisions		<p>CO1. This course is designed to equip students with basic tools of economic theory and its practical applications.</p> <p>CO2. The course aims at familiarizing the students with the understanding of the economic aspects of current affairs and there by prepares them to analyse the market behaviour with economic way of thinking.</p> <p>CO3. In addition to providing an insight into application of economic principles in business decisions, it also intends to widen analytical ability of the students and to provide them a foundation for further study of economics.</p> <p>CO4. In order to make the study practical oriented, the paper requires discussion of some cases involving the use of concepts of business economics.</p>
Cost And Management Accounting		<p>CO1. To enable the abilities of learners to develop the concepts of cost and management accounting and its significance in the business.</p> <p>CO2. To enable the learners to understand, develop and apply the techniques of costing in the decision making in the business corporate.</p> <p>CO3. To enable the learners in understanding, developing, preparing and presenting the financial report in the business corporate.</p>
Business Ethics And Corporate social Responsibility		<p>CO1. To Familiarize the learners with the concepts and relevance of Business Ethics in the modern era.</p> <p>CO2. To enable learners to understand the scope and complexity of corporate Social responsibility in the global and Indian context.</p>
SEMESTER II		
Strategic Management		<p>CO1. To enable the learners to understand new forms of strategic management concepts and their use in business.</p> <p>CO2. To provide information pertaining to bus, corporate and global reforms.</p> <p>CO3. To develop learning & analytical skills of the learners to enable them to solve cases and to provide strategic solutions.</p> <p>CO4. To acquaint the learners with recent developments and trends in the business corporate world.</p>
Economics For Business Decisions		<p>CO1. This course is designed to equip students with basic tools of economic theory and its practical applications.</p> <p>CO2. The course aims at familiarizing the students with the understanding of the economic aspects of</p>

		<p>current affairs and there by prepares them to analyse the market behaviour with economic way of thinking.</p> <p>CO3. In addition to providing an insight into application of economic principles in business decisions, it also intends to widen analytical ability of the students and to provide them a foundation for further study of economics.</p> <p>CO4. In order to make the study practical oriented, the paper requires discussion of some cases involving the use of concepts of business economics.</p>
Cost And Management Accounting		<p>CO1. To enable the abilities of learners to develop the concepts of cost and management accounting and its significance in the business.</p> <p>CO2. To enable the learners to understand, develop and apply the techniques of costing in the decision making in the business corporate.</p> <p>CO3. To enable the learners in understanding, developing, preparing and presenting the financial report in the business corporate.</p>
Business Ethics And Corporate social Responsibility :		<p>CO1. To Familiarize the learners with the concepts and relevance of Business Ethics in the modern era.</p> <p>CO2. To enable learners to understand the scope and complexity of corporate Social responsibility in the global and Indian context.</p>
SEMESTER III		
Advanced Financial Accounting		CO1. To know and understand the provisions of different Acts applicable while preparing the Final Account of Banking Companies, Insurance Companies, Cooperative Societies etc
Advanced Cost Accounting		CO1. To study the meaning and allocation of overheads by using different methods, understand the concepts, activity based Costing System, Responsibility Accounting Transfer pricing.
Corporate Financial Accounting		CO1. Determining the different methods of valuing Goodwill & Shares, studying the Holding Companies.
Advanced Financial Management		CO1. Understand the meaning of Budget, different types of Budgets, Working Capital Management, Receivables management etc.
SEMESTER IV		

Advanced Financial Accounting		CO1. To know and understand the provisions of different Acts applicable while preparing the Final Account of Banking Companies, Insurance Companies, Cooperative Societies etc
Advanced Cost Accounting		CO1. To study the meaning and allocation of overheads by using different methods, understand the concepts, activity based Costing System, Responsibility Accounting Transfer pricing.
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Advanced Financial Management		CO1. Understand the meaning of Budget, different types of Budgets, Working Capital Management, Receivables management etc.
The level of attainment of M.Com. programme is:-		
PROGRAMME : B.Com Banking & Insurance		
SEMESTER I		
Foundation Course –I	UBIFSI.5	CO1. To know the reasons of gender disparity language differences, religions etc. CO2. Different types of disabilities, communalism, etc. CO3. Studying the features and basic parts of Indian Constitution.
Principles of Management	UBIFSI.2	CO1. To study the meaning and basic functions of management CO2. To study the Indian and foreign business leaders. CO3. Importance of management process and practices
Business Communication - I	UBIFSI.4	CO1. To study the theory of communication & Obstacles to communication. CO2. To aware students about different forms of communication and business letters. CO3. To study the language and writing skills
Business Economics	UBIFSI.6	CO1. Basic tools & scope & importance of Business Economics. CO2. Demand Function & Demand estimation & forecasting. CO3. Supply & production decision & cost of production.
Environment and Management of Financial Services	UBIFSI.1	CO1. Describe the functions of commercial bank. CO2. Develop an understanding of various financial services. CO3. Explain key insurance terminology and its principles.

Financial Accounting I	UBIFSI.3	CO1. Develop the ability to use accounting concepts, principles. CO2. To study the Manufacturing companies final account. CO3. To study the methods of valuation of stock.
Quantitative Methods I	UBIFSI.7	CO1. To study organising data, frequency distribution and data representation. CO2. To study the concept of co-variance, correlation and regression.
SEMESTER II		
Foundation Course – II	UBIFSII.5	CO1. To study the meaning of Globalisation, Liberalisation and Privatisation and its impact on Indian society. CO2. Basic human rights at an Indian citizen. CO3. Meaning of stress, its causes and remedial measures to overcome the stress.
Organisational Behaviour	UBIFSII.6	CO1. To know the concept of OB, its features and different models of OB. CO2. To study the Motivation, leadership concepts and theories. CO3. Importance of leader in the business leadership.
Business Communication - II	UBIFSII.4	CO1. To study the presentation skills & Group Communication. CO2. To study the Business Correspondence. CO3. To study the language and writing skills.
Business Law	UBIFSII.2	CO1. To know the meaning of law, Indian constitution, Contract Act. CO2. To study the Negotiable Instrument Act and information Technology Act. CO3. To study Consumer Protection Act And RTI Act.
Principles and Practices of Banking & Insurance	UBIFSII.1	CO1. To understand the meaning of bank and insurance. CO2. To study the various fund based facilities and non fund based facilities provided by bank. CO3. To study the principles and objectives of insurance
Financial Accounting -II	UBIFSII.3	CO1. To study the various methods use in calculation of goodwill CO2. To understand the concept of redemptions of share and redemption of debenture.
Quantitative Methods II	UBIFSII.7	CO1. To study ratio proportion and percentage. CO2. To study the concept of statistical application and management
SEMESTER III		
Management Accounting	UBIFSIII.2	CO1. To study the meaning and importance of Management accounting. CO2. To study the Vertical statement, Balance Sheet and Profit and Loss Account.

		CO3. Dividend Policies and Working Capital Management.
Mutual Fund Management	UBIFSIII.5	CO1. To know the meaning, features, definition, advantages and limitations of MFM CO2. To know the different parties involved in MFM. CO3. To study the fund selection process.
Foundation Course – III(An overview of Banking Sector)	UBIFSIII.7.1	CO1. Taking an overview of banking Company. CO2. To study the Banking & Customer –Banker Relationship. CO3. To study the Universal Banking, Technology in Banking Sector & Microfinance.
Financial Markets	UBIFSIII.8	CO1. To study in detail the Indian Financial System, Financial Markets in India CO2. To study commodity market & Derivative Markets. CO3. To study the Indian Money Market, Capital Market , Equity Market in details
Direct Taxation	UBIFSIII.9	CO1. To acquaint the students with basic principles underlying the provisions of direct tax and to develop a broad understanding of the tax laws and accepted tax practices. CO2. To give an understanding of the relevant provisions of Direct Tax. CO3. Students of the course will be able to explain different types of incomes and their taxability and expenses and their deductibility.
Financial Management I	UBIFSIII.1	CO1. Describe the common factors influencing dividend policy. CO2. Describe applications of options in financial management. CO3. To bring financial management decisions from the business world to the classrooms. CO4. Calculate capital budgeting and resource allocations.
SEMESTER IV		
Corporate And Securities Law	UBIFSIV.6	CO1. To study the Company Law, Regulatory Framework Governing Stock Exchange. CO2. To study the SEBI in detail. CO3. To study the Depositories Act 1996.
Cost Accounting	UBIFSIV.2	CO1. To study the meaning of Cost Accounting. CO2. To study the classification of Cost and Cost Sheet. CO3. To study the Standard Costing and Marginal Costing.
Customer Relationship Management	UBIFSIV.3	CO1. To Know the CRM, Technological support in CRM. CO2. To study the implementation of CRM CO3. To study the CRM In Banking & Insurance Sector.
Business	UBIFSIV.7	CO1. To study the Macroeconomics Data & Theory.

Economics II		CO2. To study the Money, inflation and Monetary Policy CO3. To study the theory and issue of International Trade.
Foundation Course IV (An overview of Insurance Sector)	UBIFSIV.5	CO1. To understand the concept of insurance. CO2. To understand the insurance plans available of various life insurance companies. CO3. To understand the insurance plans available of various general insurance companies.
Financial Management II	UBIFSIV.1	CO1. Identify the major sources of short-term financing available to the firm. CO2. Apply risk and return concept. CO1. To understand the concept of leverage and its benefits. CO2. To understand the concept of working capital management and its benefits
SEMESTER V		
Financial Reporting And Analysis	UBIFSV.1	CO1. To know and study the final accounts of Banking, Insurance, Limited Companies. CO2. To study the Cash Flow statements. CO3. Taking an overview of IFRS, Ethics in maintaining the books of accounts etc.
Business Ethics And Corporate Governance	UBIFSV.4	CO1. Understanding the concept of Ethics, Business Ethics, its features, advantages, limitations etc. CO2. Studying the concept of Corporate Governance, different types of committees, in regards to Corporate Governance. CO3. Studying the meaning of Corruption and Frauds, different types of frauds in the Banking and Insurance sector,
Auditng -I	UBIFSV.2	CO1. To study the various approaches to audits, inspections & review. CO2. To study the similarities and differences between audit and investigation. CO3. To study the skills required to manage the audit function & challenges to managing audits.
Strategic Management	UBIFSV.3	CO1. Understanding the concept of Ethics, Business Ethics, its features, advantages, limitations etc. CO2. Studying the concept of Corporate Governance, different types of committees, in regards to Corporate Governance. CO3. Studying the meaning of Corruption and Frauds, different types of frauds in the Banking and Insurance sector,
International Banking & Finance	UBIFSV.5	CO1. Identify the reasons for international trade CO2. Describe the importance of balance of trade and balance of payment. CO3. Evaluate cross border investment opportunities.
Research	UBIFSV.6	CO1. To understand some basic concepts of research and its methodologies.

