CH.S.D.ST.THERESA'S COLLEGE FOR WOMEN
(AUTONOMOUS)
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Department of English
Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
General English	**I**	**I** **II**	**I** **II**	**General English**	The Expected learning outcomes of the general English the students are expected course is that to demonstratethe following: **CO 1:** Develop comprehension of simple prose,poetrytexts. Develop the content of stories,anecdotes,prose&poetrypieces. **CO 2:** Analyse real life situations related to texts prescribed and be able to communicate in oral written format with clarity. **CO 3:** Gain a thorough knowledge of English speech Sounds and be able to articulate them. **CO 4:** Able to gain competence in the conversations, style, language in different forms of correspondence formal and informal. **CO 5:** Introduce students to dialogue writing, preparation of role- plays and basic grammar.

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	II	**III**	**III**	**General English**	**CO1**: Faster communication skills in students in formal and informal registers **CO 2**: Enhance reading skills in students to introduce reading of text and comprehension **CO 3:** Introduce students to women related issues and promote short oral and written presentations and debates **CO 4**: Enable students to fill forms with accuracy **CO 5**: Introduced students to communicate online (css lab) **CO 6**: Enable expansion of vocabulary instruments through idiomatic expression
Advanced English	**I**	**I**	**I**	**INTRODUCTION TO LITERATURE**	**CO 1:** Understand difference between genres of writing prose and short stories. **CO 2**: Introduced types of prose writing, narrative, descriptive and reflective. **CO 3:** Understand about plot, character, and dialogue, short stories and attempt to create plots and stories. **CO 4:** Able to review short stories and poetry. **CO 5:** Able to write short poems on their own.
	I	**II**	**II**	**INTRODUCTION TO ENGLISH LANGUAGE AND LITERATURE**	**CO 1:** Introduce students to different forms of poetry. **CO 2:** Orient students about character, dialogue and plot in plays. **CO 3:** Orientation on English language and its gradual development.
	II	**III**	**III**	**BRITISH POETRY AND DRAMA**	**CO1:** learn about the history of British drama and different elements of drama. **CO 2:** Train students in creative writing, poetry and short skits dramatization. **CO3:** Train students in history of British prose and

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					novel.
	II	**IV**	**IV**	**BRITISH PROSE AND NOVEL**	**CO 1:** Enable students to write creative poems and short skits dramatization. **CO 2:** Train students in history of British prose and novel.
	III	**V**	**V**	**INDIANENGLISHLITERATURE**	**CO 1**: Orient students about the prose writers of Indian English literature. **CO 2:** Enable students to develop creative writing in different prose style. **CO 3:** Introduce students to genres of Indian English writing such as poetry and prose.
	III	**V**	**VI**	**AMERICAN ENGLISH LITERATURE**	**CO 1:** Orient students about the American English prose writers. **CO 2:** Introduce students to American English writers of drama. **CO 3**: Enable students about creative writing.
	III	**VI**	**VII**	**INDIANENGLISHLITERATURE(DRAMA&NOVEL)**	**CO 1**: Orient students about the Novel writers of Indian English literature. **CO 2:** Enable students to develop creative writing in different drama style. **CO 3:** Introduce students to genres of Indian English writing such as drama and novel.
	III	**VI**	**VIII**	**AMERICAN ENGLISH LITERATURE (POETRY & NOVEL)**	**CO 1:** Orient students about the poets of American English literature. **CO 2:** Introduce students to the novelists of American English literature. **CO 3:** Enable them about creative writing of unseen poem/novel/passage.
Professional English	**I**	**I**	**I**	**COMMUNICATION SKILLS– I**	**CO 1:** Enable students about vocabulary building **CO 2:** Introduce basics of grammar to students.

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					CO 3: Orient students with features of business correspondence. **CO 4:** Enable students to write resumes for interviews.
	I	**II**	**II**	**COMMUNICATION SKILLS– II**	**CO 1:** Enable students about business communication skills. **CO 2:** Orient students about reading skills and spoken skills. **CO 3:** Introduce LSRW skills to students for better communication skills. **CO 4:** Understand dyadic communication.
	II	**III**	**III**	**PROFESSIONAL ENGLISH & SOFTSKILLS–I**	**CO 1:** Orient students about body language. **CO 2**: Develop interpersonal relationships, team work among students. **CO 3:** Students trained about time management. **CO 4:** Enable students about basic writing skills and speaking skills. **CO 5:** Orient students to business correspondence and resume writing.
	II	**IV**	**IV**	**PROFESSIONAL ENGLISH & SOFTSKILLS–II**	**CO 1:** Orient students about soft skills. **CO 2:** Enable students about writing skills and speaking skills and phonetics. **CO 3:** Each student about information transfer and building vocabulary.
COMMUNICATION SKILLS	**I**	**I**	**I**	**COMMUNICATION SKILLS IN ENGLISH– I**	**CO 1:** Enable students about communication. **CO 2:** Orient students about remedial grammar. **CO 3:** Students are oriented towards reading skills, speaking skills and writing skills.
	I	**II**	**II**	**COMMUNICATION SKILLS IN ENGLISH – II**	**CO 1:** Exhibit presentation skills. learn about body language. **CO 2:** Oriented about team dynamics. **CO 3:** Students acquire Knowledge on group discussion and interview skills.

Department of Telugu

అభ్యసనఫలితాలు 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
జనరల్తెలుగు	**I**	**I**	Paper I	కోర్సు 1 : ప్రాచీన కవిత్వం , ఆధునిక కవిత్వం,వ్యాకరణం	**CO1.**ప్రాచీనతెలుగుసాహిత్యంయొక్కప్రాచీనతను, విశిష్టతనుగుర్తిస్తారు. నన్నయ, తిక్కనకాలంనాటిభాషాసంస్కృతులను, ఇతిహాసకాలంనాటివిషయాలపట్లపరిజ్ఞానాన్ని సంపాదించగలరు. **CO2.** . ప్రాచీనకావ్యభాషలోనిఛందస్సుఅధ్యయనంచేయడంద్వారారచనలమెళకువలనుగ్రహించగలరు **CO3**. ఆంగ్లభాషప్రభావంకారణంగాతెలుగులోవచ్చినఆధునికసాహిత్యాన్ని, దానివిశిష్టతనుగుర్తిస్తారు. **CO4.**ఆధునికతెలుగుకల్పనాసాహిత్యంద్వారాసామాజిక, సాంస్కృతిక, రాజకీయచైతన్యాన్ని పొందుతారు. **CO5**. సంధులు,సమాసాలుమొదలైనవ్యాకరణంశాలనుఉదాహరణ సహితంగాతెలుసుకుంటారు.
		II	Paper II	కోర్సు 2 : ప్రాచీన కవిత్వం , ఆధునిక కవిత్వం	**CO1.**ప్రాచీనతెలుగుసాహిత్యంయొక్కప్రాచీనతను, విశిష్టతనుగుర్తిస్తారు. నాటిభాషాసంస్కృతులను, ఇతిహాసకాలంనాటివిషయాలపట్లపరిజ్ఞానాన్ని సంపాదించగల

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స్పెషల్తెలుగు					రు. **CO2**. ప్రబంధకవులరచనావిశిష్టతనుధూర్జటిశైవభక్తినితెలుసుకోగలరు. **CO3**. తెలుగుసాహిత్య క్రమపరిణామాన్ని గురించిన స్థూలమైన అవగాహనను పొందుతారు. **CO4.**ఆధునిక సాహితీ ప్రక్రియలను అవగాహన చేసుకోవడం ద్వారా సమాజంపై సాహిత్య ప్రభావాన్ని తెలుసుకోగలరు. **CO5**. రచయితలుతమ సృజనాత్మకత ద్వారా సృష్టించిన సాహిత్యాన్ని బోధించడం ద్వారా విద్యార్థులు సాహిత్యం పట్ల అభిరుచిని, విమర్శనాత్మక విశ్లేషణాశక్తిని పొందగలరు.
	II	**III**	Paper III	ప్రాచీన కవిత్వం , ఆధునిక కవిత్వం,వ్యాకరణం,గద్యభాగం	CO 1: మార్గకవితకు వ్యతిరేకంగా తలెత్తిన దేశికవిత్వోద్యమాన్ని అవగాహన చేసుకుంటారు. శివకవుల కాలంనాటి మత,ధార్మిక పరిస్థితులను, భాషావిశేషాలను గ్రహించగలరు. CO 2:పోతనభక్తితత్వాన్ని, భాగవతవిశిష్టతనుతెలుసుకోగలరు. CO 3:స్త్రీపురుషులసమానులేఅన్న ఆధునికభావాలనుతెలిపేస్త్రీవాదదృక్పదాన్ని గూర్చిఅవగాహనపొందుతారు

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					CO 4:వ్యక్తి- వ్యక్తిత్వం-వ్యక్తిత్వవికాసంలోఆశావాదం, శ్రమ, సమయపాలనప్రాముఖ్యంగురించితెలుసుకుంటారు. CO 5: సంప్రదాయసాహిత్యంలోనిచందస్సువివిధఅలంకారాల విశిష్టతను గ్రహిస్తారు.
		I	Paper I	ప్రాచీనకవిత్వం, నాటకం	CO 1:ప్రాచీనతెలుగుసాహిత్యంయొక్కప్రాచీనతను, విశిష్టతనుగుర్తిస్తారు. నన్నయకాలంనాటిభాషాసంస్కృతులను, ఇతిహాసకాలంనాటివిషయాలపట్లపరిజ్ఞానాన్ని సంపాదించగలరు. CO 2:శ్రీనాధునికాలంనాటికవితావిశేషాలను - విశిష్టతనుశైవభక్తులజీవితాల్లోపరమేశ్వరుడుచేసినపలులీలలనుగుర్చితెలుసుకుంటారు CO 3:ప్రబంధకవులరచనవిశిష్టతనురామరాజుభూషణునిశ్లేషాలంకారప్రయోగంగురించిఅవగాహనపొందుతారు. CO 4:భాసకవివిరచితమైనసంస్కృతఅనువాదనాటకంస్వప్నవాసవదత్తనాటకవిశిష్టతనుతెలుసుకుంటారు. CO 5: ప్రాచీనతెలుగుసాహిత్యంలోనిపలుప్రక్రియలనుగూర్చిఅవగాహనపొందుతారు.

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	II	II	Paper II	ప్రాచీనకవిత్వం, ఆధునికసాహిత్యం	CO 1:తెలుగువారి చరిత్రలో భాగమైన తెలుగు సాహిత్యచరిత్ర, చిరకాలంగా తెలుగువారు ఆచరిస్తున్న సంస్కృతిలో ఎలా అంతర్భాగమైందో తెలుసుకోగలరు. CO 2: తెలుగుసాహిత్య క్రమపరిణామాన్ని గురించిన స్థూలమైన అవగాహనను పొందుతారు. CO 3:తెలుగులో ఉన్న రెండు సాహిత్య ప్రదాయాలైన మౌఖిక, లిఖిత రూపాలను గుర్తిస్తారు. వివిధ సాహిత్య ప్రక్రియల వికాసాన్ని అవగాహన చేసుకుంటారు. CO 4: కవులు తమ సృజనాత్మకత ద్వారా సృష్టించిన సాహిత్యాన్ని బోధించడం ద్వారా విద్యార్థులు సాహిత్యం పట్ల అభిరుచిని, విమర్శనాత్మక విశ్లేషణాశక్తిని పొందగలరు. CO 5:ఆయా శాస్త్రాలో కృషిచేసే వారికి ఆ రంగంలో విషయజ్ఞానం ఎలా అవసరమో తెలుసుకోగలరు. తెలుగుసాహిత్యంలో కృషిచేసే వారికి తెలుగులో పాండిత్యం అవసరమని గ్రహిస్తారు.
	III	III	Paper III	ప్రాచీనకవిత్వం, ఆధునికసాహిత్యం	CO 1:తెలుగులో ఉన్న రెండు సాహిత్య సంప్రదాయాలైన మౌఖిక లిఖిత రూపాలను గుర్తిస్తారు. వివిధ సాహిత్య ప్రక్రియల వికాసాన్ని అవగాహన చేసుకుంటారు. CO 2:మార్గకవితకు వ్యతిరేకంగా తలెత్తిన దేశికవిత్వోద్యమాన్ని అవగాహన చేసుకుంటారు. శివకవుల

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					కాలంనాటి మత,ధార్మిక పరిస్థితులను, భాషావిశేషాలను గ్రహించగలరు. CO 3: తెలుగు సాహిత్య క్రమపరిణామాన్ని గూర్చి స్థూలమైన అవగాహన పొందుతారు. CO 4: మార్గకవిత ప్రబంధప్రక్రియలోకి పరిణమించిన వైనాన్ని తెలుసుకుంటారు. ప్రబంధయుగ విశిష్టతను, అల్లసాని కవితలోని జిగిబిగిని ఆస్వాదించగలరు. కావ్యవస్తువులో కాలానుగుణంగా వచ్చిన మార్పులు గ్రహించగలరు. CO 5: ఆధునిక కాలంలో కవితల్లోనూ వస్తువులోనూ భావన లోను వస్తువులోనూ వచ్చిన మార్పులను గ్రహించగలరు.
		IV	Paper IV	ప్రాచీనకవిత్వం, నాటకం	CO 1:తెలుగువారి చరిత్రలో భాగమైన తెలుగు సాహిత్యచరిత్ర, చిరకాలంగా తెలుగువారు ఆచరిస్తున్న సంస్కృతిలో ఎలా అంతర్భాగమైందో తెలుసుకోగలరు. CO 2: కవులు తమ సృజనాత్మకత ద్వారా సృష్టించిన సాహిత్యాన్ని బోధించడం ద్వారా విద్యార్థులు సాహిత్యం పట్ల అభిరుచిని, విమర్శనాత్మక విశ్లేషణాశక్తిని పొందగలరు. CO 3: ఆంగ్లభాష ప్రభావం వల్ల వచ్చిన పరిణామాల ఫలితంగా ఏర్పడిన ఆధునిక తెలుగు సాహిత్య స్వరూప స్వభావాలను తెలుసుకుంటారు. CO 4: సామాజిక మార్పులు సాహిత్యంలో ఎలా

Subject	Year	Semester	Course	Title of the course	Course outcomes
		V			ప్రతిబింబించింది గ్రహిస్తారు CO 5: ఆధునిక సాహితీ ప్రక్రియలను అవగాహన చేసుకోవడం ద్వారా సమాజంపై సాహిత్య ప్రభావాన్ని తెలుసుకోగలరు.
		V	Paper V	ఆంధ్రభాషాచరిత్ర	CO 1:తెలుగుభాషయొక్కపుట్టుకతెనుగుతెలుగుశబ్దాలవ్యక్తులనుగూర్చిఅవగాహనపొందుతారు CO 2:ప్రపంచభాషలుభారతీయభాషలుద్రావిడభాషల్లోతెలుగుస్థానంగూర్చితెలుసుకుంటారు CO 3:తెలుగుభాషలోఉన్నమండలికాలనుగూర్చిఅవగాహనపొందుతారు CO 4: ధ్వనిస్వరూపాన్నిగ్రహించడంద్వారాకావ్యానందాన్నిఆస్వాదిస్తారు CO 5:పరవస్తుచిన్నయ్యసూరియొక్కబాలవ్యాకరనంలోనిసంజ్ఞసంధిపరిచ్ఛేదాలు ,సోదాహరణంగాతెలుసుకుంటారు.
		VI	Paper VI	సాహిత్యవిమర్శ	CO 1: కావ్య స్వరూపాన్ని; ప్రాచీన, ఆధునిక కవుల అభిప్రాయాలను అవగాహన చేసుకుంటారు. CO 2: కావ్య ప్రయోజనాలను, కావ్యభేదాలను గుర్తించడం

Subject	Year	Semester	Course	Title of the course	Course outcomes
					ద్వారా సాహిత్యం ఎందుకోసమో విశ్లేషించగలుగుతారు. CO 3: కళలు, సాహిత్యం ఎలా పుడుతున్నాయో గుర్తిస్తూ, కళల్లోని రకాలను, కవిత్వం యొక్క ప్రత్యేకత ను గ్రహిస్తారు. CO 4: కావ్యలక్షణాలను సంప్రదాయ పద్ధతిలో విమర్శనాత్మకంగా అధ్యయనం చేస్తారు. C0 5: సంప్రదాయసాహిత్యంలోని విశిష్టతను గ్రహిస్తారు.
			Paper VII	ఆంధ్రభాషాచరిత్ర	CO 1: అర్ధపరిణామంలోలక్ష్యార్థాలనుగూర్చిఅవగాహనపొందుతారు CO 2: వివిధదేశభాషలనుంచివచ్చినటువంటిపరపదాలనుగూర్చితెలుసుకుంటారు. CO 3:మనభాషనుంచిపరభాషలోకివెళ్ళినపదాలగురించిఅవగాహనపొందగలరు CO 4: సంప్రదాయసాహిత్యంలోనిచందస్సువివిధయతుల విశిష్టతను గ్రహిస్తారు. CO 5:ప్రాచీన సాహిత్యంలోనిషడ్విధప్రాసలుఅలంకారాలు విశిష్టతను గ్రహిస్తారు.
		VI	Paper VIII	సాహిత్యవిమర్శ	CO 1: కావ్య స్వరూపాన్ని; ప్రాచీన, ఆధునిక కవుల అభిప్రాయాలను అవగాహన చేసుకుంటారు. CO 2: రససూత్రాన్ని అవగాహన చేసుకోవడం ద్వారా

Subject	Year	Semester	Course	Title of the course	Course outcomes
					కళాభిరుచిని పొందుతారు. CO 3: కావ్యహేతువులను, కావ్య ప్రయోజనాలను, కావ్యభేదాలను గుర్తించడం ద్వారా సాహిత్యం ఎందుకోసమో విశ్లేషించగలుగుతారు. CO 4: కావ్యలక్షణాలను సంప్రదాయ పద్ధతిలో విమర్శనాత్మకంగా అధ్యయనం చేయడం ద్వారా సంప్రదాయసాహిత్యంలోని విశిష్టతను గ్రహిస్తారు CO 5:ఆంగ్లభాషప్రభావంవల్లవచ్చినపరిణామాలఫలితంగాఏర్పడిన ఆధునికతెలుగుసాహిత్యంలోజీవితచరిత్రస్వీయచరిత్రగూర్చితెలుసుకుంటారు.
		VI	Cluster Paper VIII A1	అనువాదసిద్ధాంతము, అభ్యాసము	CO 1:ఆంగ్లభాష ప్రభావం వల్ల వచ్చిన పరిణామాల ఫలితంగా ఏర్పడిన ఆధునిక తెలుగు సాహిత్య ప్రక్రియఅనువాదంగూర్చితెలుసుకుంటారు. CO 2: అనువాదాన్ని అభ్యసనంచేయడంద్వారాలిప్యంతరీకరణనైపుణ్యాలనుపెంపొందించుకోగలుగుతారు CO 3:మూలభాషనుంచిలక్ష్యభాషలోకిభాషాంతరీకరణంచేయగలిగే నేర్పునుగూర్చిఅవగాహనపొందుతారు CO 4: అనువాదంలో ఎదురయ్యేటటువంటిసమస్యలను,

Subject	Year	Semester	Course	Title of the course	Course outcomes
					పరిష్కారమార్గాలనుగురించితెలుసుకుంటారు. CO 5: సాహిత్యముశాస్త్రసాంకేతిక, రంగాలలో,అనువాదఆవశ్యకతనుగూర్చిఅవగాహనపొందగలరు.