Methodology		CO2. Identify appropriate research topics. CO3. To understand how to write a report
SEMESTER VI		
Security Analysis And Portpolio Management	UBIFSVI.1	CO1. Study the meaning and definition of Security analysis, different type of avenues available for investment. CO2. To study the NPV, Equity and Bond valuation. CO3. To study the meaning and types of Ratio Analysis.
International Business	UBIFSVI.4	CO1. To know the meaning and definition of Domestic and International Business, difference in between these two business. CO2. Different environment governing International Business, International Marketing. CO3. International Business entry strategies and outcomes.
Auditing-II	UBIFSVI.2	CO1. To aware the learners about how to conduct the Audit of limited Companies. CO2. To aware the learners about new areas of auditing like Cost Audit, Human Resource Audit, Forecast Audit . CO3. To aware the learners about professional Ethics & Misconduct in audit
Human Resource Management	UBIFSVI.3	CO1. Contribute to the development, implementation & evaluation of employee recruitment, selection& retention plans & processes. CO2. Administer & contribute to the design & evaluation of the performance management programme.. CO3. Develop, implement & evaluate employee orientation, training & development programmes.
Central Banking	UBIFSVI.5	CO1. To understand the Functions of central banking CO2. To understand the role of RBI in Indian economy
Project Work in Banking & Insurance	UBIFSVI.6	CO1. Student should be able to identify the Research design and overall Research methodology process. CO2. Students should be find out the solution of research problems with the help of Research Methodology.
The level of attainment of B.Com. (BI) programme:- 89.65%		
PROGRAMME : B.Com SMART		
SEMESTER I		
Introduction To Business	USMARTFS I-1	CO1 Analyze the local business environment. CO2 Formulate a marketing plan including marketing objectives, marketing mix, strategies, budgetary considerations and evaluation criteria.

		CO3 Write a business plan for an entrepreneurial start-up venture CO4 understand the concept of leadership & Explain organization structure
Communication Skills	USMARTFS I-2	CO1 Demonstrate a clear understanding of major marketing concepts in writing and orally using proper business communications techniques. CO2 The ability to communicate ideas clearly and concisely in oral and written structures, and in formal and informal settings CO3 Apply effective written and oral communication skills to business situations. CO4 Communicate marketing information persuasively and accurately in oral, written and graphic formats.And Use oral communication skills
Introduction To Computer-I	USMARTFS I-3	CO1 Evaluate an e-Business opportunity. CO2 Produce high quality documents utilizing Word, Excel, Access or PowerPoint CO3 Summarize key historical media, technology, and marketing milestones CO4 Develop, monitor, and assess digital networked communication/marketing campaigns
Business Mathematics	USMARTFS I-4	CO1 Describe mathematic relation & function CO2 Solve business arithmetic operations with fractions to do business problems, and be able to select which math method needs to be used to do problems. CO3 Use percentages, ratios, and proportions for business applications such as discounts, markups, and markdowns, and be able to differentiate which math methods should be used for different problems. CO4 Use business statistics for central measurements, frequency distributions, graphs, and measure of dispersion and be able to select which math method should be used for different problems.
Supply Chain & Introduction To Marketing	USMARTFS I-5	CO1 Assess and apply the 4 P's (Product, Place, Promotion, Price) in the B2B environment for products or services being marketed to organizations. CO2 Explain the techniques to conduct market analysis practices including market segmentation and targeting. CO3 Identify and integrate market mix elements into a comprehensive plan.
FMCG & RETAIL-I	USMARTFS I-6	CO1 overview fmcg industry CO2 to introduce the business CO3 to introduce the manufacturing CO4 to get knowledge of fmcg operational strategy
SEMESTER II		
Introduction To Computer-II	UA&FFII-1	CO1 Employ digital tools to analyze the effectiveness of a marketing campaign. CO2 To give knowledge of network basic & infrastructure

		CO3 Describe the process to formulate and manage the B2B marketing strategy including all key components. CO4 Predict mega trends associated with the digital networked environment.
Indian Economy	UA&FFSII-2	CO1 describe structure of indian economy CO2 explain market structure CO3 explain introduction to financial system CO4 describe purchasing power
Fundamentals Of Accounting	UA&FFSII-3	CO1 explain accounting rules CO2 introduction to cost accounting CO3 describe consignment CO4 explain EMI
Customer Releation Marketing	UA&FFSII-4	CO1 understand customer relation CO2 define CRM CO3 explore CRM
Business Ethics	UA&FFSII-5	CO1 use critical thinking skills in business situations. CO2 apply an ethical understanding and perspective to BUSINESS situations. CO3 apply the principles of business ethics and corporate SOCIAL responsibility.
FMCG-II	UA&FFSII-6	CO1 to help in outlet management CO2 to help in introduction of fmcg industry CO3 to get familiarize with sales management CO4 explain direct store delivery
SEMESTER III		
Rural Marketing, Retail Management & Modern Trade	UU&FSSII-1	CO1 to create awareness about the applicability of the concept, techniques & processes of marketing in rural context CO2 to familiarize with the special problem to sales in RURAL marketing CO3 to help understand the working of marketing institution CO4 to familiarize with retail management CO5 explain 4p's in rural marketing
Distribution & Supply Chain Management	UU&FSSII-2	CO1 explain the importance of distribution channel supply CHAIN management CO2 identify how distribution channel add value to businesses CO3 explain indirect taxes CO4 describe inventory control

Human Skills	UU&FSSII-3	CO1 to understand basic human behavior pattern as they ARE THE most important resource CO2 to help in dealing & creating greater awareness of HUMAN behavior CO3 to help manage human resource effectively
Business Law	UU&FSSII-4	CO1 analyze any legal obligations, principles, and rules associated with the organization CO2 introduction of negotiable instrument CO3 explain law of contract CO4 describe sales of goods act CO5 familiarize with consumer protection act
General Awareness & Major Issues In India	UU&FSSII-5	CO1 describe Indian society. CO2 describe Indian political system CO3 explain science & technology CO4 explain ecology
Fmcg & Retail-III	UU&FSSII-6	CO1 to enable the student in data analysis CO2 explain route planning CO3 to understand asset management CO4 to introduce the basic of business
SEMESTER IV		
Marketing Research, Business Plan & Market Analysis	UU&SSSII-1	At the end of this course students should be able to: CO1 describe marketing research, what kinds of information it can provide, and how it is used by marketing. CO2 identify and explain alternative research methods and their relative strengths and weaknesses. CO3 identify and describe examine major types of measurement techniques and data collection methods. CO4 analyze data obtained through marketing research using the software. CO5 write a marketing research report and make an oral presentation of the research results. CO6 make sound tactical and strategic business decisions based on the proper interpretation of marketing research results.
Operational Management	UU&SSSII-2	CO1 understand the core features of the operations and production management function at the operational and strategic levels, specifically the relationships between people CO2 define 'operations' and 'operations management' CO3 identify operational and administrative process CO4 identify and evaluate the processes, tools and principles of operations management to better

		<p>understand the logistics and supply chain operations.</p> <p>CO5 explain and evaluate the quality processes in manufacturing and service sector to improve the operational performance.</p> <p>CO6 apply contemporary techniques to layout design</p> <p>CO7 describe manufacturing planning and control strategies</p>
Financial Management/Business Finance	UU&SSSII-3	<p>CO1 explain financial management</p> <p>CO2 explain capital budgeting</p> <p>CO3 introduction to cash management</p> <p>CO4 introduction to account receivable management</p> <p>CO3 to help understanding new channel development</p> <p>CO4 familiarize task based personal evaluation & action plan</p>
Selling & Negotiable Skills	UU&SSSII-4	<p>CO1 to enable the student for critical sales competencies that drive buying decision</p> <p>CO2 to introduce basic principles & practical steps in negotiating process</p> <p>CO3 utilize sales skills.</p>
Product & Brand Management	UU&SSSII-5	<p>CO1 understand what a product is, the various levels which make it up, and different types of products</p> <p>CO2 understand how products can be classified, and the nature of the product line and product mix.</p> <p>CO3 explain the benefit of brand management</p> <p>CO4 identify the different types of brand</p> <p>CO5 explain the strategic value of brand equity</p>
Fmcg & Retail-IV	UU&SSSII-6	<p>CO1 to enable the student in product positioning</p> <p>CO2 to introduce the basic of business</p>

SCIENCE

PROGRAMME : B.Sc. Botany		
SEMESTER I		
Plant diversity I	USBO1O1	CO 1 On completion of the course, students are able to Understand the diversity among Algae, Fungi and Bryophytes
Form and function I	USBO1O2	CO 1 Students will understand the nature of cell and cell organelle, ecological aspects and Mendelian and Non Mendelian Genetics
SEMESTER II		
Plant diversity I	USBO2O1	CO 1 Students are able to Understand the morphological diversity among Pteridophytes, Gymnosperms and Angiosperms
Form and function I	USBO2O2	CO 1 Learners get basic ideas about plant anatomy, process of Photosynthesis. Students will learn concept of primary and secondary metabolites and earn knowledge about medicinal plants.
SEMESTER III		
Plant diversity II	USBO3O1	CO 1 To studying in depth about fungi algal. Bryophyta and Angiosperms.
Form and function II	USBO3O2	CO 1 Students know basics in microscopy and separation techniques. Cell biology gives knowledge about cell organelles, importance their function.
Current trends in plant sciences I	USBO3O3	CO 1 Forestry and Economic botany enable students about utilization of plants in life. Students are aware about current trends in Pharmacognosy and molecular biology.
SEMESTER IV		

Plant diversity II	USBO4O1	CO 1 To give knowledge about fungi, plant diseases, Pteridophytes and gymnosperms.
Form and function II	USBO4O2	CO 1 Students are able to learn about Anatomy, physiology of plants and aspects of ecology and environment.
Current trends in plant sciences I	USBO4O3	CO 1 Students will learn about garden types, plant tissue culture, rDNA technology and Biostatistics
SEMESTER - V		
Plant diversity III	USBO5O1	CO 1 Understand the concept, principle of sterilization, culture of bacteria and fungi, plant pathology, morphology and structure of algae.
Plant diversity IV	USBO5O2	CO 1 This paper gives brief idea about fossil plants, anatomy, palynology and flowering plants.
Form and function III	USBO5O3	CO 1 On completion of the course, students are able to understand the process of translation in eukaryotes, membrane transport in plants, plant succession and production of secondary metabolite via plant tissue culture
Current trends in plant sciences II	USBO5O4	CO 1 On completion of the course, students are able to understand the traditional plants used by tribes as medicines. Pharmacognosy and medicinal botany provide knowledge of monograph of drugs with reference to their biological sources, distribution and characters
Horticulture And Gardening –I	USACHO501	CO 1 On completion of the course, students are able to improve their skill in horticulture and garden practices
SEMESTER - VI		
Plant diversity III	USBO6O1	CO 1 To studying in depth knowledge of general characters, morphology, life cycles and economic importance of Bryophyte, Pteridophytes and Gymnosperms.
Plant diversity IV	USBO6O2	CO 1 Students will learn angiospermic families, ecological anatomy, embryology and biostatistics.
Form and function III	USBO6O3	CO 1 On completion of the course, students are able to understand structure and properties of biomolecules, physiology of nitrogen metabolism, genetic disorders.
Current trends in plant sciences II	USBO6O4	CO 1 Understand fundamentals of plant biotechnology. Gain the knowledge about economic botany and phytogeography.