Department of Mathematics
Course Outcomes-2019-20

Subject	Year	Semester	Course	Title of the Course	Course Outcomes
Mathematics	I	I	Paper-1	Differential Equations	CO 1: Solve first order first degree linear differential equations. CO 2: Solve higher-order linear differential equations for both homogeneous and non-homogeneous, with constant coefficients. CO 3: Understand and apply the appropriate methods for solving higher order differential equations. CO 4: Know the Applications of First order Differential Equations CO 5: Know the Applications of Higher order Differential Equations.
		II	Paper-II	Analytical Solid Geometry	CO 1: Understand planes and system of planes. CO 2: Know the detailed idea of lines. CO 3: Understand the lines and their properties. CO 4: Understand the Spheres and their properties CO 5: Know system of spheres and coaxial system of spheres.
	II	III	Paper-III	Abstract Algebra	CO 1: Acquire the basic knowledge and structure of groups. CO 2: Get the significance of the notation of a subgroup and cosets. CO 3: Understand the concept of normal subgroups and properties of normal subgroups. CO 4: Study the homomorphisms and isomorphisms with applications. CO 5: Understand the properties of permutation and cyclic groups.
		IV	Paper-IV	Real Analysis	CO 1: Get clear idea about the limit of a sequence and Convergent sequence – The Cauchy's criterion. CO 2: Obtain the skills of analysing the concepts and applying appropriate methods for testing convergence of series. CO 3: Know about the Real valued Functions, Limits of functions, bounded ness of a function, Continuous functions. CO 4: Understand the derivability of a function at a point and on an

					interval, Derivability and continuity of a function and Meanvalue Theorems. CO 5: Know about the Riemann integral functions, Properties of integrable functions, Fundamental theorem of integral calculus.
	III	V	Paper-V	Ring Theory &LinearAlgebra	CO 1: Acquire the basic knowledge of rings, fields and integral domains,subrings and ideals. CO 2: Get the knowledge of Homomorphism of Rings. C03: Understand the concepts of Vector spaces, Subspaces. CO4:Understand the concepts of Basis, Dimension and their properties. CO:5 Understand the concept of Linear transformation and its properties.
			Paper-VI	Multiple Integrals & Vector Calculus	CO1. Learn Multiple Integrals as a natural extension of definite Integral to a function of two variables in the case of double integral/three variables in the case of triple integral. CO2. Learn applications in terms of finding Surface area by Double Integral and volume by Triple integral. CO3. Determine the Gradient,Divergence and Curl of a vector and Vector identities. CO4. Evaluate Line,Surface and Volume Integrals. CO5. Understand the Relation between Surface and Volume integrals,Relation between the Line integral and Volume integral,Relation between Line and Surface integral.
		VI	PAPER-VII(A)	Numerical Analysis and Computer Programming in C	CO 1: Difference between the Forward, Backward operators and the relation between them. CO 2: Know about the Newton-Gregory and Backward interpolation. CO 3: Know the central difference operators and relation between them. CO4: Know the Algorithms ,Flowcharts,Structure of C Programme, Operators. CO5: Know the Looping statements, Functions.
			Paper-VII(B)	Discrete Mathematics	CO 1: Know the sets, operations of sets ,Relations and Fundamentals of Logic. CO 2: Know about the Methods of Implication

					CO 3: Know the Generating functions of sequences.. CO4: Know the Recurrence Relations CO5: Solutions of the Recurrence relations by various methods
			Paper-V(IIIA1)	Advanced Numerical Analysis and Computer Programming in C	CO 1: Understand the process of Numerical Integration. . CO 2: Know Algebraic and Transcendental equations.. CO 3:Understand the Numerical Solution of Ordinary Differential Equations. . CO4: Know the Arrays.Strings. CO5: Know the Structure of C, union Files..
			Paper-VIII(B1)	Graph Theory & Boolean Algebra	CO1:Know the relations and Digraphs. CO2: Understand the Isomorphism and properties of trees. CO3: Know the Spanning trees, Directed trees, Binary Trees. CO4: Understand the Multi graphs, Hamiltonian Graphs and Chromatic Numbers. Co5: Understand the Boolean Functions,Switchining Mechanisms, Minimizations of Boolean Functions.
			Paper-VIII(A2&B2)	Special Functions	CO 1: Get the knowledge of Hermite equation, generating functions, orthogonal properties of Hermite Polynomials and recurrence relations. CO2:Acquire the knowledge of Laguerre polynomial, generating functions, orthogonal properties,Recurrence relations. CO3:Acquire the knowledge of Legendre equation, generating functions, orthogonal properties of Legendre Polynomials. CO4:Understand the generating function, Recurrence relations, orthogonal properties of Bessel's Equation. CO5:Understand the Beta and Gamma functions, their properties and relation between these two functions.
			Paper-VIII(A3&B3)	Matrix Theory	CO1: Know the rank of a Matrix.. CO2:Understand the Linear Equations. CO3: Acquire the Eigen values and Eigen vectors. CO4:Understand the Cayley Hamilton theorem. CO5: Understand the Orthogonal Vectors.

Department of Statistics
Course Outcomes-2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Statistics	I	I	I	Descriptive statistics and probability	Co:1 Students will Analyze statistical data using measures of central tendency, dispersion and location. CO2:Calculate probabilities, and derive the marginal and conditional distributions of bi variate random variables. CO3: Analyze Statistical data using MS-Excel.
		II	II	Mathematical Expectations & Probability Distributions	CO1:Students will Use discrete and continuous probability distributions, including requirements, mean and variance, and making decisions. CO2:Also derive formulae by using Mathematical expectations.
	II	III	III	Statistical Methods & Inferences	CO1:Students will Gain Knowledge on important of Statistical concepts in Statistical Methods such as Correlation, Regression, Curve fitting &Methods in Estimation. CO2: Demonstrate understanding of the theory of maximum likelihood estimation. CO3: Also Analyze Statistical data using MS-Excel.
		IV	IV	Statistical Methods & Inferences	CO1:Students can understand the concept of Testing of Hypothesis in large and small samples ,they also learn the calculation of those methods such and differences between means, standard deviations and correlations. CO2:Also learn the construction of Non-Parametric tests
			V	Sampling and Experimental Design	CO1: Students can understand the fundamental concepts of Sampling and Experimental Design such as ANOVA,CRD,RBD,LSD and official statistics. CO2:Students will Gain Knowledge on Sampling techniques such as Simple random sampling, systematic random and stratified random sampling.

Subject	Year	Semester	Course	Title of the course	Course outcomes
	III	V	VI	Operations Research	**CO1:** students can Gain the knowledge on optimization techniques . CO2:Also know the construction of those techniques such as Graphical, Simplex, Big-M, Two-Phase and Dual simplex methods. CO3: Students can solve the problems in Transportation and sequencing.
		VI	VII	Applied Statistics	Co1: students can Demonstrate and understanding the concepts o time series and its applications in different areas. CO2: Acquire knowledge on vital statistics, Index numbers an calculate an indices from given data. Explain how supply an demand relationships between the price of a product and th quantity of the same product. CO3: Analyze statistical data using MS-Excel.
			VIII A1	Quality and Reliability	CO1:Understand the concepts of quality control, chance and assignable causes of variation, control charts for variables and attributes, producer's and consumer's risk - Acceptance sampling plans. CO2: Understand the setting of mean chart limits, range chart limits using mean and range charts. Co3: Analyze statistical data using MS-Excel.
			VIII A2	Advanced Experimental Designs	CO1:Students will be able to know the concepts of ANCOVA. CO2: BIBD, PBIBD and factorial Designs such as $2^{2,}2^{3,}3^{2},3^{3}$.

Department of Physics & Electronics

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Physics	**I**	**I**	Paper I	Mechanics and Waves & Oscillations	At the end of the course, the student will be able to: CO 1: Specialize and update knowledge within one of the main specializations of the mechanics. CO 2: Comprehend complicated practical problems in Mechanics, specify the problem mathematically and identify suitable analytical and/or numerical solution methods, and prospective experimental methods. CO 3: Understand the different concepts of vectors and their integrations . CO 4: Understand Collisions in one and two dimensions & relation between scattering cross section and impact parameter. CO 5: Understand the concepts of rigid body .
		II	Paper II	Mechanics and Waves & Oscillations	At the end of the course, the student will be able to; CO 1: Gain knowledge on Central forces – definition and examples, Conservative nature of central forces, Conservative force as a negative gradient of potential energy, Equation of motion under a central force. CO 2: Derive Kepler's laws, Coriolis force and its expressions. CO 3: To Solve wave equation and understand significance of transverse waves. CO 4: To Solve wave equation of a longitudinal vibration in bars free at one end and also fixed at both the ends . CO 5: To obtain boundary conditions of a longitudinal vibration in bars free at one end and also fixed at both the ends .
	II	**III**	Paper III	Wave Optics	At the end of the course students will be able to: CO 1: Understands behavior of light in different mediums and analyses the behavior of light in mirrors and lenses CO 2.Interpret reflection and refraction of light to determine light

Subject	Year	Semester	Course	Title of the course	Course outcomes
					propagation in different media CO 3.Use mathematical analysis to calculate image properties formed by a mirror, a lens and their combinations CO 4: Interpret constructive and destructive interference to visualise interference/diffraction patterns a)Use mathematical analysis to find bright and dark fringes in an interference/diffraction pattern b)Use mathematical analysis to find a wavelength diffracted by a grating CO 5: Determine a polarisation state of light by interpreting polariser, scattering and reflection/refraction
		IV	Paper IV	Thermodynamics and Radiation Physics	At the end of the course students will be able to CO 1: Gain the knowledge of Thermodynamics CO 2: Apply various laws of thermodynamics to various processes and real systems. CO 3:Understands the concept of Entropy, calculate heat, work and other important thermodynamic properties for various ideal gas processes. CO 4: Estimate performance of various Thermodynamics gas power cycles and gas refrigeration cycle and availability in each case. CO 5: Estimate the condition of steam and performance of vapour power cycle and vapour compression cycle
	III	**V**	Paper V	Electricity & Magnetism	At the end of the course students will be able to CO 1:Gains knowledge of basic physical laws and concepts in electricity and magnetism. CO 2: Understands relationship between electrostatic fields and electrostatic potential. CO 3: The student will be able to account for basic theories in electrostatics, electrical circuits, stationary electromagnetism and electromagnetic induction, and further be able to apply the theory.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 4: performing calculations of electric and magnetic fields in space in some simple geometries with simple boundary conditions. CO 5: performing calculations of stationary and time-dependent electrical currents in simple circuits containing resistors, capacitors, and inductors and handling the most common instruments for electrical measurements.
			Paper VI	Electricity and Solid state Physics	At the end of the course students will be able to CO 1: Students will be able to solve the problems related magnetic properties. CO 2: Students will be able to understand the transverse nature of electromagnetic waves. CO 3: Students will be able to analyze different types of matter depending on nature of chemical bonds and their properties CO 4: Students will be able analyze the crystal structures by applying crystallographic parameters.
		VI	Paper VII	Electronics	At the end of the course students will be able to CO 1: Student understand symbols, truth tables, Booleans equations and working principle. CO 2: Explain the theoretical principles essential for understanding the operation of electronic circuits. CO 3: To learn function of basic digital circuits and use of transistor to create logic gates in order to perform Boolean logic. CO 4: The basic concepts of semiconductor diodes such as P-N junction diode,zener diode. CO 5: To apply the basics of diode to describe the working of rectifier circuits such as full and half wave rectifier. CO 6:Apply the acquired knowledge essential for the design of electronic circuits.
			Paper VIII A1	Circuit Analysis	At the end of the course students will be able to CO 1 : To be able to understand basic electrical properties CO 2. To be able to analyze electrical circuits CO 3. To be able to

Subject	Year	Semester	Course	Title of the course	Course outcomes
					find circuit response using Laplace transform CO 4. To understand signal superposition and Fourier transform
			Paper VIII A2	Analog & Digital IC applications	At the end of the course students will be able to CO 1 :Develop the ability to analyze and design digital &analog electronic circuits using discrete components. CO 2: Observe the amplitude and frequency responses of common amplification circuits. – CO 3: Design, construct, and take measurement of various analog circuits to compare experimental results in the laboratory with theoretical analysis.
			Paper VIII A3	Introduction to Circuit protection, control and measurement	At the end of the course students will be able to: CO 1: Understand basics of R , L , C circuit elements and voltage and current sources. CO 2. Appreciate and analyzeDC , AC and magnetic circuits using KVL and KCL. CO 3. Understand working principle of various analogue electrical measuring instruments. CO 4. Comprehend the working of DC machines, transformers and induction Motors.

Department of Physics & Electronics
Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Electronics	**I**	**I**	Paper I	Circuit Analysis	At the end of the course, the student will be able to: CO 1: To understand basic electrical properties CO 2: To analyze electrical circuits CO 3: To find circuit response using Laplace transforms CO 4: To understand signal superposition and Fourier transform.
		II	Paper II	Electronic devices	At the end of the course, the student will be able to: CO 1: To understand operation of semiconductor devices. CO 2: To understand DC analysis and AC models of semiconductor devices. CO 3: To apply concepts for the design of Regulators and Amplifiers CO 4: To verify the theoretical concepts through laboratory and simulation experiments CO 5: To design and analyze of electronic circuits
	II	**III**	Paper III	Digital Electronics	At the end of the course students will be able to: CO 1: Have a thorough understanding of the fundamental concepts and techniques used in digital electronics. CO 2: To understand and examine the structure of various number systems and its application in digital design. CO 3: To understand, analyze and design various combinational and sequential circuits. CO 4: To identify basic requirements for a design application and propose a cost effective solution CO 5: To identify and prevent various hazards and timing problems in a digital design and to develop skill to build, and troubleshoot digital circuits
		IV	Paper IV	Analog & Digital IC applications	At the end of the course students will be able to CO 1: To develop the ability to understand, analyze and

Subject	Year	Semester	Course	Title of the course	Course outcomes
					design digital &analog electronic circuits using discrete components. CO 2: Observe the amplitude and frequency responses of common amplification circuits. CO 3: Design, construct, and take measurement of various analog circuits to compare experimental results in the laboratory with theoretical analysis.
	III	**V**	Paper V	Basic Communication Techniques	At the end of the course students will be able to CO 1: Understand and apply the knowledge of statistical theory of communication and explain the conventional digital communication system. CO 2:Apply the knowledge of signals and system and evaluate the performance of digital communication system in the presence of noise. CO 3: Apply the knowledge of digital electronics and describe the error control codes like block code, cyclic code. CO 4: Analyze the digital communication system with spread spectrum modulation. CO 5: Design as well as conduct experiments, analyze and interpret the results to provide valid conclusions for digital modulators and demodulator using hardware components and communication systems..
			Paper VI	8085 Microprocessor	At the end of the course students will be able to CO 1: Demonstrate computer architecture concepts related to design of modern processors, CO 2: Create the memory interfacing techniques and I/O interfacing techniques with 8085. CO 3: Analyze the performance of commercially available computers. CO 4: To develop logic for assembly language programming
		VI	Paper VII	8051 Microcontroller	At the end of the course students will be able to CO 1: Gain comprehensive knowledge about architecture

Subject	Year	Semester	Course	Title of the course	Course outcomes
					and addressing modes of 8051 CO 2: Write assembly language program in 8051 for various embedded system applications CO 3:Implement the middle level programming and interfacing concepts in 8051 CO 4:Use external interfaces in various embedded system projects CO 5: Design and implement programs on 8051, ARM, PIC and describe the architecture and instruction set of ARM microcontroller.
			Paper VIII A1	Electronic Instrumentation	At the end of the course students will be able to CO 1 :Recognize the evolution and history of units and standards in Measurements. CO 2: Identify the various parameters that are measurable in electronic instrumentation. CO 3: Employ appropriate instruments to measure given sets of parameters. CO 4 : Practice the construction of testing and measuring set up for electronic systems CO 5 :To have a deep understanding about instrumentation concepts which can be applied to Control systems and to relate the usage of various instrumentation standards..
			Paper VIII A2	Radar Systems & Antennas	At the end of the course students will be able to CO 1: Know the fundamentals of Antennas & concept of radio wave propagation. and Illustrate the different types of arrays and their radiation patterns. CO 2: Analyze a complete radio system, from the Transmitter to the Receiver end with reference to antenna and Quantify the fields radiated by various types of antennas CO 3: Analyze antenna measurements to assess antenna's performance

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 4. Demonstrate an understanding of the importance of Matched Filter Receivers in Radars. CO 5. Familiarize with the different types of Radar Displays and their application in real time scenario
			Paper VIII A3	Electronics Project	

Department of Chemistry

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Chemistry	**I**	**I**	Paper I	Inorganic & Physical Chemistry	At the end of the course, the student will be able to: CO 1: Understand the basic concepts of p-block d-block elements CO 2: Explain the difference between solid, liquid and gasses in terms of intermolecular interactions. CO 3: Understand the concept of orbitals & energy levels CO 4: Shape of covalent molecules, identify types of intermolecular forces and predict those that are important for a given molecule, CO 5: Relate the chemical and physical properties of substances to molecular structure, chemical bonding, and inter molecular interactions
		II	Paper II	Organic & General Chemistry	At the end of the course, the student will be able to; CO 1: Understand and explain the differential behavior of organic compounds based on fundamental concepts learnt. CO 2: Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved. CO 3: Learn and identify many organic reaction mechanisms including Free Radical Substitution, Electrophilic Addition and Electrophilic Aromatic Substitution. CO 4: Correlate and describe the stereo chemical properties of organic compounds and reactions.
	II	**III**	Paper III	Spectroscopy & Organic Chemistry	At the end of the course students will be able to: CO 1: Understand the concepts of UV- Visible

Subject	Year	Semester	Course	Title of the course	Course outcomes
					spectroscopy. CO 2: Explain the principles of Infra Red spectroscopy. CO 3: Study the reactivity of halogen and hydroxy compounds. CO 4: Learn the preparation and properties of carbonyl compounds. CO 5: Formulate the reactivity of carboxylic acids and active methylene compounds.
		IV	Paper IV	Inorganic & Physical Chemistry	At the end of the course students will be able to CO 1: Understand the basic concepts of d-block elements and theories of bonding. CO 2: Explain the properties of f- block elements. CO 3: Learn the concepts of dilute solutions. CO 4: Compute the fundamentals of electrochemistry. CO 5: Interpret importance of phase rule & EMF measurements and its applications.
	III	**V**	Paper V	Inorganic, Organic & Physical Chemistry	At the end of the course students will be able to CO 1: Apply various theories of complex compounds CO 2:Describe the spectral and magnetic properties of metal complexes. CO 3: Study nitrogen containing function groups with respect to their reactivity. Students understand the nomenclature of amines, Basicity of amines, comparison of basicity, separation of amines. Chemical properties of amines. CO 4:The student will learn nomenclature, structure, properties, syntheses, and reactions of the simple 5 and 6-membered ring heterocyclics. CO 5: Compute the order of a reaction AND understand difference between thermal and photochemical reactions, laws of photochemistry, quantum yield and types of photochemical reactions.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Paper VI	Inorganic, Organic & Physical Chemistry	At the end of the course students will be able to CO 1: Understand the reactivity of metal complexes and basic principles of Bio- inorganic chemistry. CO 2: Describe and recognize the basic and ring structures of glucose and fructose and their conversions. CO 3: Explain the synthesis and role of amino acids and Proteins. CO 4: Able to learn the different types of thermodynamic systems, reaction energies, feasibility of the chemical reactions, entropy and its significance. CO 5: Apply the concepts of II law of thermos dynamics.
		VI	Paper VII	Analytical Methods in Chemistry (General Elective)	At the end of the course students will be able to CO 1: Explain and demonstrate the applications of volumetric and gravimetric analysis. CO 2: Apply the principles for the treatment of analytical data. CO 3: Learn the separation techniques in chemical analysis. CO 4: Understand the basic concepts of Chromatography. CO 5: Apply the principles of thin layer and column chromatography
			Paper VIII A1	Polymer Chemistry (Cluster Elective)	At the end of the course students will be able to CO 1 : Understand the basic concepts of polymers and their properties. CO 2: Learn the techniques and applications polymerization. CO 3: Explain the kinetics of polymerization. CO 4: Demonstrate the applications of polymer additives. CO 5: Explain the applications of polymers.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Paper VIII A2	Instrumental Methods of Analysis (Cluster Elective)	At the end of the course students will be able to CO 1: Learn the importance of spectroscopic techniques in analysis. CO 2: Explain the principles of Infra red spectroscopy. CO 3: Demonstrate the applications of UV – Visible spectroscopy. CO 4: Study the applications of separation techniques. C0 5: Describe the applications of Mass spectrometry in elemental analysis.
			Paper VIII A3	Pharmaceutical and Medicinal Chemistry (Cluster Elective)	At the end of the course students will be able to: CO 1: Learn the pharmaceutical terminology. CO 2: Study the classification and nomenclature of drugs. CO 3: Describe the synthesis and therapeutic activity of chemotherapeutic drugs. CO 4: Explain the importance and applications of pharmacodynamic drugs. CO 5: Understand the nature and importance of HIV-AIDS drugs.

Department of Botany

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Botany	**I**	**I**	Paper I	Microbial Diversity, Algae & Fungi	At the end of the course, the student will be able to: CO 1: Learn the history, ultrastructure, diversity and importance of microorganisms CO 2: Understand the structure and functions of macromolecules CO3: Illustrate diversity among the viruses and prokaryotic organisms and can categorizethem. CO4: Classify fungi, lichens, algaeand bryophytes based on theirstructure, reproduction andlife cycles. CO4: Analyze and ascertain the plant disease symptoms due to viruses, bacteria and fungi.
		II	Paper II	Diversity of Archaegoniatae& Plant Anatomy	On successful completion of this course, the students will be able to**:** CO1: Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles. CO2: Justify evolutionary trends in tracheophytes to adapt for land habitat. CO3: Explain the process of fossilization and compare the characteristics of extinct and extant plants.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO4: Understand the organization of tissues and tissue systems inplants.
	II	**III**	Paper III	Plant Taxonomy and Embryology	At the end of the course students will be able to: CO1: Critically understand various taxonomical aids for identification of Angiosperms. CO1; Analyze the morphology of the most common Angiosperm plants of their localities and recognize their families. CO3: Illustrate and interpret various aspects of embryology. CO4: Compare and contrast the vegetative and floral characteristics of some angiospermic families CO5.: Evaluate the economic value of plant species from the families under the study. CO6. Defend the utility of evidence on different branches of botany in solving the taxonomic lineages of some species.
		IV	Paper IV	Plant Physiology and Metabolism	On successful completion of this course, the students will be able to; CO1: Comprehend the importance of water in plant life and mechanismsfor transport ofwater and solutes in plants. CO2: Evaluate the role of minerals in plant nutrition and their deficiency symptoms. CO3: Interpret the role of enzymes in plant metabolism. CO4: Critically understand the light reactions and carbon

Subject	Year	Semester	Course	Title of the course	Course outcomes
					assimilation processes responsible for synthesis of food in plants. CO5: Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms. C06: Evaluate the physiological factors that regulate growth and development in plants. CO7: Examine the role of light on flowering and explain physiology of plants under stressconditions.
	III	**V**	Paper V	Cell biology and Genetics	CO1:Distinguish prokaryotic and eukaryotic cells and design the model of a cell. CO2: Explain the organization of a eukaryotic chromosome and the structure of geneticmaterial. CO3: Demonstrate techniques to observe the cell and its components under a microscope. CO4: Discuss the basics of Mendelian genetics, its variations and interpret inheritanceof traits in living beings. CO5: Elucidate the role of extra-chromosomal genetic material forinheritance ofcharacters. CO6: Evaluate the structure, function and regulation of genetic material.
			Paper VI	Medicinal Botany and Plant Ecology	On successful completion of this course, the students will be able to:

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO1: Understand the utility of plants as medicines and preparation of basic herbal medicine. CO2: Implement the idea of cultivation practices. CO3: Discuss the basic concepts of plant ecology and evaluate theeffects ofenvironmental and biotic factors on plant communities. CO4: Appraise various qualitative and quantitative parameters to study the populationand community ecology. CO5: Understand core concepts of Economic Botany and relatethem with the environment, populations, communities, andecosystems.
		VI	Paper VII	Economic Botany and Plant Biotechnology General Elective	On successful completion of this course, the students will be able to: CO1: Course familiarize studentswith the various varieties and cultivation practices of plantsused by humans for food,fibre, beverages and medicine. CO2: It emphasizesmodern techniques andapplications of plant sciences. CO3: Get the knowledge on rrecombinant DNA technology. CO4: Applications of Biotechnology in Plant, Animal, andHuman welfare. CO5: Learn the specific and non-specific methods of

Subject	Year	Semester	Course	Title of the course	Course outcomes
					genetransfer.
			Paper VIII A1	Cluster Elective Nursery and Gardening	On successful completion of this course, the students will be able to**:** CO1: The students will be able to perform soil and plant nutrients management activities, make compost and plant protection activities. CO2: Course exposes the students with the concepts of gardening and landscaping operations along with identification, propagation, cultivation, management and harvesting of ornamental plants. CO2: The students will be familiar with various gardens, perform garden development activities, maintain garden and garden plants. CO4: The students will be empowered with gardening techniques, Bonsai, land scaping, terrace garden, floriculture techniques, organic kitchen development etc which will help them as personal benefit and also provide self-employment. CO5: The students will perform communication and professionalism development activities and perform entrepreneurship development activities
			Paper VIII A2	Cluster Elective	On successful completion of this course, the students will be

Subject	Year	Semester	Course	Title of the course	Course outcomes
				Organic Farming and Sustainable Agriculture	able to: CO1: Initiative from Government for organic produce. CO2: The student will be able to explain the major aspects of agricultural practices andtraditions through time and throughout the world. CO3: Ability to explain definition, concept, importance and scope of organic farming in India. CO4: Propagation of the initiatives taken by govt. (Central/state), NGO and other organization for promotion of organic agriculture. CO5: Discussion on organic agriculture in relation to the choice of crop and their varieties, nutrient management, weed and plant-protection measures under organic mode, CO6: Familiarity with the certification process and standards of organic farming. CO7: Developing understanding of Indigenous Technology knowledge (ITK) for inputs used in organic farming, quality aspects, grading, packaging as well as handling of organic outputs.
			Paper VIII A3	Cluster Elective Crop cultivation Techniques & Economic Development	CO1: The student will be able to explain in general the relationships among culture,economics, politics, science, and agricultural development.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO2: A solid understanding of the cross-cultural interactions and exchange that linked theworld's people and facilitated agricultural development is also expected. CO3: Students will get acquainted with detailed practices and cultivation of fruit and vegetablecrops ; this will help them to enhance theproduction of horticulture crops using scientificmethods. CO4: The student will study and analyze the refereed-journal articles, texts, and practicesthat represent the perspectives of different societies and agricultural traditions.

Department of Zoology

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Zoology	**I**	**I**	Paper I	Animal Diversity – Non chordates	At the end of the course, the student will be able to: **CO1** Describe general taxonomic rules on animal classification **CO2** Classify Protozoa to Coelenterata with taxonomic keys **CO3** Classify Phylum Platy hemninthes to Annelida phylum using examples from parasitic adaptation and vermin composting **CO4** Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscans **CO5** Describe Echinodermata to Hemi chordata with suitable examples and larval stages in relation to the phylogeny
		II	Paper II	Animal Diversity - chordates	At the end of the course, the student will be able to; **CO1** Describe general taxonomic rules on animal classification of chordates **CO2** Classify Protochordata to Mammalia with taxonomic keys **CO3** Understand Mammals with specific structural adaptaions **CO4** Understand the significance of dentition and evolutionary significance **CO5** Understand the origin and evolutionary relationship of different phyla from Prochordata to mammalia.
	II	**III**	Paper III	Cytology, Genetics And Evolution	At the end of the course students will be able to: CO 1: Understand the structure of cell, Cell organelles

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 2: Explain the structure of Nucleus, Chromosomes CO 3: Learn the Mendal's laws of Inheritance, Interaction of Genes CO 4: Learn the sex Determination, Sex linked Inheritance, karyotyping CO 5; Understand the Theories of Evolution, Modern synthetic theory, Speciation and Isolation
		IV	Paper IV	Embryology, Physiology And Ecology	At the end of the course students will be able to CO 1: Understand the Gametogenesis, Fertilization, Types of Cleavage and eggs CO 2: Understand the various physiology of organ systems like Respiration, Circulation, Excretion CO 3: Understand the Muscular contraction, Nervous coordination, Hormones of reproduction and Endocrine glands CO 4: Understand the abiotic factors and nutrient cycles CO5: Learn Ecological succession, interactions and Population studies
	III	**V**	Paper V	Animal Biotechnology	At the end of the course students will be able to CO 1 Get knowledge of the Vectors and Restriction enzymes used in biotechnology CO 2 Describe the gene delivery mechanism and PCR technique CO 3 Acquire basic knowledge on media preparation and cell culture techniques CO 4 Understand the manipulation of reproduction with the application of biotechnology
			Paper VI	Animal Husbandry	At the end of the course students will be able to CO 1: understand different cattle breeds

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 2: learn about the management of dairy farming CO 3: know about poultry breeds, nutrition CO 4: know about poultry diseases CO 5: learn about aquaculture management
		VI	Paper VII	Immunogy	At the end of the course students will be able to CO 1 Compare and contrast humoral versus cell-mediated immune responses CO 2 Distinguish various cell types involved in immune responses and associated functions; CO 3 Distinguish and characterize antibody isotypes, development, and functions CO4 : Understand the role of cytokines in immunity and immune cell activation; CO5: Understand the significance the Major Histocompatibility Complex in terms of immune response and transplantation
			Paper VIII A1	Principles of Aquaculture	At the end of the course students will be able to CO 1.Understand the significance and history of Aquaculture fishery resources, CO 2: learn the types of culture systems and practices of Aquaculture CO 3: know the feed and seed resources, construction of fish pond CO 4: learn the management of major carp culture CO 5: learn the culture of ornamental fish, pearls and weed.
			Paper VIII A2	Aquaculture Management	At the end of the course students will be able to CO 1: understand breeding techniques, management of hatcheries CO 2:Estimate the water quality parameters CO 3: Learn feed management

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 4:Learn disease management CO 5: know the fishery extension and marketing
			Paper VIII A3	Clinical Technology Self Study	At the end of the course students will be able to CO 1: understand the concepts of haematology CO 2: know about the cancer, diabetes, Cholesterol CO 3: learn the immunological reactions CO 4: learn about intestinal or blood parasites CO 5: learn about viral and bacterial diseases

Department of Nutrition and Dietetics

Course Outcomes 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
Nutrition	**I**	**I**	**Paper I**	**Principles of Nutrition**	**At the end of the course,the student will be able to;** **CO 1:** Learns basic concepts of nutrition **CO 2:** Identifies various vitamins and minerals **CO 3:** Knows energy value of foods and energy requirements **CO 4:** Understands water balance **CO 5:** Relates nutrients inter-relationship
		II	**Paper II**	**Food Science and Chemistry**	**At the end of the course,the student will be able to;** **CO 1:** Understands cereals, millets and sugars **CO 2:** Learns about pulses, legumes, nuts and oil seeds **CO 3:** Relates nutritional aspects of vegetables and fruits **CO 4:** Knows various meat and milk products **CO 5:** Identifies spices and condiments
	II	**III**	**Paper III**	**General Nutrition**	**At the end of the course,the student will be able to;** **CO 1:** Learns energy metabolism and meal planning **CO 2:** Knows adulthood, pregnancy and lactation nutritional requirements **CO 3:** Understands nutritional problems of infancy and preschool children **CO 4:** Relates the problems of school going children and adolescents **CO 5:** Identifies changes in old age.
		IV	**Paper IV**	**Diet Therapy**	**At the end of the course,the student will be able to;** **CO 1:** Knows the roles of dietitian and understands therapeutic diets. **CO 2:** Relates nutrition in metabolic disorders and CVDs **CO 3:** Relates nutrition in GID and liver disorders **CO 4:** Understands nutrition in renal disorders **CO 5:** Identifies stress conditions and relates nutrition
	III	**V**	**Paper V**	**Food processing and**	**At the end of the course,the student will be able to;**