Horticulture And Gardening –Ii	USACHO502	CO 1 On the completion of this course students understand the principles of gardening, floriculture and commercial production of fruits, vegetables, medicinal and aromatic plants
The level of attainment of B.Sc. Botany programme:- 88.23 %		
PROGRAMME : M.Sc. Botany		
SEMESTER - I		
Plant Diversity :CryptogamsI (Algae and Fungi)	PSBO101	CO1. On completion of the course, students are able to Understand the diversity among Algae, Fungi and Bryophytes
Plant Diversity – Spermatophyta I (Gymnosperms and Angiosperms)	PSBO102	CO1. Students are able to Understand the diversity among gymnosperms and angiosperms
Plant Physiology	PSBO103	CO1. This paper enrich the knowledge of students about various physiological aspects.
Cytogenetics, Molecular Biology and Biotechnology	PSBO104	CO1. On completion of the course, students are able to Understand the techniques of Cytogenetics, Molecular Biology and Biotechnology
SEMESTER - II		
Plant Diversity : Cryptogams II (Bryophyta and Pteridophyta)	PSBO201	CO 1Students get in brief knowledge of Bryophyta and Pteridophyta
Plant Diversity: Spermatophyta II (Anatomy, Developmental Botany and Palynology)	PSBO202	CO 1This paper provide in depth idea about anatomy, developmental botany and palynology.
Plant Physiology and Environmental Botany	PSBO203	CO 1This paper deals with the study of stress physiology and ecophysiological aspects in the environment.

Medicinal Botany and Dietetics	PSBO204	CO 1 Students earn knowledge about medicinal plants and dietetics
SEMESTER - III		
Techniques and Instrumentation	PSBO301	CO 1 This paper gives information on principle, working and applications of spectrophotometer (UV-VISIBLE) , pH meter and separation techniques.
Molecular Biology	PSBO302	CO 1 This provide in detail information on DNA replication, translation and RNA processing
Angiosperms I	PSBO303	CO 1 Students learn Plant Identification Strategies. Students know Progress & Advancement in Angiosperm Taxonomy in India.
Angiosperms II	PSBO304	CO 1 This paper provides in brief the Methods in Evaluating Crude Drugs and approaches to the taxonomy, anatomy, embryology and palynology.
SEMESTER - IV		
Techniques and Instrumentation	PSBO401	CO1. On completion of the course, students are able to Understand the tracer techniques microscopy, centrifugation and chromatography
Molecular Biology	PSBO402	CO1. This paper provide in depth knowledge about gene regulation in prokaryotes and eukaryotes.
Angiosperms I	PSBO403	CO1. This paper provides in brief the Methods in Evaluating Crude Drugs and approaches to the taxonomy, anatomy, embryology and palynology.
Angiosperms II	PSBO404	CO1. This paper provides in brief the Methods in Evaluating Crude Drugs and approaches to the taxonomy, anatomy, embryology and palynology.
The level of attainment of B.Sc. Botany programme :- 100%		
PROGRAMME :B.Sc. Chemistry		
SEMESTER I		
Physical/Organic /Inorganic Chemistry: PAPER –I	USCH101	The students will gain knowledge about- CO 1 Thermodynamics with respect to basic terms, laws and thermochemistry. CO 2 Expressing concentrations of solutions with respect to volume base and weight base. CO 3. Describe the periodic table and basic concepts of atomic structure CO 4. Basic concepts in bonding, structures and reaction mechanism.

Physical/Organic /Inorganic Chemistry: PAPER –II	USCH102	CO 1.Kinetics of reaction and determination of order of reaction by different methods. CO 2. Characteristic properties of liquid states CO 3. Students will get sound knowledge of main group element CO 4. Basics in stereochemistry
SEMESTER II		
Physical/Organic /Inorganic Chemistry : PAPER –I	USCH201	The students will gain knowledge about- CO 1. Characteristics properties of Gaseous state CO 2. Basics concept of Chemical Equilibria CO 3. Basic concepts of Acid-Base Theory and concept of qualitative analysis CO 4. Basic concepts in chemistry of hydrocarbons
Physical/Organic /Inorganic Chemistry : PAPER –II	USCH202	CO 1 Basic concepts in Ionic Equilibria, Molecular Spectroscopy CO 2 Concept of Solid State Chemistry CO 3. Basic concepts in Chemical Bonding and Reactivity CO 4. Concept of Solid tate Chemistry CO 5. Concept of stereochemistry and Aromatic Hydrocarbons
SEMESTER III		
Physical/Organic /Inorganic Chemistry : PAPER –I	USCH 301	On completion of the course learners will be able to understand, CO 1. Basic Concept of Thermodynamics CO 2. The bonding and structure of Inorganic Molecules. CO 3.Nomenclature, Synthesis and reactions of Halogenated Organic Compound
Physical/Organic /Inorganic Chemistry : PAPER –II	USCH 302	The course enables the learners will be able to understand, CO 1. The Chemistry of P-block elements and study of B,Si,Ge and N containing compounds CO 2. Kinetics of reactions. CO 3.Nomenclature, Synthesis and reactions of Carbonyl Compound
Analytical Chemistry PAPER –III	USCH 303	Learners are able to get vital knowledge about , CO 1. The basics of Analytical Chemistry, Sampling CO 2. Classical and Instrumental Methods
SEMESTER IV		

PAPER –I Physical/Organic /Inorganic Chemistry	USCH 401	The course enables the students to understand, CO 1 the transition element series and concept in bonding Co-ordination Chemistry CO 2 Different types of electrodes, Ph Determination and numerical methods regarding Equilibrium Constant, Chemical Cells CO 3 Chemistry of Carboxylic Acid, Sulphonic Acids and their derivatives
PAPER –II: Physical/Organic /Inorganic Chemistry	USCH 402	Learners are able to get vital knowledge about , CO 1 Identify and describe the types of Crystals w.r.t Laws of Crystallography and XRD methods Diff. Types of Catalytic methods with its mechanism and Kinetics CO 2 Chemical Behaviours and Role of ions and their movements in aqueous environment CO 3 The Course study will get the sound knowledge of Nitrogen containing compounds and Heterocyclic compounds
PAPER –III: Analytical Chemistry	USCH 403	Learners are expert in CO 1 Various Separation techniques, solvent extraction, Instrumental methods CO 2 Different measures of Dispersion Methods
SEMESTER - V		
PAPER –I Physical Chemistry	USCH501	On completion of the course learners will be able to, CO 1. Understand different type of spectroscopic methods and their use. CO 2. Molar mass determination using colligative properties, CO 3. Theories of reaction rates and their classification, CO 4. Radioactivity, Nuclear reactions, applications of radioisotopes and nuclear reactors, CO 5. Stability and uses of colloidal and properties and uses of surfactants
PAPER –II Inorganic Chemistry	USCH502	On completion of the course learners will be able to, CO 1. Basic concept of molecular symmetry with respect to symmetry elements symmetry operations and point groups. CO 2. Bonding in polyatomic species. CO 3. Structure of solids w.r.t. packing lattice in space. CO 4. Chemistry of inner transition elements and non aqueous solvents. CO 5. comparative chemistry of group 16 and 17.
PAPER –III Organic Chemistry	USCH503	On completion of the course learners will be able to, CO 1. Understand acyl nucleophilic substitution mechanism and stereochemistry of compounds.

		CO 2. Understand advantages and disadvantages of agrochemicals, biopesticides like neem oil and karanja oil. CO 3. Understand importance of green chemistry.
PAPER –IV Analytical Chemistry	USCH504	On completion of the course learners will be able to, CO 1. Understand the concept of quality, quality control and quality assurance and the techniques of sampling for solids liquids and gases, CO 2. Understand the method of analysis by instrumental method like GC, HPLC, Flame photometry, AAS, UV Visible Spectrophotometer. CO 3. Understand electroanalytical methods like voltammetry and amperometry.
Applied Components: Drugs & Dyes: PAPER –V	USACDD501	On completion of the course learners will be able to, CO1. Study different types of dyes and pigments. CO2. get knowledge about the drugs
SEMESTER - VI		
PAPER –I Physical Chemistry	USCH601	On completion of the course learners will be able to, CO 1. Activity, classifications of cell, EMF measurements and their applications, Concept of overvoltage, electroplating. CO 2. Classification of polymers, LEP's, antioxidants and stabilizers, CO 3. Classical and Quantum mechanics, Operator concepts and their terms, CO 4. Renewable energy sources, Solar energy, Hydrogen, NMR and ESR spectroscopy.
PAPER –II Inorganic Chemistry	USCH602	On completion of the course learners will be able to, CO 1. Bonding in complexes on basis of CFT CO 2. stability of complexes and factors affecting thermodynamic stability CO 3. types of substitution reaction and mechanism CO 4. Concept of electronic spectra CO 5. Organometallic compounds of main group elements CO 6. Phenomenon of catalysis CO 7. Extraction of metals by using different metallurgical techniques CO 8. Chemistry of group 18 elements of bioinorganic chemistry.
PAPER –III Organic Chemistry	USCH603	On completion of the course learners will be able to, CO 1. Understand stereoselectivity and stereospecificity of addition and substitution reactions, CO 2. Determine structure of organic compounds by spectroscopic techniques.