Subject	Year	Semester	Course	Title of the course	Course outcomes
				preservation	**CO 1:** Understands basic concepts of food processing and preservation **CO 2:** Learns processing of pulses **CO 3:** Knows various foods from meat, fish, fruits and vegetables **CO 4:** Relates fermented foods and its nutrition **CO 5:** Identifies RTE, RTU foods
				Food analysis and Instrumentation(add on course)	**At the end of the course,the student will be able to;** **CO 1:** Learns basic concepts of food chemistry **CO 2:** Learns general principles of sampling techniques **CO 3:** Understands carbohydrates **CO 4:** Understands total protein **CO 5:** Relates the principles and applications of instrumentation in food analysis
			Paper VI	**Food Service Management**	**At the end of the course,the student will be able to;** **CO 1:** Knows the basic concepts of food service management in various organizations. **CO 2**: Understands types and techniques of food services **CO 3:** Learns the equipment and their purchase used in food service system **CO 4:** Relates principles and tools in managing the food service system **CO 5:** Manages spaces in kitchen and storage unit**s**
			Common Project		
		VI	**Paper VII**	**Food Quality and Safety**	**At the end of the course,the student will be able to;** **CO 1:** Learns basic concept of food quality control and safety **CO 2:** Understands quality assurance and specifications **CO 3:** Identifies types of food additives **CO 4:** Relates food laws in food quality and safety **CO 5:** Learns food packaging materials and their properties
			Paper VIII A1	**Nutritional Biochemistry**	**At the end of the course,the student will be able to;** **CO 1:** Learns metabolism of carbohydrates

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 2: Learns metabolism of fats and fatty acids **CO 3:** Learns metabolism of proteins and amino acids **CO 4:** Learns metabolism of nucleic acids **CO 5:** Understands enzymes and their mechanism of actions
			Paper VIII A2	**Food Microbiology**	**At the end of the course,the student will be able to;** **CO 1:** Learns about common microbes present in foods **CO 2:** Understands water and food borne diseases **CO 3:** Identifies common microbes in food spoilage **CO 4:** Relates food preservation techniques in food spoilage **CO 5:** Understands food adulteration
			Paper VIII A3	**Community Nutrition**	**At the end of the course,the student will be able to;** **CO 1:** Learns the methods of nutritional assessment **CO 2:** Understands basics of nutrition education **CO 3:** Knows about intervention programme in nutrition **CO 4:** Relates the role of agencies in combating malnutrition **CO 5:** Relates effects of food fads and fallacies on nutrition
			Paper VIII B1	**Research Methodology**	**At the end of the course,the student will be able to;** **CO 1:** Learns objectives and motivation in research **CO 2:** Understands research problem **CO 3:** Learns different experimental designs in research **CO 4:** Relates data processing and statistical analysis to research methodology **CO 5:** Learns how to write report of research
			Paper VIII B2	**Nutrition in Fitness**	**At the end of the course,the student will be able to;** **CO 1:** Learns basic concepts of fitness and training **CO 2:** Understands diets and exercises in fitness **CO 3:** Relates the effect of exercises on body metabolism **CO 4:** Learns water and electrolyte balance in the body **CO 5:** Formulates dietary guidelines for health and fitness

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Paper VIII B3	**Community Nutrition**	**At the end of the course,the student will be able to;** **CO 1:** Learns the methods of nutritional assessment **CO 2:** Understands basics of nutrition education **CO 3:** Knows about intervention programme in nutrition **CO 4:** Relates the role of agencies in combating malnutrition **CO 5:** Relates effects of food fads and fallacies on nutrition

Department of Bio-Chemistry

Course outcomes- 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
Bio-Chemitsry	**I**	**I**	Paper I	Biomolecules	At the end of the course, the student will be able to: CO 1: This course enable the students to get knowledge and understanding of the molecular machinery of living cells; CO2. Acquire knowledge and understanding of the principles that govern the structures of macromolecules and their participation in molecular recognition; CO3:This course will enable the student to understand the importance of biomolecules in living organisms and effects of their alterations in diseases occurring in plants, animals and humans. CO 4:The practical will give the expertise to the student for analysis of any biological or non-biological sample for identification of its chemical composition. CO5: Students will understand the methods of determination of amino acid and nucleotide sequence of proteins and DNA respectively.
		II	Paper II	NUCLEIC ACIDS AND BIO CHEMICAL TECHNIQUES	At the end of the course, the student will be able to; CO1. The student will learn the various analytical techniques and their applications in separation and isolation of cells and tissues for studying their functional abnormalities CO2. The practicals will provide the expertise to the student for quantification of electrolytes and other metal ions, hormones and identification of bacteria. CO3. The expertise gained by the student in this course can be useful in food industries, pharma industries, clinical and microbiological labs.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO4:Students will be exposed to various chromatographic techniques and their applications in isolation of different biological molecules. CO5: In addition to understanding the applications of centrifugation and chromatography in biological investigations, they will gain insight into purification of proteins by affinity chromatography using epitope tags such as histidine tag, GST tag, Flag tag etc.

Department of Microbiology

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Microbiology	**I**	**I**	**Paper I**	**Introduction to Microbiology and Microbial Diversity**	At the end of the course, the student will be able to: CO 1: Understand terminologyrelatingtothemicrobiology and gain knowledge about development of branch microbiology and its place in living world. CO 2:Students will know the structure of and properties of prokaryotic microorganisms CO 3: Students will know the structure of and properties of eukaryotic microorganisms CO 4: Gain knowledge on cultivation of bacteria on media. CO5: Demonstrate appropriate br3laboratory skill and techniques related to isolation, staining,identificationandcontrolofmicroorganisms.
		II	**Paper II**	**Enzymology and Microbial Metabolism**	At the end of the course, the student will be able to; CO 1: To understand the basics of Enzymes and their classification and functions.biomolecularsynthesisandcontrolwill helpinfurtherstudy CO 2: Explain the basic nutritional types of microorganisms CO 3:Provide practical knowledge knowledge on growth and

Subject	Year	Semester	Course	Title of the course	Course outcomes
					measurement of growth. CO 4:Understand the concept of metabolism in bacteria. CO 5:The student will understand the different types of metabolic strategies and mechanism of microbial life.
	II	**III**	**Paper III**	**Microbial Genetics and Molecular Biology**	At the end of the course students will be able to: CO 1: Understand the concepts of Nucleic acids and their isolation techniques CO 2: Explain the mechanism of Replication of DNA . CO 3: Study the concepts of gene expression transcription and translation . CO 4: Gain knowledge on mutations and gene transfer mechanisms . CO 5: Understand the basics og gene cloning ,also gain practical skill on gene cloning .
		IV	**Paper IV**	**Immunology & Medical Microbiology**	At the end of the course students will be able to CO 1:Understand the concept of Immunity,cells and organs involved in providing immunity CO 2:Gain knowledge on structure and properties of ofantigenand antibody also develop practical skill in Ag-Ab reactions

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 3:Develop knowledge on disease causing organisms CO 4:Acquie skills in identification of pathogen - Diagnosis. CO 5:Acquire skill in antimicrobial susceptibility test.
	III	**V**	**Paper V**	**Environmental and Agricultural Microbiology**	At the end of the course students will be able to CO1:The students will be able to identify the types of plant diseases affecting crops . CO 2: They will be able to isolate PGPB and formulate bioinoculant. CO 3: Understand the properties of different types of soil and interaction of microbes with plants, insects and microbes itself. CO 4. Insight knowledge on nitrogen fixing organisms, their cultivation on usage for biofertilizer and biopestticides. CO 5: To gain practical knowledge on water analysis,air sampling techniques
			Paper VI	**Food and Industrial Microbiology**	At the end of the course students will be able to CO1. Students will gain knowledge of significance and activities of microorganisms in food. CO 2. Students will also study interaction between microorganisms and factors influencing their growth and survival.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 3:Know about principles of industrial microbiology and develop skills in screening techniques CO 4:Know about design of fermentor and fermentation types CO 5:Gain knowledge on fermentative productions of different products
		VI	**Paper VII**	**Microbial Diagnostics in Health Clinics**	At the end of the course students will be able to CO 1:Gain practical skill in identification of pathogen. CO 2:Also gain knowledge in specimen collection. CO 3: Gain skill in staining techniques and media preparation as a part of identification of pathogen. CO 4: Acquire knowledge on identification of pathogen using serological methods. CO 5: Develop skill in testing of antibiotic sensitivity in bacteria
			Paper VIII A1	**A1- Biofertilizers and Biopesticides**	At the end of the course students will be able to CO 1 :Ability to understand formulation and large scale industrial production of biofertilizers. CO 2:To gain knowledge on ecofriendly agricultural inputs. CO 3To acquire knowledge on cultivation of PSB. CO 4:Develop skill in production of VAM .

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 5: Explain the application of biofertilizers.
			Paper VIII A2	**A2- Advanced Cell Biology**	At the end of the course students will be able to CO1: Understand cell theory, cell organelles, and the role of the cytoskeleton. CO 2: Students will comprehend the structure and functions of the cell membrane, nuclear envelope, and nucleolus,. .CO 3: Gain knowledge on the cell cycle,. and its regulation CO 4: As well as gain basic knowledge of cancer development. C0 5:Develop skill in techniques in cell biology.
			Paper VIII A3	**A3- Mushroom technology**	At the end of the course students will be able to: CO 1: Students study the morphology and types of Mushrooms... CO 2: They are aware of the identification of edible and poisonous Mushrooms. CO 3: Students will be able produce spawn on their own. CO 4: Learned the prospects and scope of mushroom cultivation in small scale industry.

Department of Home Science

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Home Science	**I**	**I**	**HSC 101**	**Family Housing**	At the end of the course students will be able to CO1:Understand importance and functions of a house CO2: Gain knowledge on house plans for different income groups CO3:UnderstandBuilding Materials and Finishes
			HSC 102	**Food Science and Microbiology**	At the end of the course students will be able to CO1**:** Planning and calculating nutritive values for the foods and recipes. CO2: Identification of signs and symptoms of different food borne diseases. CO3: Practical knowledge on availability of seasonal and other foods by doing market survey. CO4: Listing out the common foods and their names in scientific and local languages.
			HSC 103	**Human Physiology**	At the end of the course students will be able to CO1: Have an enhanced knowledge and appreciation of mammalian physiology; CO2: Understand the functions of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems; CO3: Understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail; CO4: Be able to perform, analyse and report on experiments and observations in physiology
		II	**HSC 201**	**Interior Decoration**	At the end of the course the students will be able to: CO!: Remember and explain in a systematic way the difference

Subject	Year	Semester	Course	Title of the course	Course outcomes
					between interior design and decoration CO2: Understand and use the elements and principles to create beautiful designs &interiors CO3: Critically explain the nuances of Indian interior design work in prescribed areas under co-curricularactivity CO4: Application of the principles and elements in creating beautifullandscape
			HSC 202	**Nutritional Bio-Chemistry**	At the end of the course students will be able to CO1**:** Understanding the concepts of nutrition and food and its relation to health. CO2: Acquiring knowledge about macro and micro nutrients and their functions. CO3: Knowing the consequences of deficiency of taking nutrients. CO4: Understanding importance of non-nutrients in human nutrition
			HSC 203	**General Psychology**	At the end of the course students will be able to CO1: Develop a working knowledge of Psychological contents, areas and applications of psychology. CO2: Develop a base in cognitive psychology with the help of relevant examples of everyday life. CO3: Comprehend and analyse situations in real life appropriately and enable others to exercise in the same way. CO4: Appreciate and apply various theories of learning in the practical world.
	II	**III**	**HSC 301**	**Fiber Science**	At the end of the course students will be able to CO1: Know the importance of the textiles in human life and also the textile terminology and types of fibres. CO2: Identification of different fibres like plant fibres, animal

Subject	Year	Semester	Course	Title of the course	Course outcomes
					fibres based on properties. CO3: Gains knowledge on manufacturing of different textile fibers. CO4: Understands the method of Spinning and process of yarn construction. CO5: Judge the differences between simple and novelty yarns.
			HSC 302	**Normal Nutrition**	At the end of the course students will be able to CO1: Understanding the nutritional problems and nutrition requirements of the community. CO2: Acquiring knowledge about RDA, food groups, steps in planning a diet. CO3: Planning of nutrition diets according to RDA for different age groups CO4: Assessment of nutritional status using ABCD techniques.
			HSC 303	**Human Development-I**	At the end of the course students will be able to CO1: Remember and explain in a systematic way about child-development, and Developmental tasks at various stages of child development. CO2: Understand the stages of pregnancy and birth process. CO3: Critically explains and judges problems of adolescence during each sub stage and coping up strategies.
		IV	**HSC 401**	**Textile Design**	At the end of the course students will be able to CO1: Explain the Principles of design, elements, classification and its importance in textile design. CO2: Understand and use **d**ifferent types of fibers and fabrics. CO3: Analyse the structure of loom and classification of weaves. CO4: Estimation of designs suitable for dyeing and printing, dye paste requirement, and also estimation of suitability of material.
			HSC 4023	**Therapeutic Nutrition**	At the end of the course students will be able to CO1: Understands the meaning, objectives and purpose of therapeutic nutrition. CO2: Understands about modification of normal diets to

Subject	Year	Semester	Course	Title of the course	Course outcomes
					therapeutic diets. CO3: Planning and preparation of diets for different diseases like Obesity, Cardiovascular, Renal, Diabetes mellitus etc, CO4:Preparation of diets for the patients in acceptable manner by applying their own choice of foods
			HSC 403	**Human Development-II**	At the end of the course students will be able to CO1: Remember and explain in a systematic way about child-development, and Developmental tasks at various stages of child development. CO2: Critically explains and judges problems of adolescence during each sub stage and coping up strategies. CO3: Familiarise with problems of elderly through case studies and institutional visits.
	III	**V**	**HSC 501**	**Resource Management**	At the end of the course students will be able to CO1: Understands process of Management – Planning, supervising, organizing and evaluation. CO2: Critically explains, judges and solves Management process of different resources – Time, Money and Energy. CO3: Working in out of prescribed area under a co-curricular activity CO4: Acquire Work simplification techniques in family activity management. CO5: Observing Budget Plans of families from different income groups-Low, Middle and High income.
			HSC 502	**Apparel Design**	At the end of the course students will be able to CO1: Recall the different parts of sewing machine and its function. CO2: Understands the use of sewing machine and ways to stitch fabrics. CO3: Learn to identify the defects and to know the adjustments of sewing machine. CO4: Analyse the estimation of fabric for different garments. CO5: Evaluate the stitching and fitting of the garments.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			HSC 503	**Family Dynamics**	At the end of the course students will be able to CO1: Knowledge on pubertal changes, adolescence and appreciate value of marriage in Indian families CO2:Understand the need for planning and preparation of parenthood. CO3: Understand the importance of adjustments to strengthen marital and family relationships
			HSC 504	**Home Science Extension**	At the end of the course students will be able to CO1: Remember and explain in a systematic way the meaning, scope and concept of Home Science Extension. CO2: Understand the role Extension worker in community CO3:Understand the principles, steps in Teaching and Learning process CO4: Critically explain and judge of an extension worker CO5:Know the importance of Teaching Methods and Teaching Aids in Communication Process. CO6: Know planning, preparation of Audio-Visual Aids
			HSC 505	**Nutrition for Fitness**	At the end of the course students will be able to CO1: To understand the fundamentals of nutrition CO2: To get acquainted with the role of skeletal system in exercise CO3: To gain an understanding of the concept of physical fitness, types and their relationship with health CO4: To learn about the importance of nutrients in enhancing physical fitness CO5: To gain knowledge regarding the role of physical fitness in various facets of health.
			HSC 506	**Disaster Management**	At the end of the course students will be able to CO1: Understand the nature, cause and effects of disasters CO2:Comprehend the importance of Disaster Management and the need of awareness CO3: Acquire knowledge on disaster preparedness, recovery remedial measures and personal precautions CO4: Volunteer in pre and post disaster management service

Subject	Year	Semester	Course	Title of the course	Course outcomes
					activities
		VI	**HSC 601**	**Home Economics**	At the end of the course students will be able to CO1: Remember and explain in a systematic way the Rights of the Consumer and the Legal provisions for the safety of theConsumer. CO2: Understand and Use the provisions in the Consumer Protection Act to ensure safety and fairness for self and othersalso. CO3: Critically explain consumer buying behaviour and consumerproblems. CO4: Analyse the consumer buyinghabits. CO5: Evaluate the types of markets, characteristics, functions and channels ofdistribution.
			HSC 602	**Family Attire and Domestics**	At the end of the course students will be able to CO1: Identify and use embroidery tools following safetyprecautions. CO2: Meticulous use stitches and trimmings. Translate design ideas ontofabric. CO3: Use the Indian Embroidery, painting and printing for developingproducts CO4: Access, analyse, evaluate and use information from a variety of sources, work collaboratively withothers to achieve individual and collectivegoals.
			HSC 603	**Food Service Management**	At the end of the course students will be able to CO1: Understand the principles, functions and tools of food servicemanagement.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO2: Implement the skills in menu planning, production andservice. CO3: Evaluate menus and articulate their suitability for modifieddiets. CO4: Plan activities to support delivery of quality nutrition and food standards within a Food Service Institute.
			HSC 604	**Crèche and Pre-School Management**	At the end of the course students will be able to CO1: Understand the concepts and importance of apreschool CO2: Learn the resource management, physical structure and facilities of an ECEcentre CO3: Describe the quality of an ideal pre-schoolteacher. CO4: Plan a programme for preschool children based on themeappropriate CO5: Plan a programme based on developmentally appropriateprogrammes
			HSC 605	**Extension Education and Community Development**	At the end of the course students will be able to CO1: Know about Programme Planning in organising community development programmes CO2: Understand the objectives and services rendered by Governmental and Non-Governmental agencies to the community. CO3: Planning, Preparation and execution of lessons in the classrooms and community. CO4: Conducting project work on community development programmes.
			HSC 606	**Sociology**	At the end of the course students will be able to CO1: Able to explain social facts and society relates concepts.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO2: Define and explain social concepts, social facts and student will be able to express empirical observations with sociology concepts. CO3: Identify main characteristics of social institutions. CO4: Provides a foundation for the other more derailed and specialized course in sociology.

Department of Computer Science (B.Com CS)

Course Outcomes- 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
Computer Science	**I**	**I**	Paper I	Computer Fundamentals & Photoshop	At the end of the course, the student will be able to: CO 1: To explore basic knowledge on computers and Photoshop's beauty from the practical to the painterly artistic and to understand how Photoshop will help you create your own successful images.
		II	Paper II	Programming In 'C'	At the end of the course, the student will be able to: CO 1: The students can be able to develop programs using the basic elements like control statements, Arrays and Strings. CO 2: The students can solve the memory access problems by using pointers.
	II	**III**	Paper III	Web Technologies-I	At the end of the course students will be able to: CO 1: The student should able to Master working successfully on the design and development of different web applications.
		IV	Paper IV	Web Technologies-II	At the end of the course students will be able to: CO 1: The student should able to Master working successfully on the design of Web applications with visual elements. And also student get an idea on PHP which is used as server side scripting language.
	III	**V**	Paper V	Data Base Management System	At the end of the course students will be able to: CO 1: The student should be able to Master working

Subject	Year	Semester	Course	Title of the course	Course outcomes
					successfully on the design and development of a database application system.
			Paper VI	Computerised Accounting Through Tally - I	At the end of the course students will be able to: CO 1: After finishing the course, the student will be able to create a company, ledgers and how to enter vouchers in tally. And learn how to get the reports and printing.
		VI	Paper VIII A1	Computerised Accounting Through Tally - II	At the end of the course students will be able to: CO 1: After finishing the course, the student will be able to create a company, ledgers and how to enter vouchers in tally. And learn how to get the reports and printing.
			Paper VIII A2	VB.Net Programming	At the end of the course students will be able to: CO 1: The student should able to Master working successfully on the design and development of dynamic web pages.
			Paper VIII A3	Project Work	At the end of the course students will be able to: CO 1:To make the students efficient in office automation with computers and computer software applications. CO 2: To facilitate the students to join professional courses. CO 3:To develop subject skill within various discipline of commerce, business, accounting, economics, finance, auditing and marketing with soft skills in Tally and ERP, E-commerce. CO 4:Helps to acquire entrepreneurship.

Department of Computer Science (B.ScComp.Sc)

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Computer science	**I**	**I**	Paper I	Computer Fundamentals &Photoshop	At the end of the course, the student will be able to: CO 1:To explore basic knowledge on computers and Photoshop's beauty from the practical to the painterly artistic and to understand how Photoshop will help you create your own successfulimages.
		II	Paper II	Programming In C	At the end of the course, the student will be able to; CO 1:The students can be able to develop programs using the basic elements like controlstatements, Arrays and Strings. CO 2:The students can solve the memory access problems by using pointers CO 3:The students will become familiar with the fundamentals and acquire programming skillsin the Java language.
	II	**III**	Paper III	Object Oriented Programming Using Java	At the end of the course students will be able to: CO 1:The student can be able to develop java programs using oop concepts such as inheritanceand polymorphism. CO 2:The student can develop efficient Java applets and applications using OOP concept CO 3:The students will become familiar with the fundamentals and acquire programming skillsin the Java language.
		IV	Paper IV	Data Structures	At the end of the course students will be able to CO 1: The student should be able to choose an appropriate data structure for a particular problem. CO 2: The students can sort the data using different sorting techniques.

Subject	Year	Semester	Course	Title of the course	Course outcomes
	III	**V**	Paper V	Database Management System	At the end of the course students will be able to CO 1: The student should be able to Master working successfully on the design and development of adatabase application system.
			Paper VI	Software Engineering	At the end of the course students will be able to CO 1: The student should be able to develop and document a minor project by using the principles of Object Oriented Software Engineering.
			Paper VII	Operating Systems	The students should be able to Simulate an Operating System by including features like CO 1: Process Management CO 2: Memory Managemment CO 3: I/O interface Management CO 4: File System Management.
			Paper VIII A1	Distributed Systems	At the end of the course students will be able to CO 1 : Understand the design principles in distributed systems and the architectures for distributed systems CO 2: Apply various distributed algorithms related to clock synchronization, concurrency control, deadlock detection, load balancing, voting etc. CO 3: Analyze fault tolerance and recovery in distributed systems and algorithms for the same CO 4:Implement different distributed algorithms over current distributed platforms
			Paper VIII A2	Cloud Computing	At the end of the course students will be able to CO 1: Explain the core concepts of the cloud computing paradigm: how and why this paradigm shift came about, the characteristics, advantages and challenges brought about by the various models and services in cloud computing CO 2:Apply the fundamental concepts in datacenters to understand the tradeoffs in power, efficiency and cost CO 3: Identify resource management fundamentals, i.e.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					resource abstraction, sharing and sandboxing and outline their role in managing infrastructure in cloud computing.
		VI	Paper VIII A3	Project	At the end of the course students will be able to: CO 1: Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution. CO2:To prepare students to undertake careers involving problem solving using computer science and technologies CO 3: Develop ability to pursue advanced studies and research in computer science CO 4: To produce entrepreneurs who can innovate and develop software product.

Department of Computer Science (BBA)

Course outcomes- 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
Computer science	**I**	**I**	Paper I	It for managers	At the end of the course, the student will be able to: CO1:Students are capable of doing documentation with MS Office word. CO 2:The students can perform analysis and calculations exactly with pictorial representation using MS Excel. CO 3:The students feel comfortable in designing slides creatively and present a power point presentation of particular topic using MS PowerPoint.
		II	Paper II	Business analysis using Ms-Excel	At the end of the course, the student will be able to; CO 1:Microsoft Excel tool which helps the user to perform complex and large calculations, data processing on the huge amount of data, performing data analysis, betterrepresentation of data, etc. CO2:Advanced Excel functions allow business organizations to increase their productivity and performance by easily sorting and filtering relevant information and using it forbetter decision making.
	II	**III**	Paper III	Fundamentals of Web Technologies	At the end of the course students will be able to: CO 1:Students are able to develop an ability to design and implement static and dynamic website.. CO2:The student should able to Master working successfully on the design and developmentof different web applications.
		IV	Paper IV	Advanced web technologies	At the end of the course students will be able to CO 1: The student should able to Master working successfully on the design of Webapplications with visual elements. And also student get an idea on PHP which is

Subject	Year	Semester	Course	Title of the course	Course outcomes
					used asserver side scripting language. CO2: Learn web-based application is any application that uses a website as the interface orfront-end. CO 3:Users can easily access the application from any computer connected to the Internetusing a standard browser.
	III	**V**	Paper V	Photoshop and Internet Applications	At the end of the course students will be able to CO1:To explore basic knowledge on computers and Photoshop's beauty from the practical to the painterly artistic and to understand how Photoshop will help youcreate your own successful images.. CO 2: They can grow individually by having their own business by creating flex withPhotoshop. CO 3: Photoshop remains as a mail stone for the further steps in to animations. CO 4: Learn web Applications deliver many business benefits compared to office basedsolutions. CO5:Students are able to learn Communication with anyone in the world.
		VI	Paper VI	Computerized accounting through Tally	At the end of the course students will be able to CO 1: Tally provides simple-to-use accounting features that enables to record businesstransactions easily and quickly. CO 2: One can record transactions necessary for your business by creating and maintainingmasters, vouchers, and generating reports. CO 3: It also allows you to perform and manage all of the major accounting operations in your business.

Department of Computer Science

Web Technology and Multimedia -Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
BVOC(WTM)	**I**	**I**		C programming	At the end of the course, the student will be able to: CO 1: Design an algorithmic solution for a given problem. CO 2: Write a maintainable C program for a given algorithm. CO 3: Trace the given C program manually. CO 4: Write C program for simple applications of real life using structures and files
				Fundamentals of Web Technology	At the end of the course, the student will be able to: CO 1: Basic HTML tags. CO 2: They can able to develop a web application using java script. CO 3: Students will gain the skills and project-based experience needed for creating web application.
				Fundamtals of Multimedia and Basic Photoshop	At the end of the course, the student will be able to: CO 1: The major functions of Photoshop CS4. CO 2: Work and manipulate images, CO 3: Resize and Crop images. CO 4: Work with basic selections. CO 5: Create, edit, delete and manage Layers. Paint, Retouch photoS, Correct Color.
				Illustrator	At the end of the course, the student will be able to: CO 1: Explores the power of Adobe Illustrator CO 2: Working with documents. CO 3: Usage of Illustrator effects and symbols

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 4: Drawing and transforming objects. CO 5: Painting techniques in Illustrator. CO 6: Logo Designing CO 7: By the end of the course you'll be ready to apply your newly acquired skills to your future projects.
				Fundamentals of computers and internet concepts	At the end of the course, the student will be able to: CO 1: Identifying the parts of the computer system. CO 2: Functioning of computer components. CO 3: The process of problem solving in computer CO 4: Algorithmic solution for a problem. Role of Operating system in computer system . CO 5: Different Networks CO 6: Internet CO 7: Usage of Internet
		II		Digital Painting in photoshop	At the end of the course, the student will be able to; CO 1: Using drawing tablet effectively CO 2: Demonstrate how to utilize the tools within Photoshop CO 3: Identify the steps required to create a concept project CO 4: Apply an understanding of Composition, Perspective, and the Anatomy of Light CO 5: Define the characteristics of Perspective CO 6: Apply artistic direction from their instructor and peers to their own work CO 7: Objectively articulate design decisions to peers and instructor during critique CO 8: Create concept pieces that show ease and familiarity with the use of the software and hardware. CO 9: Select supporting examples of work as inspiration to design work. CO 10: Critically analyze their own creative work and

Subject	Year	Semester	Course	Title of the course	Course outcomes
					the work of others.
				PhpProgramming -I	At the end of the course, the student will be able to; CO 1: Understand what is PHP Programming CO 2: The Syntax and rules for writing basic CO 3: PHP Programming CO 4: Arrays and Objects in PHP
				Css And Javascript	At the end of the course, the student will be able to; CO 1: Know different Style sheets CO 2: How to apply styles to the web pages without disturbing its content CO 3: Use of Dynamic HTML in detail
				Ms office	At the end of the course, the student will be able to; CO 1: Create documents using MS Word CO 2: Develop Style sheets and Lookup tables. CO 3: Create slides and animation effect for presentation CO 4: Create database and storing data in database CO 5: Select different tables basing on the query CO 6: Create outlook and basic usage of MS Outlook
				Boostrab and web builders	At the end of the course students will be able to: CO 1: To build and experiment websites CO 2: Get Knowledge of bootstrap built-in components design, grids, fluid grids, and responsive layout. CO 3: Understand global Bootstrap CSS classes for images, typography, tables, grids, forms, buttons, and more CO 4: Understand the reusable bootstrap components including icons, dropdowns, alerts nav bars, breadcrumbs, popovers, and many more. CO 5: Utilize the bootstrap java script Plugins to

Subject	Year	Semester	Course	Title of the course	Course outcomes
	II	**III**			develop modern web pages. CO 6: Customize Bootstrap's elements with fewer variables and jQuery plugins to build our version.
				BG Art concepts	At the end of the course students will be able to: CO 1: Some different functions for art and find art in different places. CO 2: Explain the properties of common world Wood materials CO 3: Create Old Concrete, Flooring, and Carpeting. CO 4: Create Sand Texturing, Brick Texturing, Floor Texturing CO 5: Create Different types of Wall Textures in New Interior Models
				3Ds max modelling	At the end of the course students will be able to: CO 1: Creating 3D Models like Interiors &Exteriors CO 2: car models, Indoor and Outdoor Locations CO 3: Creating props' and different Objects which we are using in daily life.
				3Ds max texturing and lighting	At the end of the course students will be able to: CO 1: Using the material editor & the material CO 2: explorer, creating & applying standard materials, adding material details with maps CO 3: creating compound materials and material modifiers, unwrapping UVs & mapping texture.
				Phpprogramming II	At the end of the course students will be able to: CO 1: String functions CO 2: Printf, scanf functions CO 3: Different date and time functions CO 4; Trimming functions CO 5: How to connect our PHP Programming to the database

Subject	Year	Semester	Course	Title of the course	Course outcomes
				Webphotoshop	At the end of the course students will be able to: CO 1: Creating different Website Layout Designing, Social Website Layout Design CO 2: Official Website Layout Design, creating buttons , menus, shadings image framing.
		IV		Mini Project	At the end of the course students will be able to CO 1: Students will go to the companies for doing their Internships. With this they will learn the real application of their work (softwares) and they will do one real project. CO 2: They will learn how an industry crack a project. They will also learn new Plug Ins which the industries are using.
				Maya Modelling	At the end of the course students will be able to CO 1: Character modeling design, visual art principles, tools and extension through the pipeline. CO 2: The project starts with verbal representations by completing characterization profile followed by 2D drawings of the character design. CO 3: Students will apply the professional practices taught in class to digitally sculpt their own characters in 3D using MAYA. Each student is responsible for their own model while working within a group of 3-4 peers. CO 4: Together each member will design and create a character that fits one unified art direction as agreed on by its members (the group).
				Maya Texturing and lighting	At the end of the course students will be able to CO 1: Exploring Types of Materials ,Understanding Materials Attributes

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 2: Using the Hyper shade Window Texturing, Types of Textures, UV Texturing Mapping, Shading and Texturing, Material Assigning, Exploring the Types of Lighting CO 3: Creating Lighting Effects, Understanding Shadows, Understanding Mental Ray, Exploring Mental Ray Attributes CO 4: Exploring Types of Cameras, Working with Cameras, Understanding Cameras Attribute, Mental Ray Rendering, Rendering a Scene CO 5: Working with Rendering Layers, Exploring Render Nodes.
				SQL server	At the end of the course students will be able to CO 1: What is database CO 2: Use of database CO 3: Creation of database CO 4: Knowledge on Queries CO 5: Query solving CO 6: Transaction Recovery
				Adobe Flash	At the end of the course students will be able to CO 1: Simple animation CO 2: Application of Adobe Flash CO 3: Usage of Flash CO 4: Combining Flash animations into single project CO 5: Adding sound to their animation
		V		photography	At the end of the course students will be able to CO 1:What is Photography CO 2: Carrier opportunities CO 3: Camera Features CO 4: DSLR camera CO 5: Identifying the object focal length CO 6: Techniques in Photography

Subject	Year	Semester	Course	Title of the course	Course outcomes
				Lab training project	At the end of the course students will be able to CO 1: This helps students in applying the knowledge which they have learned in a project. CO 2: So they will know the combing of works into a project. CO 3: They will model the project by using clay techniques.
				Programming through java	At the end of the course students will be able to CO 1: What is Java Programming CO 2: Why it is used CO 3: Programming techniques in Java CO 4: Security in Java by Access Specifiers. CO 5: Exception Handling CO 6: Dividing the program into simpler parts Thread Concept
				Z brush modelling	At the end of the course students will be able to CO 1: Z Brush is the 3D industry's standard digital sculpting application. Use customizable brushes to shape, texture, and paint virtual clay, while getting instant feedback. Work with the same tools used by film studios, game developers and artists the world over. CO 2: Dynamesh is Z Brush's digital clay. It rebuilds the topology of your model as you sculpt, creating a smooth, even surface for you to add fine details. Z Brush bridges the gap between 2D and 3D. CO 3: In this students will create different models using clay tools etc.
	III			Z brush Texturing	At the end of the course students will be able to CO 1: In Z Brush Texturing we give texturing to a model done in Z **B**rush and give detailing to the objects using alpha and stroke

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 2: We can give colors CO 3: By usingdynamesh students learn to create how to soften the object CO 4: By using different brushes according to the model students will learn to give the texture detail in more realistic way. CO 5: They also learn how to import the model done in maya into the Z Brush to give particular detailing and textures to the model.
		VI		Film Making	At the end of the course students will be able to CO 1: The techniques in Film Making, CO 2: How to select a story CO 3: How to write the story script CO 4: How to do shooting CO 5: How to act in a film
				Java servlets	At the end of the course students will be able to CO 1: What is Servlets CO 2: Usage of Servlets CO 3: Combining Java Program to a database with servlets. CO 4: Creating forms in java and storing the data in database.
				After effects video and audio editing	At the end of the course students will be able to CO 1: The basics of creating projects, compositions, and layers,Importing footage, including video, audio, and still images CO 2: Creating special effects using the Effects menu,Creating animation for shapes, objects, and layers CO 3: Adding and animating text ,Drawing shapes ,Animating shapes,Creating and using masks and track mattes

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 4: Working in 3D Using the puppet tools to create animated characters and effects CO 5: Extracting and removing objects from layers, Exporting to video
				Major Project	At the end of the course students will be able to CO 1: Students will go to the companies for doing their Internships. With this they will learn the real application of their work (softwares) and they will do one real project. CO 2: They will learn how an industry crack a project. They will also learn new Plug Ins which the industries are using.