PAPER –IV Analytical Chemistry	USCH604	On completion of the course learners will be able to, CO 1.Understand the technique of food processing and preservation, analysis food products and detect adulterant present in it, CO 2.Understand the principles, instrumentation and applications of thermogravimetric methods like TGA, DTA, DSC etc.
Applied Components: Drugs & Dyes: PAPER –V	USACDD6 01	On completion of the course learners will be able to, CO 1. Study different types of dyes and pigments. CO 2. get knowledge about the drugs
The level of attainment of B.Sc. Chemistry programme:- 98.70%		
PROGRAMME : M.Sc. Chemistry		
SEMESTER - I		
Physical Chemistry Paper –I	PSCHA101	On completion of the course learners will be able to, CO 1.Understand the concept of Thermodynamics –I, Phase transition, State function, thermodynamic relation, ,application of ideal gaseous CO 2. Understand classical Mechanics, Partial wave, Operators, and application of quantum Mechanics'. CO 3. Understand of Chemical dynamics, Composite reaction, polymerisation of reaction, Reaction in gas. CO 4. Understand the concept basic electrochemistry, Debye-huckel theory, electrolytic conductance, and Bio-electrochemistry.
Inorganic Chemistry Paper –Ii	PSCHA102	On completion of the course learners will be able to, CO 1. Understand the concept of Hybridization, concept of resonance, Critical analysis of VBT,Weak forces of attraction. CO 2. Understand of Symmetry criterion of optical activity, Concept of Groups, Application of Group Theory. CO 3. Understand the concept Electronic structure of solid and band theory, Methods of preparation of inorganic solids, and preparative methods of Nonmaterial's and its application. CO 4. Understand of characterisation of Coordination compounds,IR ,NMR,and ESR spectroscopic methods.
Organic Chemistry: Paper –Iii	PSCHA103	On completion of the course learners will be able to understand the concept of Mechanisms and application of, CO1. Thermodynamics, Kinetics and mechanism Organic Chemistry

		CO2. Nucleophilic substitution Reactions and Aromaticity CO3. Stereochemistry CO4. Oxidation and Reduction .
Analytical Chemistry Paper –Iv	PSCHAEC 104	On completion of the course learners will be able to understand the concept of, CO1. Analytical perspective, An overview of analytical methods. CO2. Concentration of solution based on volume and mass, dilution in ppm ppb,ans,stoichiometry of chemical reaction. CO 3. Optical Methods & 4 Thermal method,
SEMESTER - II		
Physical Chemistry Paper –I	PSCHA201	On completion of the course learners will be able to, CO1. Understand the basic concept of chemical thermodynamic, Real Solution, Thermodynamic of surface, Bioenergetisc. CO 2. Understand the concept of Quantum Chemistry, Rigid Roter, and Application of Schrodinger equation to two electron systems. CO 3. Understand the concept Elementary Reaction, Kinetic of reaction, Inhibition enzyme action. And Rate laws for reaction in solid. CO4. Understand the concept of Structures of Defects in Solid, Types of Defects and stoichiometry, two components and three components system.
Inorganic Chemistry: Paper –II	PSCHA202	On completion of the course learners will be able to, CO1. Understand the concept of Rate of reaction ,Ligand substitution reaction ,Redox reaction ,Stereochemistry of substitution reaction of octahedral complexes. CO 2. Understand of Eighteen and sixteen electron rule, Preparation and properties of Alkyl,carbense,and sandwich compound , CO 3. Understand the concept of Heavy Metals, Toxicity of metallic species, and Interaction of radiation in context with environment CO 4. Understand of Biological oxygen carriers, haemoglobin, Activation of oxygen in biological system with example, Metal ion transport and storage.
Organic Chemistry: Paper –III	PSCHA 203	On completion of the course learners will be able to understand the concept of Mechanisms and application of, CO 1. Alkylation Nucleophilic Intermediate CO 2. Molecular Rearrangements CO 3. Introduction to MOT for organic chemistry and Application of UV and IR spectroscopy.

		CO 4. Magnetic Resonance Spectroscopy,(PMR, ¹³ CNMR spectrometry,) and Mass spectrometry.
Analytical Chemistry: Paper –IV	PSCHAEC 204	On completion of the course learners will be able to understand the concept of, CO 1. Separation Techniques CO 2. Instrumentation and application of X-ray spectroscopy, Mass spectrometry, Radioanalytical Methods , SEM,STM,TEM,ESCA,AAS. CO 3. The Ion selective potentiometry,Polarography,Electrogravimetry,Coulometry .
SEMESTER - III		
Quality In Analytical Chemistry PAPER –I	PSCHA301	CO1. After completion of this topic student comes to understand sampling methods of various analytical samples, their measurements also the pre treatment method. They are also getting knowledge about separation of various chemical species using different chromatographic techniques.
Advanced Instrumental Techniques PAPER -II	PSCHA302	CO1. In this paper students study about various instruments used in chemical as well as pharmaceutical industries which include Mass Spectroscopy, X-Ray emission Spectroscopy, Polarographic techniques, Mossbauer's Spectroscopy, Chemiluminescence Techniques & Photoacoustic Spectroscopy.
Bio Analytical Chemistry & Food Analysis PAPER – III	PSCHA303	CO1. In this paper students studying compositions & analysis of various body fluids also the various Physiological & Nutritional significance of vitamins & minerals.they are studying food constituents and their analysis as well.
Environmental & Certain Industrially Important Materials study PAPER –IV	PSCHAEC 304	CO1. In this particular paper students study in detail the acts and laws regarding the environmental issues. They are studying the sources, effects and preventive measures of different kind of pollution and also studying the various petrochemical products in detail.
SEMESTER - IV		
Quality In Analytical Chemistry PAPER –I	PSCHA401	CO1. Basically in this topic students are studying different separation techniques and analysis of herbal products on the basis of separation. Students are also studying Green Chemistry.

Advanced Instrumental Techniques PAPER –II	PSCHA 402	CO1. After completion of this topic students will get brief information about instruments like NMR, RAMAN Spectroscopy & Hyphenated techniques like LC-MS, HPLC-MS, ICP-MS, GC-IR etc.
Selected Topic In Analytical Chemistry PAPER –III	PSCHA403	CO1. Students getting brief knowledge about plastic and polymer and also metallurgical process.
Pharmaceuticl & Organic Analysis PAPER –IV	PSCHAECI I-304	CO1. In this paper students are studying in deep about Pharmaceuticals. Students also get knowledge about vast variety of drugs & assays. Students learn to co-relate Analytical Chemistry with the Forensic science by analysing different parameters. They also study chemistry in Cosmetic Industry.
The level of attainment of M.Sc. Chemistry programme:- 100%		
PROGRAMME : B.Sc. Physics		
SEMESTER I		
Classical Physics PAPER –I :	USPH-101	CO1. Understand Newton's laws and apply them in calculations of the motion of simple systems. CO2. Use the free body diagrams to analyse the forces on the object. CO3. Understand the concepts of friction and the concepts of elasticity, fluid mechanics and be able to perform calculations using them. CO4. Understand the concepts of lens system and interference. CO5. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.
Modern Physics: PAPER –II	USPH-102	CO1. Understand nuclear properties and nuclear behaviour. CO2. Understand the type isotopes and their applications.
SEMESTER II		
Mathematical Physics PAPER –I	USPH-201	CO1. Understand the basic mathematical concepts and applications of them in physical situations. CO2. Demonstrate quantitative problem solving skills in all the topics covered.
Electricity and Electronics	USPH-202	CO1. Understand the basic electronics concepts and applications of electronics in real world. CO2. Exploring different branches of electronics such as Power, analog and digital electronics

PAPER –II		CO3. Understanding of AC and DC Voltages and current
SEMESTER III		
Mechanics and thermodynamics PAPER –I	USPH-301	CO1. Understand the concepts of mechanics & properties of matter & to apply them to problems. CO2. Comprehend the basic concepts of thermodynamics & its applications in physical situation.
Vector calculus, Analog Electronics PAPER –II	USPH-302	CO1. Understand the basic concepts of mathematical physics and their applications in physical situations. CO2. Understand the basic laws of electrodynamics and be able to perform calculations using them. CO3. Understand the basics of transistor biasing, operational amplifiers, their applications CO4. Understand the basic concepts of oscillators and be able to perform calculations using them.
Applied Physics –I : PAPER –III	USPH-303	CO1. Students will be exposed to contextual real life situations. CO2. Students will appreciate the role of Physics in 'interdisciplinary areas related to materials, Bio Physics, Acoustics etc. CO3. The learner will understand the scope of the subject in Industry & Research.
SEMESTER IV		
Optics and Digital Electronics: PAPER –I	USPH-401	CO1 Understand the diffraction and polarization processes and applications of them in physical situations. CO2. Understand the resolving power of different optical instruments. CO3. Understand the working of digital circuits
Quantum Mechanics: PAPER –II	USPH-402	CO1. Understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in Physics.
Applied Physics-II: PAPER –III	USPH-403	CO1. Understand the concepts of mechanics & properties of matter & to apply them to problems. CO2. Learn about situations in low temperature.
SEMESTER - V		
Mathematical Methods in Physics and Thermal and Statistical Physics: PAPER –I	USPH-501	CO1. From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics.
Solid State Physics: PAPER –II	USPH-502	CO1. Understand the basics of crystallography, Electrical properties of metals, Band Theory of solids, demarcation among the types of materials, Semiconductor Physics and Superconductivity. CO2. Understand the basic concepts of Fermi probability distribution function,

		CO3. Density of states, conduction in semiconductors and BCS theory of superconductivity.
Atomic and Molecular Physics: PAPER –III	USPH-503	CO1. The application of quantum mechanics in atomic physics CO2. The importance of electron spin, symmetric and antisymmetric wave functions and vector atom model CO3. Effect of magnetic field on atoms and its application
Electrodynamics : PAPER –IV	USPH-504	CO1. Understand the laws of electrodynamics and be able to perform calculations using them. CO2. Understand Maxwell’s electrodynamics and its relation to relativity CO3. Understand how optical laws can be derived from electromagnetic principles.
Analog Circuits, Instruments And Consumer Appliances	USACEI-501	CO1. Understand the difference between a transducer and a sensor. CO2. Understand the construction, working and uses of different types of transducers. CO3. Understand the concept of signal conditioning, devices used and their operations. CO4. Get acquainted with the measuring instruments used in laboratory. CO5. Get the insight of the modern medical instruments in principle, which are used in day to day life. CO6. Analyze/design and implement combinational logic circuits. CO7. Develop assembly language programming skills and real time applications of microprocessor.
SEMESTER - VI		
Classical Mechanics: PAPER –I	USPH601	CO1. This course will introduce the students to different aspects of classical mechanics. CO2. They would understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating. CO3. The students are expected to learn the concepts needed for the important formalism of Lagrange’s equations and derive the equations using D’Alembert’s principle etc
Electronics: PAPER –II	USPH602	CO1. Understand the basics of semiconductor devices and their applications. CO2. Understand the basic concepts of operational amplifier: its prototype and applications as instrumentation amplifier, active filters, comparators and waveform generation. CO3. Understand the basic concepts of timing pulse generation and regulated power supplies