B.VOC-Clinical and Aqua Lab Technology

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
CALT	**I**	**I**	Paper I	Biology of Fish	At the end of the course, the student will be able to: CO1 Explain the General characters of Fishes and Classification CO2 Understand the anatomy of bony fish CO3 Understand Fish nutrition CO4 Describe fish scales CO5 Understand general characters of crab, Lobester
		II	Paper II	Seed Production Technology	At the end of the course, the student will be able to; CO1 Learn the importance of Fish seed CO2 Understand the fish resources CO3 Describe Fish hatchery CO4 Understand Fish breeding CO5 Explain cryopreservation
	II	**III**	Paper III	Aquatic Ecology & Toxicology	At the end of the course students will be able to: CO 1: Understand pond ecosystem CO 2: Explain planktonic organisms CO 3: Estimation of water paramers like DO, Ammonia CO 4: Estimation of Water parameters like Carbonates, bicarbonates CO 5; Understand BOD treatment
		IV	Paper IV	Aquaculture Management	At the end of the course students will be able to CO 1: Understand Site eclection criteria CO 2: learn about pond mangement CO 3: Learn crustacean and molluscan Fisheries CO 4: Water quality management CO5: Understand health management

	III	**V**	Paper V	Ornamental Fish Keeping	At the end of the course students will be able to CO 1 Understand potential scope of ornamental industry CO 2 Understand Aquarium fish CO 3 learn food and feeding of fish CO 4 learn transport of fish CO 5 maintenance of Aquarium
			Paper VI	Post Harvest Technology	At the end of the course students will be able to CO 1: Understand preservation and processing of fish CO 2: Know the biproducts of fish CO 3: Understand marketing of fish CO 4: Learn about Fishery Economics CO 5: Understand Export and quality control
		VI	Paper VII	Human Anatomy	At the end of the course students will be able to CO 1 Knew about anatomical terms of Human body CO 2 Understand Digestive, Repiratory systems CO 3 Understand Excretory and circulatory system CO 4 Understand Nervous suytem CO 5 Understanf Urinogenital sysem
			Paper VIII A1	Physiology	At the end of the course students will be able to CO 1. Understand Digestive and Respiration CO 2: Understand Circulatory and Excretion CO 3: Understand Repruction CO 4: Learn about Endocrine glands CO 5: Understand Nervous coordination and muscle contraction.
			Paper IX	Clinical Laboratory Practices	At the end of the course students will be able to CO 1: Learn about Laboratory services CO 2:Learn about CO 3: Understand infrastructure and sample collection CO 4: Learn about all equipment in the lab CO 5:
			Paper 10	pathology -I	At the end of the course students will be able to

					CO 1: Knew about introduction to animal cell CO 2: Understand reception of specimen, tissue embedding, preparation tissue blocks CO 3: Processing and cleaning of tissue blocks CO 4: Equipment for pathological slides CO 5: Procedures of section cutting and microslide preparation
			Paper 11	Microbiology I	At the end of the course students will be able to CO 1: Know the general bacteriology CO 2: Understand culture media preparation CO 3: Learn systemic bacteriology CO 4: Understand bacterial infections and diagnosis CO 5: Procedures of CNS infections
			Paper 12	Biochemistry I	At the end of the course students will be able to CO 1: Understand introduction to chemical balance CO 2: Understand conceprts of molecular weight CO 3: Principles of photometry and spectrometry CO 4: Learn the chemistry of carbohydrates CO 5: Learn the chemistry of Proteins and fats
			Paper 13	Haematology	At the end of the course students will be able to CO 1: Know the blood composition CO 2: Estimation of WBC and RBC CO 3: Understand blood transfusion CO 4: problems of blood transfusion like AIDS, CO 5: Understand stains used in Heamatology
			Paper 14	Immunology II	At the end of the course students will be able to CO 1: Understand Immunity, Types of Immunity CO 2: Learn about anibody and antigens CO 3: Understand Antigen and antibody reaction CO 4: Learn about immune system and immune response CO 5: infection, modes of transmission
			Paper 15	Biochemistry II	At the end of the course students will be able to CO 1: Enzyme definition, classification CO 2: Determination of SGOP, SGPT,

					CO 3: Chemistry of Proteins CO 4: Chemistry of Lipid, triglycerides CO 5:Inorgonic ions
			Paper 16	Pathology II	At the end of the course students will be able to CO 1: Knew about types of staining agents CO 2: Demonstration of pigments, CO 3: Demonstration collegen CO 4: Preparation of cell blocks CO 5: Museum techniques
			Paper 17	Immunology II	At the end of the course students will be able to CO 1: Hemorrhagic disorders- Mechanism of coagulation CO 2:,Understand Hyper sensitivity CO 3: Learn Immunodeficiency diseases CO 4: Learn Autoimmunity CO 5: Understand Basics of Tumor Immunology
			Paper 18	Microbiology II	At the end of the course students will be able to CO 1: Understand general properties of Virology CO 2: Knew DNA viruses CO 3: Understand fungi and diseases CO 4: learn parasites and their preventice methods CO 5: learn cestoda parasites

Department of social science

History Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
History	**I**	**I**	Paper I	**Indian history and culture. (from earliest times to 647A.D)**	At the end of the course, the student will be able to: CO1 It creates awareness about one of the Ancient civilization of the world. CO2 Compare and contrast stages of progress from Vedic culture to Jainism, Buddhism and Mauryans. CO3 I can make to identify transition from territorial States to emergence of Empires – Gain knowledge about South Indian culture. CO4 Impacts knowledge about classical age - Development of Science, Technology - New culture through Arabs. CO5 Facilitate to study administration from basic administrative unit and can compare with present day.
		II	Paper II	Indian history and culture. (from 647A.D TO 1526A.D)	At the end of the course, the student will be able to; CO 1: Students will demonstrate an understanding of the major historical events and figures in Indian history from 647 to 1526, including the political, social, and economic changes CO 2: Students will analyze the rise and fall of various dynasties and factors contributing to their success or decline. CO 3: Students will explore the cultural and religious developments of the period, it's impact on society. CO 4: Students will examine the evolution of Indian

Subject	Year	Semester	Course	Title of the course	Course outcomes
					art, architecture, and literature during this period. CO 5: Students will discuss the legacy of this period in shaping the cultural and historical landscape of India, including the influence on modern Indian society and culture.
	II	**III**	Paper III	Indian history and culture. (from 1526A.Dto 1761A.D)	At the end of the course students will be able to: Co1: Students will gain a comprehensive understanding of the establishment, expansion, and consolidation of the Mughal Empire in India. CO2: Students will learn about the administrative and political structures of the Mughal Empire. Co3: Students will examine the economic policies of the Mughal Empire. Co4: Students will study the military strategies of the Mughal rulers, significant battles, and conflicts with regional powers and European colonial entities. Co5: Students will develop critical thinking skills by analyzing primary sources, historical texts.
		IV	Paper IV	Indian history and culture. (from 1757A.Dto 1964A.D)	At the end of the course students will be able to CO 1: Students will be able to describe the key events, policies, and consequences of British colonial rule in India from 1757 to Indian Independence 1947. CO 2: Students will know the significant figures in the Indian independence struggle. Students will be able to explain the socio-economic changes in Indian society

Subject	Year	Semester	Course	Title of the course	Course outcomes
					due to colonial policies. CO 3: Students will analyze historical events and trends using primary and secondary sources, developing critical thinking and interpretive skills. CO 4: Students will compare and contrast different perspectives on colonialism, nationalism, and the struggle for independence. CO 5: Students will present well-organized, clear, and coherent written and oral presentations on topics related to Indian history and culture from 1757 to 1964.
	III	**V**	Paper V	History of Modern World. (from 1453 to 1848 A.D)	At the end of the course students will be able to CO1. Comprehensive understanding of British policies. CO2 Awareness of key reform movements. CO3. Knowledge of Nationalist movements. CO4. Insight into Gandhian and revolutionary movements. CO5. Understanding of communalism and partition
			Paper VI	History and culture of Andhra Pradesh.(from satavahanas to 1857A.D)	At the end of the course students will be able to CO 1: Students will recognize the influence of various dynasties, such as the Satavahanas, Ikshvakus, Pallavas, Eastern Chalukyas, Kakatiyas, Vijayanagara, Qutb Shahis, and the British. CO 2:Develop an appreciation for the rich cultural heritage of Andhra Pradesh, including its art, architecture, literature, and music. CO 3:Analyse the social and economic structures of the time, including caste systems, trade, agriculture, and the impact of colonialism. CO 4:Study the changes in land tenure systems and the emergence of new social cla

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 5:Explore the religious and philosophical movements in the region, including the spread of Buddhism, Jainism, Shaivism, and Vaishnavism.
		VI	Paper VII	History of Modern World. (from 1848 to 1945 A.D)	At the end of the course students will be able to CO1. Comprehensive understanding of British policies. CO2 Awareness of key reform movements. CO3. Knowledge of Nationalist movements. CO4. Insight into Gandhian and revolutionary movements. CO5. Understanding of communalism and partition
			Paper VIII A1	Cultural Tourism in Andhra Pradesh	At the end of the course students will be able to CO 1. Students will demonstrate an in-depth understanding of the cultural heritage, traditions, and historical significance of Andhra Pradesh. CO2. Students will develop an appreciation for cultural diversity and demonstrate cultural sensitivity towards different communities in Andhra Pradesh. CO 3.Students will acquire practical skills in planning and managing cultural tourism activities and events in Andhra Pradesh. CO 4. Students will be able to effectively communicate cultural narratives and interpret the cultural significance of sites and traditions to diverse audiences, including tourists and local communities.
			Paper VIII A2	Popular Movements in Andhra Desa.(1848 to 1956 A.D)	At the end of the course students will be able to CO 1: Students will be able to identify and explain the historical contexts and causes of various popular movements in Andhra Desa from 1857 to 2014. CO 2: Students will gain an in-depth understanding of

Subject	Year	Semester	Course	Title of the course	Course outcomes
					significant movements, and they will be able to analyze their origins, development, and impact on the region. CO 3: Students will evaluate the social, political, and economic changes brought about by these movements. CO 4: Students will be able to compare and contrast different movements, understanding how they intersected with broader national and global trends. CO 4: Students will conduct research on specific movements or events, utilizing primary and secondary sources. CO 5: Students will connect historical movements to contemporary issues.
			Paper VIII A3	Contemporary History of Andhra Pradesh.(1956 to 2014)	At the end of the course students will be able to: CO 1: Students will understand the historical context and the political movements leading to the formation of Andhra Pradesh in 1956 CO 2. Students will be able to dentify and describe the key political leaders and their roles in shaping the state's political landscape. CO 3: Students will understand the rise of regional political parties, including the Telugu Desam Party, and their impact on state politics. CO 4: Students will explore the cultural and literary movements in Andhra Pradesh, including contributions to Telugu literature, cinema, and arts. CO 5: Students will be able to analyse the political, economic, and social implications of the bifurcation for both Andhra Pradesh and Telangana.

Department of Social science

Political Science Course outcomes- 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
	I	**I**	Paper I	**Basic concepts of political Science**	At the end of the course, the student will be able to: **CO1**: Analysing what is Politics and explaining the approaches to the Study of Political Science – Normative, Historical and Empirical Traditions **CO 2**: Assessing the theories of State (Origin, Nature, Functions): Contract, Idealist, Liberal and Neo-Liberal Theories. **CO 3**: Explaining the Concept of State Sovereignty: Monistic and Pluralistic Theories, Analysing the changing concept of Nation and Nationality . **CO 4**: Classification of Rights of Indian Citizen and Citizenship and Understanding basic concepts of Liberty, Equality, and Justice.
		II	Paper II	**Political Institutions (concepts ,Theories and Institutions**	At the end of the course, the student will be able to; **CO 1:** Students will get aware of the different political systems that are working throughout the world. **CO 2:**Students get interest in knowing about the working of constitution and constitution law in various countries. **CO 3:**They will understand the inter link between the organs of the government. **CO 4:** They will get knowledge about democracy, and the differences between direct and indirect democracy

Subject	Year	Semester	Course	Title of the course	Course outcomes
	II	**III**	Paper III	**Indian Constitution**	At the end of the course students will be able to: **CO1**: Introducing the Indian Constitution with a focus on the role of the Constituent Assembly and examining the essence of the the Preamble. **CO 2**: Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles. **CO3:** Assessing the nature of Indian Federalism with focus on Union-State Relations. **CO 4**: Critically analyzing the important institutions of the Indian Union: the Executive: President; Prime Minister, Council of Minister s ; The legislature: Rajya Sabha, Lok Sabha, Speaker, The Judiciary: Supreme Court composition and functions- Judicial Activism **CO5**: Looking at the Constitutional Amendment Procedure with focus on the main recommendations of the Constitutional Review and Basics Structure of Constitution
		IV	Paper IV	**Indian Political process**	At the end of the course students will be able to **CO1 :**Teach and Evolution of Approach to Study the political process in India they Examine Modernization and Marxian Approach **CO 2**: Evaluating the role of various forces on Indian politics: Communalism and Secularism and Religion at peasants **CO 3:** Critically evaluating the Indian Party system – its development and looking at the ideology of dominant national parties and Regional Parties. Evaluating the Electoral Process in India and Assess how elections affect the behavior of public officials **CO 4**: Investigating the Andhra , Telangana agitations

Subject	Year	Semester	Course	Title of the course	Course outcomes
					and Naxalists movement **CO 5:**Analyzing the new Government programmes working like swatch Bharath ,Make in India and Made in India and National Skill development corporation They Provide awareness in this programmes
	III	**V**	Paper V	**Indian and Western political Thought**	At the end of the course students will be able to **CO 1:-** Providing an insight into the dominant features of Ancient Western Political Thought: Ancient Greek political thought with focus on Aristotle and Plato; Roman Political Thought: its contributions with special emphasis on the emergence of Roman law. **CO2:-** Examining the features of Ancient l Political Thought. They Evaluating the Manu Varnadharma and Dandaneeti ; political thought of Reformation; and Machiavelli. **CO3:-** Critically examining Hobbes as the founder of the science of materialist politics; Locke as the founder of Liberalism with focus on his views on natural rights, property and consent; and Rousseau's views on Freedom and Democracy; Bentham's Utilitarianism; and John Stuart Mill's views on liberty and representative government. **CO 4:-** Analysing the nationalist thought of Raja Rammohun Roy and Assessing the nationalist thought of . Discussing the roots of communalism- Savarkar and Hindu Nationalism and Jinnah and the two nation theory **CO 5:** - Discussing the nationalism of Gandhi, M. N. Roy, Narendra Deva and . Analysing the Gandhian..
			Paper VI	PRINCIPLES OF PUBLIC ADMINISTRATION	At the end of the course students will be able to **CO 1:-** Explaining the nature, scope and evolution of

Subject	Year	Semester	Course	Title of the course	Course outcomes
					Public Administration; Private and Public Administration; **CO 2-:** Discussing the ,Classical approach ,Scientific Management approach ,Human Relations approach , Ecological approach and Decision Making approach to Pub. Adm. **CO 3:-** Analysing the Administrative Processes: decision making; communication and control; leadership; co-ordination and Line and Staff agencies **CO 4:-** Examining the Institutions of Personnel Administration in India and Evolution of Motivational Theories
		VI	Paper VII	Local Self Government In Andhra Pradesh	At the end of the course students will be able to **CO1 :** Examining the Institutions of Local Self Government in India, Local self government implies the transference of power to rule to the lowest rungs of political order .It is form of democratic decentralisation where the participation of even the grass root level of the society is ensure in the process of Administration **CO2:**They understand the knowledge on evolution of local self Government and recommendations of Balwantrai ,Ashok Mehta committees and They clear idea on 73rd and 74th constitutional amendments . **CO**3:They analysis the structure and functions of Rural and urban governments and They applying knowledge on role of leadership and Emerging challenges **CO**4:They aware the strategies of Rural development and role of people participation in Rural development .
			Paper VIII A1	International Relations	At the end of the course students will be able to **CO**1:Students get the understanding about the different nations and relations between them. C**O**2:Knowing about the post – world war scenario, makes them to realize importance of peace and

Subject	Year	Semester	Course	Title of the course	Course outcomes
					adversities of conflict. **CO3:**A strong hold on international relations will give them success in competitive exams like UGC-NET, SLET, and Civil Services etc. **CO4:**Choosing international relations as the career will give them employment in NGOs and other international organizations. **CO5:** As a broad in its scope, it has a many chance in taking up research and taking up research in international relations will have bright career.
			Paper VIII A2	India's Foreign Policy	At the end of the course students will be able to **CO1** :Students get interest in knowing the relations of various countries with India, which makes them to follow contemporary events happening in foreign policy. **CO2**:Brings them awareness on trends in India's foreign policy since the time of independence to till today. **CO3;**It creates interest to know the social culture and political culture of various nations all over C**O4**;It is helpful while writing competitive exams like UGC NET, SLET and Civil Services. **C05:** As because of its vast area of study gives more opportunities for students while choosing foreign policy as their area of research.
			Paper VIII A3	Contemporary Global Issues	At the end of the course students will be able to: **CO**1 :students get affinity with international community and show their responsibility towards the problems of the world. **CO2:**They try to find various solutions for the post globalization problems. **CO 3:** Helpful for students while writing competitive exams like UGC NET, SLET, APPSC, UPSC, RRB, SSC etc.