Nuclear Physics: PAPER –III	USPH603	CO1. fundamental principles and concepts governing classical nuclear and particle physics CO2. knowledge of their applications interactions of ionizing radiation with matter CO3. Knowledge on elementary particles will help students to understand the fundamental constituents of matter, antimatter and other research oriented topics.
Special Theory of Relativity: PAPER –IV	USPH604	CO1. Understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result CO2. Understand the importance of postulates of special relativity, Lorentz transformation equations, Absolutism and relativity, CO3. Understand the transformation equations for: Space and time, velocity, frequency, mass, momentum, force, Energy, Charge and current density, electric and magnetic fields.
Digital Electronics, Microprocessor, Microcontroller And OOP	USACEI601	CO1. Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor CO2. Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller. CO3. Develop the programming skills in programming Language C++.
The level of attainment of B.Sc. Physics programme:- 94.11%		
PROGRAMME : B. Sc. Zoology		
SEMESTER - I		
Wonders Of Animal World, Biodiversity And Its Conservation	USZO 101	CO1. The curiosity will be ignited in the minds of learners to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology. CO2. Learners would appreciate treasure of biodiversity its importance and would contribute their best for its conservation. CO3. Minds of learners would be impulse to think differently and would be encourage ipso facto to their original crude ideas from the field of biological science
Laboratory Safety And Units Of Measurement	USZO 102	CO1. Learners would work safely in the laboratory and avoid and avoid occurrence of accidents which will boost their scholastic performance and economy in the use of materials and chemicals during practical session CO2. Learners would understand recent advance in the subject and their application for betterment of mankind and that the young minds would be turns to think out of the box. CO3. Learner will be skilled to select and operate suitable instruments for the studies of different componts of Zoology of this course and also of higher classes including research

SEMESTER - II		
Ecology And Wildlife Management	USZO 201	<p>CO1: Learners will learn about nature of human population , specific factors affecting its growth and its impact on the population of other life forms</p> <p>CO2: Students will grasp the concept of interdependence and interaction of physical ,chemical and biological factors in the environment .</p> <p>CO3: It will leads to better understanding about implications of loss of fauna on human being erupting spur of desire for conservation of all fauna and flora</p> <p>CO4: Learner would be motivated to choose their career in the field of wildlife of conservation , Research, photography and ecotourism</p>
Nutrition,Public Health And Hygiene	USZO 202	<p>CO1: Healthy dietary habits would be inculcated in the lifestyle of learners preventing risk of developing health hazards in younger generations due to faulty eating habits.</p> <p>CO2: Promoting optimum conservation of water, Encouragement for maintain personal hygiene. Optimum use of electronic gadgets, avoiding addiction, thus facilitating to achieve the goals of healthy young India in true sense.</p> <p>CO3: Learner will be able to promptly recognised tress related problems at initial stage and would be able to adopt related solution which would lead to psychological stronger mind-set, promoting promoting Positive attitude.</p> <p>CO4: Acquiring knowledge about cause symptoms and precautions about infectious diseases to help students to prevent frequent sickness not only for them but also for their family members.</p>
SEMESTER - III		
Fundamentals Of Genetics, Chromosomes Heredity And Nucleic Acids	USZO 301	<p>CO1: Understand and apply the principles of inheritance, concept of multiple allele's linkage and crossing over</p> <p>CO2: Learner will understand importance of nucleic acid as a genetic materials</p> <p>CO3: Learner would comprehend and appreciate the regulation of gene expression</p> <p>CO4: Learners would understand the structure and types of chromosome , mechanism of sex determination</p> <p>CO5: Learners would be able to correlate the disorders link to a particular sex chromosomes.</p>
Animal Physiology	USZO 302	<p>CO1: Learners should understand the increasing complexity of nutritional, excretory and osmoregulatory physiology in evolutionary hierarchy</p> <p>CO2: learner would be able to correlate the habit and habitat with nutritional, excretory and osmoregulatory structure in different classes of organism</p>

		<p>CO3: Learner would understand increasing complexity of respiratory, and Circulatory physiology in evolutionary hierarchy</p> <p>CO4: Learners would understand the process of control and coordination by nervous and endocrine regulation.</p> <p>CO5: Learners would be amazed by various locomotory structure found in the animal kingdom</p> <p>CO6: Learners would be acquainted with various reproductive strategies present in the animals</p>
Applied Zoology	USZO303	<p>CO1: Learners would gain insight into different types of animal's behaviours and their role in biological adaptation</p> <p>CO2: Learners would be sensitised to be feelings which are instrumental in social behaviour.</p> <p>CO3: learners should understand the general epidemiological aspect of parasite that affect humans and takes simple preventive measures for the same</p> <p>CO4: Learner would be competent the lifecycle of specific parasite the symptoms of diseases and its treatments .</p> <p>CO5: Learner would gain knowledge of animals useful to mankind and means to make the most of it</p> <p>CO6: Learner would learn the modern technique in animal husbandry and peruse entrepreneurship as a career .</p>
SEMESTER - IV		
Origin And Evolution Of Life , Population Genetics ,Scientif Attitude, Methodology Scientific Writing And Ethics Inscientific Research	USZO 401	<p>CO1: Learner would gain insights into the origin of life</p> <p>CO2:Leraner would analyse and critically view the different theory of evolution</p> <p>CO3: Learner would understand the force that cause evolutionary changes in the natural population and mechanism of speciation's.</p> <p>CO4: The learner would develop quality such as critical thinking, skill of scientific communication and analysis and to understand the ethical aspects of Research.</p>
Cell Biology, Endomembrane System And Biomolecules	USZO 402	<p>CO1: Learners would acquire insights into the composition of the transport system adopted by the cell and organelle for its maintaince and composition of the cell</p> <p>CO2: Learners would appreciate the intricacy of endomembrane system</p> <p>CO3: Learners would understand the interlinking of endomembrane system for functioning of the cell</p>

		CO4: Learners would realise the importance of biomolecules and their clinical significance.
Comparative Embryology Aspect Of Human Reproduction And Effects On Organism	USZO 403	CO1: Learners understood and compare different types of eggs and sperms. CO2: Learners would be understand human reproductive physiology CO3: Learners would become familiar with advance in ART and related ethical issues. CO4: Learners would be sensitised about the adverse effect of pollution and measure to control it
SEMESTER - V		
Taxonomy Of Invertebrates	USZO 501	CO1: Learners would be apprehended the basis of classification and modern classification up to class of the lower invertebrate animals CO2: Learners would be familiarise with classification put phylum Nematode along with their examples CO3: Learners would get an idea of higher groups of invertebrate animals life, their classification and their peculiar aspects. CO4: Learners would get an idea of general characteristics and detail I of invertebrate animal system
Haematology And Immunology	USZO 502	CO1: Learners comprehended basic haematology and identified various component of haemostatic system CO2: Learners become familiar with the terminology used and diagnostic test performed in a pathological laboratories CO3: Learners acquainted diagnostic approach in haematological disorders CO4: Learners better equipped for further pathological course or working in a diagnostic laboratory CO5: Learners comprehended the types of immunity and the components of the immune system . CO6: The learners realised the significance role of immune system in giving resistance against disease.
Histology, Toxicology, Pathology And Biostatistics	USZO 503	CO1: Learners appreciated the well plan organization of tissues and cells in the organ system CO2: Learners developed broad understanding in different areas of toxicology CO3: Learners developed critical thinking and assist student in preparation for employment in pharmaceutical and related areas CO4: Learners become familiar with various medical terminology pertaining to pathological condition of the body cause due to disease CO5: Learners. able to collect , organised and analysed data using parametric and non-parametric tests and also setup hypothesis and verified the same limits of significance

Anatomy And Developmental Biology	USZO 504	CO1: Learners understood importance of various types of epidermal and dermal derivatives along with their functions CO2: Learners understood the structure ,types and functions of human skeleton . CO3: Learners understood the long limb muscles its arrangement and their role in body movements
Applied Components	USACFBIO601	CO1: Learners understood and learn about the use of sea safety, navigational equipments and oceanographic instruments CO2: Learners understood basic physical, chemical and biological oceanography CO3: Learners understood boat building techniques and design of engines used in mechanized boats CO4: Learners acquainted breeding techniques and skills for culture of major carps CO5: Learners understood breeding techniques, hatchery and management of finfish and shell fishes
SEMESTER - VI		
Taxonomy Of Vertebrates	USZO 601	CO1: Learners got the idea of origins of chordates , its taxonomy up to the class with reference to phylogeny with reference to phylogeny and their special features CO2: Learners understood the characteristic feature and examples of class reptile aves and mammals CO3: Learners got idea of vertebrate animal life after studding one representative animal Shark
Physiology And Tissue Culture	USZO 602	CO1: Learners understood fundamental structure action and kinetics CO2: Learners appreciated the enzyme assay procedure and therapeutic applications of enzymes . CO3: Learners comphrended the adaptive response of the animals to environmental changes for their survival. CO4: Learners understood the types and secretion of endocrine glands and their functions CO5: Learners appreciated the significance of tissue culture as a tool in a specialised area of research and its application in various industries.
Genetics And Bioinformatics	USZO 603	CO1: Learners understood an insights into the intricacies of chemicals and molecular processes that affect genetic materials. CO2: Learners appreciated the enzyme assay procedure and therapeutic applications of enzymes . CO3: Learners understood significance of molecular biology as a basis for the study of other areas of biology and biochemistry CO4: Learners understood related areas in relatively new field in genetic engineering and biotechnology.

		CO5: Learners acquainted the vast array of techniques used to manipulate genes which can be applied in numerous fields like medicine research etc for human benefits.
Environmental Biology Zoopharmacognosy	USZO 604	CO1: Learners understood the different factors affecting environment its impact and environment management law CO2: Learners understood various methods for wildlife conservation CO3: Learners understood knowledge of overcome the issues related to wildlife conservation . CO4: Learners acquainted how and why different animals species are distributed around the globe
Applied Components	USACFBIO601	CO1: Learners understood deep sea and coastal fishes CO2: Learners understood commercial potential and know about the major landing centres of the fishes CO3: Learners understood basics of nutritional requirements at various developmental stages of fish and crustaceans CO4: Learners should oriented towards understanding causes, pathogenicity, prophylaxis and preventive measures of various fish diseases and physiological disorders CO5: : Learners understood fish by-products and value-added products CO6: : Learners understood good manufacturing practices while manufacturing the various products
The level of attainment of B.Sc. Zoology programme :- 77.77%		
PROGRAMME : M. Sc. Zoology		
SEMESTER - I		
Non Chordates And Chordates And Their Phyllogeny	PSZO101	CO1: Learners understood systematic position and importance of taxonomic study in biology , morphological studies of phylum protozoa up to Echinodermata CO2: Learners understood different kinds of taxonomic keys merits and demerits of non chordates , CO3: Learners understood phylogeny salient features and classification up to the classes
Biochemistry And Metabolism	PSZO102	CO1: Learners understood structure and functions of biomolecules like carbohydrates, amino acids, proteins, fats and nucleic acids CO2: Learners understood biochemical thermodynamics . CO3: Learners understood metabolic pathways of biomolecules CO4: Learners understood regulation of metabolism and concept of homeostasis

Genetics And Evolution	PSZO103	CO1: Learners understood chromosome theory of inheritance CO2: Learners understood Evolution of animals CO3: Learners understood development of animals CO4: Learners understood Mendelian and non Mendelian inheritance
Microtomy And Spectroscopy	PSZO104	CO1: Learners understood principle and application of microtomy CO2: Learners understood Principle and application of radioisotopes CO3: Learners understood principle and application spectroscopy CO4: Learners understood good laboratory practices
SEMESTER - II		
Non Chordates And Chordates And Their Phyllogeny-II	PSZO201	CO1: Learners understood Phylogeny of non chordates CO2: Learners understood systematics of non chordates CO3: Learners understood phylogeny of chordates CO4: Learners understood comparative vertebrates and osteology
Biochemistry And Metabolism -II	PSZO202	CO1: Learners understood biomolecules and structures CO2: Learners understood types of enzymes and functions CO3: Learners understood metabolic pathway and metabolism CO4: Learners understood inborn errors of metabolism
Genetics And Evolution -Ii	PSZO203	CO1: Learners understood chromosomal theory CO2: Learners understood extension of Mendelian genetics CO3: Learners understood evolutionary theory of animals CO4: Learners understood different types of development of animals
Chromatography And Electrophoresis	PSZO204	CO1: Learners understood application of chromatography techniques CO2: Learners understood application of gel chromatography CO3: Learners understood electrophoresis CO4: Learners understood research methodology
SEMESTER - III		
Biotechnology-I	PSZOBT 301	CO1: Learners understood recombinant DNA technology CO2: Learners understood environment biotechnology CO3: Learners understood culture and production from Recombinant microorganisms

		CO4: Learners understood medical biotechnology
Biotechnology –II	PSZOBT 302	CO1: Learners understood genome management and analysis CO2: Learners understood manipulation of gene expression CO3: Learners understood bioinformatics CO4: Learners understood animal biotechnology
Entomology-I	PSZOENT 303	CO1: Learners understood insect classification CO2: Learners understood insect morphology CO3: Learners understood insect anatomy and physiology CO4: Learners understood insect development and endocrinology
Entomology-II	PSZOENT 304	CO1: Learners understood insect pest of crop CO2: Learners understood medical and industrial entomology CO3: Learners understood insect control and toxicology CO4: Learners understood insect physiology and genetics
Ocenography-I	PSZOENT 303	CO1: Learners understood general ocenography CO2: Learners understood physical ocenography CO3: Learners understood chemical ocenography CO4: Learners understood biological ocenography
Ocenography-II	PSZOENT 304	CO1: Learners understood planktology CO2: Learners understood fish and fishery science CO3: Learners understood biotechnology and fisheries CO4: Learners understood aquaculture
SEMESTER - IV		
Industrial And Environmental Biotechnology-II	PSZOBT 401	CO1: Learners understood microbial synthesis of commercial product CO2: Learners understood large scale culture and production for industrial biotechnology CO3: Learners understood agricultural biotechnology CO4: Learners understood environmental biotechnology
Genetic Engeering Technique And Its Application	PSZOBT 402	CO1: Learners understood basic tools and cloning vector CO2: Learners understood manipulation of gene expression CO3: Learners understood human genome project CO4: Learners understood regulation and patent in biotechnology

Generalphysical Chemical And Biological Ocenography	PSZO0CN 403	CO1: Learners understood oceanographic instruments CO2: Learners understood waves , tides and water currents CO3: Leainers understood impact of anthropogenic activity CO4: Leaners understood resource from the sea
Planktology Fish, Fishery Science And Aquaculture	PSZO0CN 404	CO1: Learners understood types of algae's and planktons, preservation and analysis. CO2: Learners understood population fishery catches and fluctuations. CO3: Leaners understood sampling method , measurement of fish and biometric index.
General Entomology	PSZOENT 403	CO1: Learners understood insect morphology CO2: Learners understood structure of hormones synthesis and regulation CO3: Leaners understood insect anatomy and physiology CO4: Leaners understood insect development and endocrinology
Applied Entomology Ecology And Genetics	PSZOENT 404	CO1: Learners understood store grain and flowering plant pest CO2: Learners understood veterinary entomology CO3: Leaners understood insecticide their resistance and impact on human health and ecology CO4: Leaners understood genetic theory of insects

The level of attainment of B.Sc. Zoology programme :- 100%

PROGRAMME : B. Sc. Mathematics

SEMESTER - I

Calculus - I PAPER –I	USMT101	CO1. Learners understood basic concept of real number system. CO2. Learners understood concept of sequences and it's properties. CO3. Learners understood limit and continuity of one variable
Algebra-I PAPER –II	USMT102	CO1. Learners understood properties of l.c.m. and g.c.d.. Also they earns properties of Congruences. CO2. Learners understood concept of functions and equivalence relations. CO3. Learners understood algebra and properties of polynomials.

SEMESTER - II

Calculus - I I PAPER –I	USMT201	CO1. Learners understood basic concept of series and it's properties. CO2. Learners understood algebra of continuous functions and properties of continuous functions. CO3. Learners understood the applications of Differentiation.
Algebra-II PAPER –II	USMT202	CO1. Learners understood system of linear equations and matrices. CO2. Learners understood concept of vector space, subspace and it's properties.

		CO3. Learners understood concept of basis of a vector space. Also they learn properties of linear CO4. transformation.
SEMESTER - III		
Calculus –III	USMT301	On completion of the course learners will be able to understand, CO1. Functions of 2 and 3 variables. CO2. Differentiation of 2variables and it’s properties. CO3. Applications of Differentiation.
Algebra -III	USMT302	The course enables the learners will be able to understand, CO1. Linear transformations and matrices. CO2. properties of Determinants. CO3. properties of Inner product spaces, Cauchy-Schwartz inequality and Triangle inequality.
Discrete Mathematics	USMT303	Learners are able to get knowledge about , CO1. Permutations and recurrence relations and it’s types. CO2. Pigeonhole principle and it’s applications. CO3. Advanced counting.
SEMESTER - IV		
Calculus -IV	USMT401	The course enables the students to understand, CO1. The properties of Riemann integration. CO2. Indefinite and improper CO3. Integrals. CO4. Applications of definite CO5. Integrals, properties of beta and gamma functions.
Algebra -IV	USMT402	Learners are able to understand, CO1. Groups, Subgroups and it’s properties. CO2. Cyclic Groups, cyclic Subgroups and it’s properties. CO3. Langrange’s theorem and group homomorphism.
Ordinary Differential Equations	USMT 403	Learners are expected to learn CO1. Set up Mathematical models of real world problems and obtain solutions for the same. CO2. Exact differential equations and various types, second order linear differential equations, series method of solution, linear partial differential equations. CO3. Linear system of ordinary differential equations.

The level of attainment of B.Sc. Mathematics programme :- 90.47 %

PROGRAMME : B.Sc. Computer Science

SEMESTER - I

Computer Organization and Design	USCS 101	CO1. To learn about how computer systems work and underlying principles CO2. To understand the basics of digital electronics needed for computers CO3. To understand the basics of instruction set architecture for reduced and complex instruction sets CO4. To understand the basics of processor structure and operation CO5. To understand how data is transferred between the processor and I/O devices
Programming with Python- I	USCS 102	CO1. Students should be able to understand the concepts of programming before actually starting to write programs. CO2. Students should be able to develop logic for Problem Solving. CO3. Students should be made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc. CO4. Students should be able to apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)
Free and Open-source Software	USCS 103	CO1. Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance. CO2. This course shall help student to learn Open Source methodologies, case studies with real life examples.
Database Systems	USCS 104	CO1. Students should be able to evaluate business information problem and find the requirements of a problem in terms of data. CO2. Students should be able to design the database schema with the use of appropriate data types for storage of data in database. CO3. Students should be able to create, manipulate, query and back up the databases.
Discrete Mathematics	USCS 105	CO1. To provide overview of theory of discrete objects, starting with relations and partially ordered sets. CO2. Study about recurrence relations, generating function and operations on them. CO3. Give an understanding of graphs and trees, which are widely used in software. CO4. Provide basic knowledge about models of automata theory and the corresponding formal languages

Descriptive Statistics and Introduction to Probability	USCS 106	CO1. Enable learners to know descriptive statistical concepts CO2. Enable study of probability concept required for Computer learners
Soft Skills Development	USCS 107	CO1. To know about various aspects of soft skills and learn ways to develop personality CO2. Understand the importance and type of communication in personal and professional environment. CO3. To provide insight into much needed technical and non-technical qualities in career planning. CO4. Learn about Leadership, team building, decision making and stress management
SEMESTER - II		
Programming with C	USCS 201	CO1. Students should be able to write, compile and debug programs in C language. CO2. Students should be able to use different data types in a computer program. CO3. Students should be able to design programs involving decision structures, loops and functions. CO4. Students should be able to explain the difference between call by value and call by reference CO5. Students should be able to understand the dynamics of memory by the use of pointers. CO6. Students should be able to use different data structures and create/update basic data files.
Programming with Python – II	USCS 202	CO1. Students should be able to understand how to read/write to files using python. CO2. Students should be able to catch their own errors that happen during execution of programs. CO3. Students should get an introduction to the concept of pattern matching. CO4. Students should be made familiar with the concepts of GUI controls and designing GUI applications. CO5. Students should be able to connect to the database to move the data to/from the application. CO6. Students should know how to connect to computers, read from URL and send email.
Linux	USCS 203	CO1. Upon completion of this course, students should have a good working knowledge of Linux, from both CO2. a graphical and command line perspective, allowing them to easily use any Linux distribution. CO3. This course shall help student to learn advanced subjects in computer science practically. CO4. Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.
Data Structures	USCS 204	CO1. Learn about Data structures, its types and significance in computing CO2. Explore about Abstract Data types and its implementation CO3. Ability to program various applications using different data structure in Python