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO4 :Encourages the students to choose area for research purposes . And Leads them to understand the importance of reading international problems in Political Science.

Department of Social Science

Economics Course outcomes- 2018-19

Subject	Year	Semester	Course	Title of the course	Course outcomes
Economics	**I**	**I**	Paper I	**Micro economics 1**	At the end of the course, the student will be able to: CO1.Students will be able to known ṣuch as micro and macro economic concepts CO2.Students will be able to learn demand and elasticity of demand CO3.Students will be able to learn production function and different Costs and revenue CO4.Students will be able to known law of supply and consumer surplus
		II	Paper II	**Micro economics II**	At the end of the course, the student will be able to; CO1.students will be able to known market and kinds of markets. CO2. Students will be able to known different markets like perfect competition and imperfect competition CO3. Students will be able to Understoodconcepts of distribution and kinds of distribution. CO4. Students will be able to known different theories of rent ,wages, interest, and profit
	II	**III**	Paper III	**Macro economics I**	At the end of the course students will be able to: CO1.students will be able to learn classical and praticalkeynsiantheries of employment CO2. Students will be able to learn consumotion CO3. Students will be able to Understoodconcepts of accelerator and multiplier CO4. Students will be able to known fiscal and monitory polices
		IV	Paper IV	Macro Economics II	At the end of the course students will be able to: CO1.students will be able to known GNP and percapita

Subject	Year	Semester	Course	Title of the course	Course outcomes
					income. CO2. Students will be able to analysis causes and measures of inflation. CO3. Students will be able to Understood functions of banking. CO4. Students will be able to learn causes and measures of trade cycles
	III	**V**	Paper V	INDIAN ECONOMY	At the end of the course students will be able to: CO1.Students will be able to knownvarious sectors of the Indian economy. CO2. Students will be able to learn liberalization, privatization, and globalization. CO3. Students will be able to learn importance of sustainable development in Indian economy. CO4. Students will be able toanalyze and interpret economic data statistics related to the Indian economy.
			Paper VI	Indian economy with special reference to Andhrapradesh	At the end of the course students will be able to: CO1.Students will be able to understood economic development of Andhra Pradesh CO2. Students will be able to the sectoral contribution of SGDP in AndhraPradesh. CO3. Students will be able to know the socio-economic issues affecting India and Andhra Pradesh CO4. Students will be able to known analyze the performance of different sectors in Andhra Pradesh like agriculture, industry, IT, and services.
		VI	Paper VII	PUBLIC FINANCE	At the end of the course students will be able to CO1.Students will be able to known the Importance of public finance CO2.Students will be able to learn different types of

Subject	Year	Semester	Course	Title of the course	Course outcomes
					taxes direct tax Indirect tax income, sales, property, etc. CO3. Students will be able to known Gain knowledge in government budgeting processes. CO4. Students will be able to know public debt, methods and debt management
			Paper VIII A1	AI- Industrial Economics	At the end of the course students will be able to CO1.Students will be able to learn Industrial policies and regulations CO2. Students will be able to learn industry dynamics, market power, and competitive strategies. CO3. Students will be able to understood the economic theories and empirical evidence to improve market outcomes. CO4.Students will be able to knownNew economic reforms (LPG)
			Paper VIII A2	A2- Labour Economics	At the end of the course students will be able to CO1.Students will be able to learn supply and demand, wage determination, and employment patterns. CO2. Students will be able to learn economic theories related to labor, including human capital theory. CO3. Students will be able to knownlabor market issues technological changes, and demographic shifts on labor markets. CO4.Students will be able to learn assess the impact of various labor market policies
			Paper VIII A3	A3- INDUSTRIAL MANAGEMENT	At the end of the course students will be able to: CO1.Students will be able to learn understood fundamental concepts and theories of managing

Subject	Year	Semester	Course	Title of the course	Course outcomes
					industrial operations. CO2..Students will be able to learn skills to manage production processes, supply chains. CO3.. Students will be able to learn understood budgeting and financial analysis. CO4. Students will be able to known advanced technologies and innovations into industrial operations.

Department of Social Sciences

Psychology Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Psychology	**I**	**I**	Paper I	General psychology	At the end of the course, the student will be able to: CO 1: Understanding and application of psychological principles, theories and methods of different psychological areas (like learning, memory, etc.) to understand the complexity of human behaviour. CO 2: Knowledge of the fundamental physiological functional mechanism behind the Nervous system in the human body. CO 3: It also correlates to the understanding of historical context of different studies and researches.
		II	Paper II	General psychology	At the end of the course, the student will be able to; CO 1: Extensive knowledge about different theories and principles of Cognition and Behaviour concerning the areas of Motivation, Emotion, Intelligence, Thinking, and Personality etc. CO 2: Understand the measures involved in different aspects of human behaviour. CO 3: Develop ability to relate the psychological concepts to everyday life events.
	II	**III**	Paper III	Social psychology	At the end of the course students will be able to: CO 1: Develop insight and the contribution of social psychologists to the understanding of human society. CO 2: Evaluate effective strategies in socialization, group processes (both inter and intra-group) and helping behaviour. CO 3: Ability to register the progression of theories in

					major areas in Social Psychology. CO 4: Interpret attitude formation and various methods to be used to change the attitude.
		IV	Paper IV	Social psychology	At the end of the course students will be able to CO 1: Recognize major theories of social psychology related to cognitive and behavioural phenomenon. CO 2: Describe the scientific methods used to obtain knowledge about social behavior. CO 3: Analyze the complexity of action in social contexts by combining factors related to the person and the situation. CO 4: Describe situational factors that constrain human action. CO 5: Describe social factors that affect personal motivations. CO 6:Analyze contemporary events using social psychological theories or concepts. CO 7: Examine the effects of implicit and explicit prejudice on cognition and behaviour.
	III	**V**	Paper V	Child psychology	At the end of the course students will be able to CO 1: Review, appraisal and applications of theory of child psychology in various settings. CO 2: Ability to construct and interpret a historical overview of Child psychology. CO 3: This course introduces the students to the biological foundations, various developmental stages and theories from prenatal to childhood stages.
			Paper VI	Psychopathology	At the end of the course students will be able to CO 1: Identify different types of anxiety and mood disorders, their clinical picture and management CO 2:Analyze Impact of socio-occupational & personal functioning. CO 3: Formulate the case with the help of psychological testing.

					CO 4: Plan Therapeutic programs for management based on goals of therapy.
		VI	Paper VII	Child and adolescent psychology	At the end of the course students will be able to CO 1: State the meaning of psychology; CO 2: Explain the relevance of the study of psychology of childhood and adolescent for a teacher-trainee CO 3: Outline the methods you will select when studying children's different problems CO 4: Define the following basic concepts in child development: maturation, learning, development, perception, and motivation CO 5: Outline the biological and environmental bases of human development CO 6: Describe the trend of the changes that occur in the following facets of human development
			Paper VIII	Psychopathology	At the end of the course students will be able to CO 1: The students will understand signs and symptoms of psychopathology. CO 2: They will be able to assess the symptoms, nature, causes and dysfunctions associated with these disorders CO 3: They will be able to understand the intervention programs with regard to the goals of therapy. CO 4: Develop an understanding of etiologic of various mental health symptoms and illnesses. CO 5: Develop familiarity with the usual clinical course of each specific mental illness.

Department of Social Science

Social Work Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
Social work	**I**	**I**	Paper I	Social work-profession, philosophy and basic social science concepts	At the end of the course, the student will be able to: CO 1: The students will acquire the knowledge on social work methods CO 2:The students will enhance knowledge on social case work CO 3: The students Will get knowledge on social group work CO 4: The students will understand the Basic concepts of community organization.
		II	Paper II	Social work-profession, philosophy and basic social science concepts	At the end of the course, the student will be able to; CO 1: Understand the principles of Social work profession and its philosophy. CO 2: Get knowledge on social reform movements in India CO 3: Understand the origin and growth of social work in USA, UK and India. Auquiné knowledge on social work values, ethies, principles and approach CO 4: Develop knowledge on social practice in various settings
	II	**III**	Paper III	Social work methods I	At the end of the course students will be able to: CO 1: The students will understand the concept of social work CO 2: The students will acquire the knowledge on social work methods CO 3: The students enhance knowledge on social case work CO 4: The students will get knowledge on social group work CO 5: The students will understand the basic concepts

Subject	Year	Semester	Course	Title of the course	Course outcomes
					of community organisation
		IV	Paper IV	Social work methods II	At the end of the course students will be able to CO 1: The students will understand the concept of social work CO 2: The students will acquire the knowledge on social work methods CO 3: The students enhance knowledge on social case work CO 4: The students will get knowledge on social group work CO 5: The students will understand the basic concepts of community organisation
	III	**V**	Paper V	Fields of social work I	At the end of the course students will be able to CO 1: To understand the concept of social work CO 2:To acquire the knowledge on social work methods CO 3: To enhance knowledge on integrated approach of social work To get knowledge on problem solving and termination CO 4:To obtain knowledge on importance and types of field work in social work
			Paper VI	Non-governmental organisations	CO 1: Understand the concept of Non-Governmental Organisations CO 2:Acquire the knowledge on formation of r non-governmental organisation CO 3: Enhance knowledge on management of non-governmental organisation Understand the financial management of non-governmental organisation CO 4:Enhance the knowledge on financial management of non-governmental organisation.
			Paper VII	Fields of social work II	At the end of the course students will be able to

Subject	Year	Semester	Course	Title of the course	Course outcomes
					CO 1: To understand the concept of social work CO 2: To acquire the knowledge on social work methods CO 3: To enhance knowledge on integrated approach of social work To get knowledge on problem solving and termination CO 4: To obtain knowledge on importance and types of vivid work in social work
			Paper VIII A1	Social problems and social welfare in India	CO 1: Students at the successful composition of the course will be able to CO 2: Develop knowledge about and analyze the origin, and causes of social problems Understand the effects of social problems on individuals, groups and society CO 3: acquire knowledge about social reforms, social policy and social legislation and critically understand their role in controlling the social problems CO 4: Aware on the Preventive and remedial services of Govt. and Non- Governmental in dealing with social Problems
			Paper VIII A2	Social work and HIV/AID	CO 1: By the end of the paper, students will be able to: CO 2: Describe Key Epidemiological Trends: Articulate the key epidemiological trends of HIV/AIDS on a global and local scale. CO 3: Identify Social Determinants: Identify and explain how various social determinants impact the spread and treatment of HIV/AIDS. CO 4: Explain the Role of Social Workers: Clearly explain the different roles and responsibilities of social workers in the context of HIV/AIDS. CO 5: Design Intervention Programs: Design a basic intervention program that addresses the needs of

Subject	Year	Semester	Course	Title of the course	Course outcomes
					individuals living with HIV/AIDS.
			Paper VIII A3	Corporate social responsibility	CO 1: At the end of the course the student will be able to: CO 2: Develop a holistic understanding of the concept CSR CO 3: Gain adequate knowledge on CSR Policy Understand global perspectives on CSR practices CO 4: Know various CSR practices in India and Andhra Pradesh through case study.

Department of Management Studies

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
BA	**I**	**I**	Course 1	Managerial Economics	At the end of the course, the student will be able to: CO1: To state concept of economics and its relevance to business. CO2: Understand concepts of perfect competition and monopoly for fixation of prices. CO2: Understand the international business scenario and concepts of BOP. CO3: Learn to apply the concepts of cost and Break-even analysis and learn various theories on production. CO4: Comprehend the concept of Demand analysis for making important business decisions
			Course 2	Management Process:	At the end of the course, the student will be able to: CO1: To explain the basic concepts, principles and theories of Management CO2: To outline the fundamental activities of Managers CO3: To examine the broad functions of Management CO4: To comprehend the contemporary issues and challenges in the field of Management CO5: To understand various control techniques practiced at organizations
			Course 3	Event Management	At the end of the course, the student will be able to; CO1: obtain a sense of responsibility for the multi-

Subject	Year	Semester	Course	Title of the course	Course outcomes
					disciplinary nature of event N management. CO2: Gain confidence and enjoyment from involvement in the dynamic industry of event management
		II	Course 4	Accounting for Managers	At the end of the course, the student will be able to; CO1: Acquire conceptual knowledge of basics of financial accounting. CO2: Understand the list of accounting standards and their application. CO3: Demonstrate hands on skills in preparing Financial Statements of a Business enterprise.
			Course 5	Business Environment.	At the end of the course, the student will be able to; CO1: Understand the concepts of Business, Industry and commerce. CO2: Analyze different forms of organization and its effect on Business Environment. CO3: Gain knowledge regarding different dimensions of Business Environment and its powerful effect on Business Entity. CO4: Develop understanding regarding overview of Government Policies in India post liberalization and its impact on Business Empires.
			Course 6	Quantitative Techniques for Managers	At the end of the course, the student will be able to; CO1: Provide the basic knowledge of quantitative methods and their application to commercial situation and for decision making in business.

Subject	Year	Semester	Course	Title of the course	Course outcomes
	II	**III**	Course 7	Human Resources Management	At the end of the course, the student will be able to; CO1: Acquire knowledge on HRM, its environment, methods of selection, and Interview techniques. CO2: Impart the skills to manage various functions of Human Resource Management in order to provide the professional approach and outlook.
			Course 8	Operations Management	At the end of the course, the student will be able to; CO1: Understand the concepts, principles, problems, and practices of operations management. CO2: Identify and articulate how operations management contributes to the achievement of an organization's strategic objectives.
			Course 9	Organization Behaviour	At the end of the course students will be able to: CO1: Grab the basics of Business concepts and functions, forms of Business Organization and functions of Management. CO2: To understand different types of personality and learning styles. CO3: Develop an appreciation for the interdisciplinary nature of business, recognizing how various functions within an organization are interconnected and contribute to overall success. CO4: To analyze the contemporary trends in business. CO5: Foster critical thinking skills by analyzing real-world business scenarios and applying theoretical frameworks to solve problems and make informed decisions.

Subject	Year	Semester	Course	Title of the course	Course outcomes
		IV	Course 10	Financial Management	At the end of the course students will be able to: CO1: To gain basic knowledge of objectives of Financial Management and its functions. CO2: To gain familiarization with different financial decisions that impact any organization. CO3: To understand the capital budgeting process and risk analysis in capital budgeting and Understand decisions relating to dividend policies and their valuation CO4: Analyze working capital management to organization.
			Course 11	Marketing Management	At the end of the course students will be able to: CO1: To know the basic concepts on Marketing Environment CO2: Develop understanding about marketing management concepts and frameworks. CO3: Analyze an organization's marketing strategies,formulateand assess strategic, operational and tactical marketing decisions. CO4: Enhance business communication skills required to work effectively with a marketing team
			Course 12	Fundamentals of Research Methodology	At the end of the course students will be able to: CO1: Apply the basic understanding of research methodology into the application of modern analytical tools and techniques for the purpose of management decision making. CO2: Identify the overall process of designing a research study from its inception to its report.
	III	**V**	Course 13	Business Law	At the end of the course students will be able to: CO1: To equip the student with fundamental

Subject	Year	Semester	Course	Title of the course	Course outcomes
					concepts, principles relating to Contract Act that applies to business situations. CO2: To provide an overview on Negotiable Instruments Act and Partnership Act in India. CO3: To understand the regulatory framework of companies with reference to various provisions of Companies Act. CO3: To understand the essentials and execution of Sale contracts. CO4: To acquire knowledge on Right to Information Act and Consumer Protection Act.
			Course 14	E-Business	At the end of the course students will be able to: CO1: To equip the student with fundamental concepts, principles relating to Contract Act that applies to business situations. CO2: To provide an overview on Negotiable Instruments Act and Partnership Act in India. CO3: To understand the regulatory framework of companies with reference to various provisions of Companies Act. CO3: To understand the essentials and execution of Sale contracts. CO4: To acquire knowledge on Right to Information Act and Consumer Protection Act.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Course 15	E-Business	At the end of the course students will be able to: CO1: Understand the concept of electronic commerce, and how electronic commerce is affecting business enterprises, governments, consumers and people in general. CO2: Recognize the impact of Information and Communication technologies, in business operations.
			Course 16	Taxation-I	At the end of the course students will be able to: CO1: Understand the tax concepts and calculate Total Income & Tax Liability. CO2: Identify and explain the self-assessment system of tax administration.
			Course 17	Management Accounting	At the end of the course students will be able to: CO1: understand concepts of Management Accounting. CO2: Demonstrate Accounting compliance and planning in financial statements.
			Course 18	Financial Markets and Services	At the end of the course students will be able to: CO1: Gather knowledge of Issues in Primary & Secondary Markets & about the various Financial Services CO2: Understand the difference between Traditional & Modern Financial Services.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Course 19	BBA Practical's	At the end of the course students will be able to: CO1: Gain knowledge of business practices and processes. CO2: Analyze, evaluate and interpret data practically for the situations at the industry, business and individual levels .
		VI	Course 20	Business Strategy	At the end of the course students will be able to: CO1: Understand the basics of the how organizations are managed, with a special focus on the role played by a business firm's strategy. CO2: Assess or predict business performance based on the detailed analysis of a specific problem, case or company.
			Course 21	International Business	At the end of the course students will be able to: CO1: Understand International Business in a multicultural world. CO2: Acquire knowledge about the impact of various economic, legal, cultural, geographical, and political systems on international business.
			Course 22	Taxation –II	At the end of the course students will be able to: CO1: Understand the tax concepts and calculate Total Income & Tax Liability. CO2: Identify and explain the self-assessment system of tax administration.