Calculus	USCS 205	CO1. Understanding of Mathematical concepts like limit, continuity, derivative, integration of functions. CO2. Ability to appreciate real world applications which uses these concepts. CO3. Skill to formulate a problem through Mathematical modeling and simulation
Statistical Methods and Testing of Hypothesis	USCS 206	CO1. Enable learners to know descriptive statistical concepts CO2. Enable study of probability concept required for Computer learners
Green Technologies	USCS 207	CO1. Learn about green IT can be achieved in and by hardware, software, network communication and data center operations. CO2. Understand the strategies, frameworks, processes and management of green IT
SEMESTER - III		
Theory of Computation	USCS 301	CO1. Understand Grammar and Languages CO2. Learn about Automata theory and its application in Language Design CO3. Learn about Turing Machines and Pushdown Automata CO4. Understand Linear Bound Automata and its applications
Core Java	USCS 302	CO1. Object oriented programming concepts using Java. CO2. Knowledge of input, its processing and getting suitable output. CO3. Understand, design, implement and evaluate classes and applets. CO4. Knowledge and implementation of AWT package.
Operating System	USCS 303	CO1. To provide a understanding of operating system, its structures and functioning CO2. Develop and master understanding of algorithms used by operating systems for various purposes.
Database Management Systems	USCS 304	CO1. Master concepts of stored procedure and triggers and its use. CO2. Learn about using PL/SQL for data management CO3. Understand concepts and implementations of transaction management and crash recovery
Combinatorics and Graph Theory	USCS 205	CO1. Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings. CO2. Understand the combinatorial features in real world situations and Computer Science applications. CO3. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems

Physical Computing and IoT Programming	USCS 306	CO1. Enable learners to understand System On Chip Architectures. CO2. Introduction and preparing Raspberry Pi with hardware and installation. CO3. Learn physical interfaces and electronics of Raspberry Pi and program them using practical's CO4. Learn how to make consumer grade IoT safe and secure with proper use of protocols
Web Programming	USCS 307	CO1. To design valid, well-formed, scalable, and meaningful pages using emerging technologies. CO2. Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites CO3. To develop and implement client-side and server-side scripting language programs. CO4. To develop and implement Database Driven Websites. CO5. Design and apply XML to create a markup language for data and document centric applications.
SEMESTER - IV		
Fundamentals of Algorithms	USCS 401	CO1. Understand the concepts of algorithms for designing good program CO2. Implement algorithms using Python
Advanced Java	USCS 402	CO1. Understand the concepts related to Java Technology CO2. Explore and understand use of Java Server Programming
Computer Networks	USCS 403	CO1. Learner will be able to understand the concepts of networking, which are important for them to be known as a 'networking professionals'. CO2. Useful to proceed with industrial requirements and International vendor certifications.
Software Engineering	USCS 404	CO1. Graduates are effective team members, aware of cultural diversity, who conduct themselves ethically and professionally. CO2. Graduates use effective communication skills and technical skills to assure production of quality software, on time and within budget. CO3. Graduates build upon and adapt knowledge of science, mathematics, and engineering to take on more expansive tasks that require an increased level of self-reliance, technical expertise, and leadership.
Linear Algebra using Python	USCS 405	CO1. Appreciate the relevance of linear algebra in the field of computer science. CO2. Understand the concepts through program implementation CO3. Install a computational thinking while learning linear algebra
.Net Technologies	USCS 406	CO1. Understand the .NET framework CO2. Develop a proficiency in the C# programming language

		CO3. Proficiently develop ASP.NET web applications using C# CO4. Use ADO.NET for data persistence in a web application
Android Developer Fundamentals	USCS 407	CO1. Understand the requirements of Mobile programming environment. CO2. Learn about basic methods, tools and techniques for developing Apps CO3. Explore and practice App development on Android Platform CO4. Develop working prototypes of working systems for various uses in daily lives.
SEMESTER - V		
Artificial Intelligence	USCS 501	CO1. After completion of this course, learner should get a clear understanding of AI and different search algorithms used for solving problems. CO2. The learner should also get acquainted with different learning algorithms and models used in machine learning.
Linux Server Administration	USCS 502	CO1. Learner will be able to develop Linux based systems and maintain. CO2. Learner will be able to install appropriate service on Linux server as per requirement. 3)Learner will have proficiency in Linux server administration.
Software Testing and Quality Assurance	USCS 503	CO1. Understand various software testing methods and strategies. CO2. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. CO3. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.
Information and Network Security	USCS 504	CO1. Understand the principles and practices of cryptographic techniques. CO2. Understand a variety of generic security threats and vulnerabilities, and identify & analyze particular security problems for a given application. CO3. Understand various protocols for network security to protect against the threats in a network
Architecting of IoT	USCS 505	CO1. Learners are able to design & develop IoT Devices. CO2. They should also be aware of the evolving world of M2M Communications and IoT analytics.
Web Services	USCS 506	CO1. Emphasis on SOAP based web services and associated standards such as WSDL. CO2. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services
Game Programming	USCS 507	CO1. Learner should study Graphics and gaming concepts with present working style of developers where everything remains on internet and they need to review it, understand it, be a part of community and learn.

SEMESTER - VI		
Wireless Sensor Networks and Mobile Communication	USCS 601	CO1. After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. CO2. Also implement and evaluate new ideas for solving wireless sensor network design issues.
Cloud Computing	USCS 602	CO1. After successfully completion of this course, learner should be able to articulate the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing using open source technology. CO2. Learner should be able to identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc. They should explain the core issues of cloud computing such as security, privacy, and interoperability.
Cyber Forensics	USCS 603	CO1. The student will be able to plan and prepare for all stages of an investigation - detection, initial response and management interaction, investigate various media to collect evidence, report them in a way that would be acceptable in the court of law.
Information Retrieval	USCS 604	CO1. After completion of this course, learner should get an understanding of the field of information retrieval and its relationship to search engines. CO2. It will give the learner an understanding to apply information retrieval models.
Digital Image Processing	USCS 605	CO1. Learner should review the fundamental concepts of a digital image processing system. Analyze the images in the frequency domain using various transforms. CO2. Evaluate the techniques for image enhancement and image segmentation. CO3. Apply various compression techniques. They will be familiar with basic image processing techniques for solving real problems.
Data Science	USCS 606	CO1. After completion of this course, the students should be able to understand & comprehend the problem; and should be able to define suitable statistical method to be adopted.
Ethical Hacking	USCS 607	CO1. Learner will know to identify security vulnerabilities and weaknesses in the target applications. CO2. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.
The level of attainment of B.Sc. Mathematics programme :- 23.07%		
PROGRAMME : B.Sc Information Technology		
SEMESTER - I		

Imperative Programming	USIT-101	<p>CO-1 To understand problem and to create the solution by writing a algorithms and drawing flowchart.</p> <p>CO-2 To write problem into computerized form by using various programming concepts.</p> <p>CO-3 To understand the procedure orientated programming structure and basic of object Orientated programming</p>
Digital Electronics	USIT-102	<p>CO-1 Understand the concepts of various components to design stable analog circuits.</p> <p>CO-2 Represent numbers and perform arithmetic operations.</p> <p>CO-3 Minimize the Boolean expression using Boolean algebra and design it using logic gates.</p> <p>CO-4 Analyze and design combinational circuit.</p> <p>CO-5 Analyze and design counter, Shift Register</p>
Operating Systems	USIT-103	<p>CO-1 To understand the main components of an OS & their functions.</p> <p>CO-2 To study the process management and scheduling. To understand various issues in Inter Process Communication (IPC) and the role of OS in IPC.</p> <p>CO-3 To understand the concepts and implementation Memory management policies and virtual memory.</p> <p>CO-4 To understand the working of an OS as a resource manager, file system manager, process manager, memory manager and I/O manager and methods used to implement the different parts of OS.</p> <p>CO-5 To understand the working of Linux operating system and android operating system.</p>
Discrete Mathematics	USIT-104	<p>CO-1 Apply the Set theory and Relation concepts.</p> <p>CO-2 Identify the permutations and combinations.</p> <p>CO-3 Define variable and also identify the mapping.</p> <p>CO-4 Apply probability and understand PDF.</p> <p>CO-5 Apply the graphs and trees concepts to different applications.</p>
Communication Skills	USIT-105	<p>CO-1 To inculcate professional and ethical attitude at the workplace.</p> <p>CO-2 To enhance effective communication and interpersonal skills.</p> <p>CO-3 To build multidisciplinary approach towards all life tasks.</p> <p>CO-4 To hone analytical and logical skills for problem-solving.</p> <p>CO-5 To Design a technical document using precise language, suitable vocabulary and apt style.</p>
SEMESTER - II		
Object Oriented Programming	USIT-201	<p>CO-1 To create the object oriented programming application.</p> <p>CO-2 Understand the features of C++ supporting object oriented programming.</p>

		CO-3 Understand how to apply the major object-oriented concepts to implement object oriented programs in C++. CO-4 Understand advanced features of C++ specifically stream I/O, templates and operator Overloading
Microprocessor Architecture	USIT-202	CO-1 To understand the architecture of microprocessor and its interfacing. CO-2 To understand the programming techniques and I/O interfacing. CO-3 To understand the concepts of counters and delays, stacks and sub-routines. CO-4 To understand Code conversion techniques and interrupts. CO-5 To understand the basic concept of Pentium Processor.
Web Programming	USIT-203	CO-1 Implement interactive web page(s) using HTML, CSS and JavaScript. CO-2 Design a responsive web site using HTML5 and CSS3. CO-3 Design a responsive web site using Java Script. CO-4 Design a responsive web site using PHP. CO-5 Build Dynamic web site using server side PHP Programming and Database connectivity.
Numerical and Statistical Methods	USIT-204	CO-1 Problem solving by using Bisection Method, Newton-Raphson Method, Regula-falsi Method. CO-2 Problem Solution of simultaneous algebraic equation by using iterative methods. CO-3 Problem solution by using Least-Square Regressions
Green Computing	USIT-205	CO-1 Describe awareness among stakeholders and promote green agenda and green initiatives in their working environments leading to green movement CO-2 Identify IT Infrastructure Management and Green Data Centre Metrics for software development CO-3 Recognize Objectives of Green Network Protocols for Data communication. CO-4 Use new career opportunities available in IT profession, audits and others with special skills such as energy efficiency, ethical IT assets disposal, carbon footprint estimation, reporting and development of green products, applications and services. CO-5 To understand how Green IT is adopted or deployed in enterprises.
SEMESTER - III		
Python Programming	USIT-301	CO-1 To understand the basics of Python and Decision Making in Python CO-2 To understand the function in Python and understanding string data type. CO-3 To understand the different data type like list, tuples, dictionaries, File-Handling, CO-4 To understand the Regular Expression, Object Oriented Programming and understanding

		<p>multithreading concept</p> <p>CO-5 To understand GUI Programming and Databases operations in Python</p>
Data Structure	USIT-302	<p>CO-1 Understand and remember algorithms and its analysis procedure.</p> <p>CO-2 Introduce the concept of data structures through ADT including List, Stack, and Queues.</p> <p>CO-3 To design and implement various data structure algorithms.</p> <p>CO-4 To design and implement various data structure algorithms.</p> <p>CO-5 To develop application using data structure algorithms.</p>
Computer Networks	USIT-303	<p>CO-1 Differentiate analog and digital communication systems.</p> <p>CO-2 Identify different types of noise occurred, its minimization and able to apply Fourier analysis in frequency & time domain to quantify bandwidth requirement of variety of analog and digital communication systems.</p> <p>CO-3 Apply sampling theorem to quantify the fundamental relationship between channel bandwidth, digital symbol rate and bit rate</p> <p>CO-4 Explain different types of line coding techniques for generation and detection of signals.</p> <p>CO-5 CO 5 :Demonstrate the different wireless technologies such as CDMA, GSM, GPRS etc.</p>
Database Management Systems	USIT-304	<p>CO-1 Explain the features of database management systems and Relational database.</p> <p>CO-2 Design conceptual models of a database using ER modeling for real life applications.</p> <p>CO-3 Also construct queries in Relational Algebra.</p> <p>CO-4 Create and populate a RDBMS for a real life application, with constraints and keys, using.</p> <p>CO-5 Retrieve any type of information from a data base by formulating complex queries.</p> <p>CO-6 To be able to implements the query to maintain the data in the database.</p>
Applied Mathematics	USIT-305	<p>CO-1 Apply the Matrix operations and representation of Complex Numbers (regular form, polar form, exponential form)</p> <p>CO-1 Demonstrate the different Differential Equation with constant coefficients</p> <p>CO-2 Apply Laplace transform , Inverse Laplace transform to different</p> <p>CO-3 Introduction of Double Integral, Triple integral, Application of Integration</p> <p>CO-4 Problem solving on Beta & Gamma functions, Differentiation under the Integral Sign, Error Functions</p>
SEMESTER - IV		
Core JAVA	USIT-401	<p>CO-1 Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.</p> <p>CO-2 Identify classes, objects, members of a class and their relationships among them needed for</p>

		<p>finding the solution to specific problem.</p> <p>CO-3 Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.</p> <p>CO-4 Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application.</p> <p>CO-5 Identify and describe common abstract user interface components to design GUI in Java Using Applet & AWT along with response to events.</p>
Introduction to Embedded Systems	USIT-402	<p>CO-1 To understand the concepts and architecture of embedded systems.</p> <p>CO-2 To understand the concepts of application specific and domain specific system and study different peripherals.</p> <p>CO-3 To understand the concepts of microcontroller interface and learning embedded c++ language.</p> <p>CO-4 To understand Designing and Programming of the embedded systems.</p> <p>CO-5 To understand working of RTOS and design development of Embedded Systems.</p>
Computer Oriented Statistical Techniques	USIT-403	<p>CO-1 Understand sampling theory and correlation, Statistical Decision theory.</p> <p>CO-2 Identify and describe Moments, Skewness and Kurtosis by using R-programming.</p> <p>CO-3 Solving problem on curve fitting by using Method of Least Squares.</p>
Software Engineering	USIT-404	<p>CO-1 Define various software application domains and remember different process model used in software development.</p> <p>CO-2 Explain needs for software specifications also they can classify different types of Software requirements and their gathering techniques.</p> <p>CO-3 Convert the requirements model into the design model and demonstrate use of software and user interface design principles.</p> <p>CO-4 Justify role of SDLC in Software Project Development and they can evaluate importance of Software Engineering in PLC.</p>
Computer Graphics and Animation	USIT-405	<p>CO-1 To introduce the use of the components of a graphics system and become familiar with building approach of graphics system components and algorithms related with them.</p> <p>CO-2 To learn the basic principles of 3- dimensional computer graphics.</p> <p>CO-3 Provide an understanding of how to scan convert the basic geometrical primitives, how to transform the shapes to fit them as per the picture definition.</p> <p>CO-4 Provide an understanding of mapping from a world coordinates to device coordinates, clipping, and projections.</p>

		CO-5 To be able to discuss the application of computer graphics concepts in the development of computer games, information visualization, and business applications.
SEMESTER - V		
Software Project Management	USIT-501	<p>CO-1 To understand the nature of software development and software life cycle process models, agile software development, SCRUM and other agile practices.</p> <p>CO-2 To explain methods of capturing, specifying, visualizing and analyzing software requirements.</p> <p>CO-3 To understand concepts and principles of software design and user-centric approach and principles of effective user interfaces.</p> <p>CO-4 To know basics of testing and understanding concept of software quality assurance and software configuration management process.</p> <p>CO-5 To understand need of project management and project management life cycle.</p>
Internet of Things	USIT-502	<p>CO-1 To understand the principles required for designing and understanding basic concept of networking.</p> <p>CO-2 To understand what is require thinking about prototyping and what are the platforms available for prototyping.</p> <p>CO-3 Preparing Physical Design of Prototype using 3d printers and different techniques and preparing prototype using online components such API's.</p> <p>CO-4 To understand the techniques required to write embedded programme and to understand business models</p> <p>CO-5 To understand how to move your prototype for manufacturing and learning ethics of prototyping.</p>
Advanced Web Programming	USIT-503	<p>CO-1 To due to development .net framework</p> <p>CO-2 To work in Website designing field</p> <p>CO-3 To work on design testing phase(Error handling , managing state, maintaining common look and fill by website beautification</p> <p>CO-4 To work in the field of Database connectivity</p> <p>CO-5 Provide the security of website authentication authorization , use the external tools like Ajax, Query while developing website</p>
Artificial Intelligence	USIT-504	<p>CO-1 Demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents.</p> <p>CO-2 Analyze and formalize the problem as a state space, graph, design heuristics and select</p>

		amongst different search or game based techniques to solve them. CO-3 Develop intelligent algorithms for constraint satisfaction problems and also design intelligent systems for Game Playing
Linux System Administration	USIT-505	CO-1 To learn and understanding Linux Basic commands, software installing by using YUM and RPM. CO-1 To learn Network configuration. CO-2 Student understand the securing server with iptables and configuring server for File sharing
Enterprise JAVA	USIT-506	CO-2 To learn and understanding JAVAEE Application. CO-3 Identify advance concepts of java programming with database connectivity.(JDBC) CO-4 Design and develop platform independent applications using a Interceptors,JNDI, session, and cookies. CO-5 Able to implement the concepts of EJB for building enterprise applications. CO-6 Able to implement the concepts of Hibernate, JPA for building enterprise applications.
Next Generation Technologies	USIT-507	CO-1 Demonstrate capability to use Big Data Frameworks like Hadoop CO-2 Demonstrate an ability to use frameworks like Hadoop, NOSQL to efficiently store retrieve and process Big Data for Analytics. CO-3 Apply several newer algorithms for Clustering Classifying and finding associations in Big Data
SEMESTER - VI		
Software Quality Assurance	USIT-601	CO-1 Students will understand Basic software debugging methods. CO-2 Understood the White box testing methods and able to implement techniques. CO-3 Students will learn the Black Box testing methods and techniques and use of BBT. CO-4 Designing test plans. Different testing tools (familiar with open source tools). CO-5 Will able to understand the concept of Quality Assurance models.
Software Quality Assurance	USIT-602	CO-1 Understand the concept of vulnerabilities, attacks and protection mechanisms CO-2 Explain the concepts of confidentiality, availability and integrity (CIA) in context of Information Assurance; CO-3 Articulate the threats to CIA and be able to analyze a given architecture, discern vulnerabilities and recommend physical, logical or administrative controls to mitigate the threat.
Business Intelligence	USIT-603	CO-1 Demonstrate an understanding of the importance of data mining and the principles of Business intelligence

		<p>CO-2 Organize and prepare the data needed for data mining using preprocessing techniques.</p> <p>CO-3 Define and apply metrics to measure the performance of various data mining algorithms.</p>
Principles of Geographic Information System	USIT-604	<p>CO-1 Will learn a general introduction to Geographic information system, nature of GIS and computer representation of Geographic information.</p> <p>CO-2 Students will learn data management and processing system hardware and software trends.</p> <p>CO-3 Students will be able to understand Spatial representation and positioning and spatial referencing.</p> <p>CO-4 Able to implement spatial data types analysis classification of analytical GIS capabilities.</p> <p>CO-5 Will be able to learn data visualization GIS maps and the visualization process and visualization strategies.</p>
Enterprise Networking	USIT-605	<p>CO-1 Understand the customer requirements and Apply a Methodology to Network Design</p> <p>CO-2 Structure and Modularize the Network</p> <p>CO-3 Design Remote Connectivity</p> <p>CO-4 Design IP Addressing and Select suitable Routing Protocols for the Network</p> <p>CO-5 Compare Open flow controllers and switches with other enterprise networks.</p>
IT Service Management	USIT-606	<p>CO-1 Student will get the general idea about IT service management, service strategy principle critical success factor and risks.</p> <p>CO-2 Will be able to understand service design fundamentals and service design principles</p> <p>CO-3 Student will be understood service operation, service operation processes, challenges, critical success factor and risks.</p>
Cyber Law	USIT-607	<p>CO-1 To understand the IT Act 2000.</p> <p>CO-2 To understand jurisdiction in the cyber law.</p> <p>CO-3 To understand the concept of copyright protection in cyber world.</p> <p>CO-4 To study E-Commerce taxation real problem in virtual world.</p> <p>CO-5 Comparing Indian Evidence Act of 1872 vs IT Act 2000.</p>
The level of attainment of B.Sc. Information Technology programme :- 60.00 %		