Subject	Year	Semester	Course	Title of the course	Course outcomes
			Course 23	Computerized Accounting through Tally.	At the end of the course students will be able to: CO1: Understand the accounting concept, tools and techniques influencing business organization. CO2: Use accounting and business terminology. CO3: Explain the objective of financial reporting and related key accounting assumptions and principles.
			Course 24	Advertising & Media Management	At the end of the course students will be able to: CO1: gain an understanding of advertising and sales promotion practices. CO2: Prepare promotional and advertising campaigns, for projects, assignments, and tests.
			Course 25	Logistics & Supply Chain Management.	At the end of the course students will be able to: CO1: Address LSCM problems in a holistic approach by taking into account general management concepts, human resources, environmental concerns, and quality, technological and economic aspects. CO2: Prepare students for career opportunities in logistics.
			Course 26	Self Study. Marketing of Banking Services	At the end of the course students will be able to: CO1: Get an outlook of how banking sector work on day-to-day basis. CO2: Understand the fundamentals of banking as applicable on individuals and organizations within the larger economic system.

Department of Commerce

Course outcomes- 2019-20

Subject	Year	Semester	Course	Title of the course	Course outcomes
COMMERCE	**I**	**I**	**B.Com General and computer**	**Financial Accounting I**	CO1: To understanding of basic commerce concepts and principles of Commerce, including trade, business market structures and the role of Commerce in the economy. CO2: Apply basic accounting principles and practises, including journal entities, pledges and trial balance. CO3: Identify the basic principles of marketing, including market research, product development, pricing strategies, promotional distribution channels. CO4:. Explain the basic economic principles that affect commerce, including supply and demand, pricing and economic cycles.
				Business statistics	CO1: Understanding of statistical concepts: Students will comprehend key statistical terms, formulas, and techniques. CO2: Data analysis skills: Students will learn to collect, organize, and analyze data to extract insights. CO3: Descriptive statistics: Students will understand how to summarize and describe tendency and variability. CO4: Inferential statistics: Students will learn to make conclusions about populations based on sample

					data. CO5: Regression analysis: Students will learn to model relationships between variables.
			B.Com General and computer	**Business organization**	CO1: Ability to understand the concept of Business Organization along with the basic laws and norms of Business Organization. CO2: The ability to understand the terminologies associated with the field of Business Organization along with their relevance and to identify the appropriate types and functioning of Business Organization for solving different problems. CO3: The application of Business Organization principles to solve business and industry related problems and to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc.

		I	**B.Com Finance**	**Business finance I**	CO1. Understanding of financial concepts: Students will comprehend key financial terms, theories, and principles. CO2. Financial statement analysis: Students will learn to analyze and interpret financial statements (Balance Sheet, Income Statement, Cash Flow Statement). CO3. Time value of money: Students will understand concepts like present value, future value, and net present value. CO4. Capital budgeting: Students will learn to evaluate investment opportunities using techniques like NPV, IRR, and payback period. CO5. Cost of capital: Students will understand how to calculate and apply the cost of capital.
		II	**B.COM (COMP&GEN)**	**Financial Accounting II**	CO1: To understanding of basic commerce concepts and principles of Commerce, including trade, business market structures and the role of Commerce in the economy. CO2:TO know about conzinementdepresiatation,jointventure,and rectification of errors. CO3: Identify the basic principles of marketing, including market research, product development, pricing strategies, promotional distribution channels. CO4:Explain the basic economic principles that affect commerce, including supply and demand, pricing and economic cycles. CO5: Gain an awareness of the global business environment and its impact on local commerce

		II	**B.COM (COMP&GEN)**	**Business statics II**	CO1. Confidence intervals: Students will learn to estimate population parameters with confidence intervals. CO2. Data visualization: Students will learn to effectively communicate insights using charts, graphs, and other visualizations. CO3. Business decision-making: Students will apply statistical techniques to real-world business problems. CO4. Critical thinking: Students will develop critical thinking skills to evaluate information and make informed decisions. CO5. Communication skills: Students will learn to present statistical findings effectively.
		II	**B.COM (COMP&GEN)**	**Principles of management**	CO1. Understanding of management concepts: Students will comprehend key management terms, theories, and principles. CO2. Management functions: Students will learn about planning, organizing, leading, and controlling. CO3: Decision-making skills: Students will develop critical thinking and problem-solving skills. CO4:Leadership skills: Students will understand leadership styles, motivations, and effective leadership practices.

					CO5:Organizational behavior: Students will learn about individual and group dynamics, culture, and diversity. CO5.
		II		**Business finance II**	CO1:Capital structure: Students will learn to optimize capital structure and make financing decisions. CO2:Dividend policy: Students will understand the impact of dividend policy on shareholder value. CO3:Risk management: Students will learn to identify and manage financial risks using techniques like hedging and diversification. CO4:Financial markets and instruments: Students will understand the functioning of financial markets and instruments like stocks, bonds, and derivatives. CO5:Financial planning and decision-making: Students will apply financial concepts to real-world business problems.
		III	**B.Com general and computer**	**Banking &financial services**	CO1:Discuss the impact of government policy and regulations on the banking industry. CO2:Evaluate the performance of the banking industry. CO3:Discuss bank lending policies and procedures. CO4:To elucidate the broad functions of banks CO5: To understand the working of the Reserve Bank of India CO6: To grasp the conduct of monetary policy and its effect on the interest rate, credit availability,

					prices, and the inflation rate
		III	**B.Com general**	**Income tax**	CO1: Understand the basic principles underlying the Income Tax Act Compute the taxable income of an assesse CO2: know the residential status of assesse and incomes exempted from tax CO3: To familiar with the computation of income from salary, To familiar with the computation of income from house property, income from salary, income from house property
		III	**B.Com Finance**	**Financial management I**	CO1. Understanding of financial concepts: Students will comprehend key financial terms, theories, and principles. CO2: Students will learn to analyze and interpret financial statements. CO3. Investment decisions: Students will understand how to evaluate investment opportunities. CO4. Capital budgeting: Students will learn to evaluate and select capital projects. CO5. Cost of capital: Students will understand how to calculate and apply the cost of capital.
		III	**B.Com General and computer**	**E-commerce**	CO1. Understanding of e-commerce concepts: Students will comprehend key e-commerce terms, theories, and principles. CO2. E-commerce business models: Students will learn about various e-commerce business models (B2B, B2C, C2C, etc.).

					CO3. Payment and security systems: Students will understand payment processing and security measures. CO4. Supply chain and logistics management: Students will learn to manage supply chains and logistics in an e-commerce environment.
		III	**B.Com General and computer**	**Corporate accounting**	CO1. Corporate finance: Students will learn about corporate finance, including capital raising, restructuring, and advisory services. CO2. Mergers and acquisitions: Students will understand the process of mergers and acquisitions, including deal structuring and negotiation. CO3. IPOs and equity financing: Students will learn about initial public offerings (IPOs) and equity financing options. CO4. Debt financing and restructuring: Students will understand debt financing options and restructuring strategies.
		IV	**B.COM(COMPUTERS & GENERALS)**	**Business environment**	CO1. Understanding of business environment concepts: Students will comprehend key terms, theories, and principles. CO2. External environment analysis: Students will learn to analyze the external environment (PESTLE analysis).

					CO3. Internal environment analysis: Students will understand how to analyze the internal environment (SWOT analysis). CO4. Industry analysis: Students will learn to analyze industries and competitors.
		IV	**B.Com General and computer**	**Merchant banking**	CO1 -Discuss the impact of government policy and regulations on the banking industry. CO2 -Evaluate the performance of the banking industry. CO3 -Discuss bank lending policies and procedures. CO4 -To elucidate the broad functions of banks CO5 - To understand the working of the Reserve Bank of India CO6 - To grasp the conduct of monetary policy and its effect on the interest rate, credit availability, prices, and the inflation rate
		IV	**B.Com General and computer**	**Accounting for service organizations**	CO1. Financial statement preparation: Students will learn to prepare financial statements for service organisations. CO2. Revenue recognition: Students will understand revenue recognition principles and apply them to service organisations. CO3. Expense accounting: Students will learn to account for various expenses, including salaries, rent, and utilities. CO4. Asset accounting: Students will understand how to account for assets, including depreciation and

					amortization.
		IV	**B.Com General**	**Fundamentals of GST**	CO1. GST registration and compliance: Students will learn about GST registration, returns, and compliance requirements. CO2. Taxable supplies and exemptions: Students will understand what constitutes a taxable supply and exemptions. CO3. Input tax credits and refunds: Students will learn about claiming input tax credits and refunds. CO4. GST calculations and invoicing: Students will understand how to calculate GST and prepare GST-compliant invoices. CO5. GST classifications and rates: Students will learn about different GST classifications and rates.
		IV	**B.Com Finance**	**Financial management II**	CO1. Capital structure: Students will learn to optimize capital structure and make financing decisions. CO2. Dividend policy: Students will understand the impact of dividend policy on shareholder value. CO3. Risk management: Students will learn to identify and manage financial risks. CO4. Financial planning and forecasting: Students will learn to create financial plans and forecasts. CO5. Financial performance evaluation: Students will understand how to evaluate financial

					performance.
		V	**B.Com general and computer**	**Business Law**	CO1: Understand the legal environment of business and laws of business, Highlight the security aspects in the present cyber-crime scenario. CO2: Apply basic legal knowledge to business transactions, Understand the various provisions of Company Law. CO3: Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues and Integrate concept of business law with foreign trade. CO4:Equip the students about the legitimate rights and obligations under The Sale of Goods Act. enable with skills to initiate entrepreneurial ventures as LLP.
		V	**B.Com General and computer**	**Cost accounting**	CO1. Cost accounting systems: Students will understand different cost accounting systems, including job costing, process costing, and activity-based costing. CO2. Cost estimation and prediction: Students will learn to estimate and predict costs using various techniques. CO3. Cost-volume-profit analysis: Students will understand how to analyze the relationship between costs, volume, and profit. CO4. Break-even analysis: Students will learn to calculate the break-even point and understand its significance. CO5. Standard costing and variance analysis: Students will understand standard costing

		V	**B.Com General and computer**	**Auditing**	CO1: Understanding the meaning and necessity of audit in modern era, Comprehend the role of auditor in avoiding the corporate frauds. CO2: Identify the steps involved in performing audit process, Determine the appropriate audit report for a given audit situation. CO3: Apply auditing practices to different types of business entities and plan an audit by considering concepts of evidence, risk and materiality
		V	**B.Com General and computer**	**Human resource management**	CO1. Recruitment and selection: Students will learn about effective recruitment and selection techniques. CO2. Training and development: Students will understand how to design and implement training programs. CO3. Performance management: Students will learn to develop and implement performance management systems. CO4. Compensation and benefits: Students will understand how to design and manage compensation and benefits packages.
		V	**B.Com General**	**Marketing management**	CO1. Market research and analysis: Students will learn to conduct market research and analyze data to inform marketing decisions. CO2. Segmentation, targeting, and positioning (STP): Students will understand how to segment markets, target audiences, and position products. CO3. Marketing mix (4Ps): Students will learn to

					develop and implement marketing strategies using the 4Ps(product, price, place, promotion).
		V	**B.Com General**	**International business**	CO1. International trade and investment: Students will learn about international trade theories, agreements, and practices. CO2. Global market entry strategies: Students will understand how to enter global markets, including export, import, and foreign direct investment. CO3. Cross-cultural management: Students will learn to manage across cultures, including communication, negotiation, and leadership. CO4. Global marketing and branding: Students will understand how to develop global marketing strategies and build global brands. CO5. International finance and accounting: Students will learn about international financial markets, instruments, and accounting practices.
		V	**B.Com General and computer**	**Fundamentals of international financial management**	CO1. Foreign exchange markets and rates: Students will learn about foreign exchange markets, exchange rates, and currency risk management. CO2. International financial instruments: Students will understand international financial instruments, including bonds, stocks, and derivatives. CO3. International investment and portfolio management: Students will learn about international investment strategies and portfolio management techniques. CO4. Multinational corporate finance: Students will understand multinational corporate finance, including capital budgeting, funding, and risk management.

		V	**B.Com Finance**	**Security analysis and portfolio management**	CO1. Security analysis techniques: Students will learn to analyze stocks, bonds, and other securities using fundamental and technical analysis. CO2. Portfolio management theories: Students will understand modern portfolio theory, asset allocation, and diversification. CO3. Risk management strategies: Students will learn to manage risk using hedging, diversification, and asset allocation. CO4. Asset pricing models: Students will understand asset pricing models, including CAPM and APT. CO5. Portfolio performance evaluation: Students will learn to evaluate portfolio performance using metrics such as return, risk, and Sharpe ratio.
		VI	**B.Com General and computer**	**Company law**	CO1. Knowledge of company formation procedures and documentation (articles of association, memorandum of association) CO2. Familiarity with company management structures (board of directors, shareholders, officers) CO3. Understanding of company finance and funding (shares, dividends, capital raising) CO4. Awareness of legal duties and responsibilities (directors' duties, shareholder rights) CO5. Knowledge of company insolvency and winding-up procedures
		VI	**B.Com General and computer**	**Management accounting**	CO1. Knowledge of budgeting and forecasting techniques (operational budgeting, financial budgeting) CO2. Familiarity with performance measurement and evaluation methods (KPIs, balanced scorecard) CO3. Ability to analyze and interpret financial

					statements for internal decision-making CO4. Understanding of variance analysis and cost control techniques CO5. Understanding of company finance and funding (shares, dividends, capital raising)
		VI	**B.Com General and computer**	**Business communication**	CO1. Ability to craft clear, concise, and persuasive written messages (emails, reports, proposals) CO2. Effective verbal communication skills (presentations, meetings, negotiations) CO3. Familiarity with nonverbal communication and interpersonal skills CO4. Knowledge of communication technologies and platforms (video conferencing, instant messaging) CO5. Understanding of cultural and diversity issues in communication
		VI	**B.Com General**	**Office management**	CO1. Ability to plan, organize, and coordinate office operations CO2. Knowledge of human resources management(recruitment, training, performance evaluation) CO3. Familiarity with financial management (budgeting, accounting, financial reporting) CO4. Understanding of records management and filing systems CO5. Ability to manage office technology and systems (software, hardware, networks)
		VI	**B.Com general and computer**	**Advertising and sales promotion**	CO1. Ability to analyze consumer behavior and target markets CO2. Knowledge of advertising media (print, broadcast, digital, outdoor)

					CO3. Familiarity with creative development (copywriting, art direction, design) CO4. Understanding of campaign planning and execution CO5. Ability to measure and evaluate advertising effectiveness
		VI	**B.Com general**	**Brand management**	CO1Knowledge of brand research and analysis methods CO2. Familiarity with brand identity design (logos, typography, color palettes) CO3.Understanding of brand communication and messaging CO4. Ability to manage brand consistency across touchpoints CO5.Knowledge of digital brand management (social media, website, e-commerce)
		VI	**B.Com Finance**	**Working capital management**	CO1. Ability to analyze and manage cash flow CO2. Knowledge of inventory management techniques (EOQ, JIT, ABC analysis) CO3. Familiarity with accounts receivable and payable management CO4. Understanding of short-term financing options (bank loans, factoring, commercial paper) CO5. Ability to calculate and manage working capital ratios (current ratio, quick ratio)
		VI	**B.Com Finance**	**security analysis and portfolio management-II**	CO1. Ability to evaluate and select securities (stocks, bonds, ETFs) CO2. Knowledge of portfolio performance measurement and evaluation CO3.Understanding of tax-efficient investing and

					asset location CO4. Familiarity with behavioral finance and investor psychology CO5. Ability to develop a comprehensive investment policy