TELANGANA SOCIAL WELFARE RESIDENTIAL ARMED FORCES
PREPARATORY DEGREE COLLEGE FOR WOMEN, BHONGIR
YADARI BHONGIR (DIST), TELANGANA, 508126
Affiliated to Mahatma Gandhi University, Nalgonda

DEPARTMENT OF ENGLISH

B.Sc. / B. Com./ B.B.A. and other U.G. Courses

Course Objectives

The 20-credit, six-semester course seeks to enhance the English language skills of undergraduate students by

* Strengthening their grammar and vocabulary
* Improving their reading and writing skills
* Enhancing their listening and speaking skills
* Imparting to them important life skills and human values
* Encouraging them to think creatively and critically
* Exposing them to a variety of content-rich texts
* Expanding their emotional intelligence
* Developing gender sensitivity among them.

Course Outcomes

On the successful in completion of the 20 credit,6 semester course, undergraduate course will be able to

1) Read, understand and interpret a variety of written text.

2) Guided and extended writing using appropriate vocabulary and correct Grammar

3) Listen with comprehension and speak with content in both formal and informal contexts with reasonable fluency and acceptable pronunciation.

3) Become employable with requisite professional skills, ethics and values.

4) Gain knowledge of basic phonetics.

5) Strengthen their grammar and vocabulary

6) Reading and writing skills

7) Enhance their listening and speaking skills.

8) Acquire important life skills and human values

9)To think creatively and critically

10)Get exposed to a variety of content - Rich texts.

11) Develop Gender sensitivity among them .

HEAD
Department of Engli:
TSWRAFPDCW, Bhongir

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TELUGU I YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A , IMA **SEMESTER - I**	4 CREDITS	తెలుగు భాషా సౌరభాలు	* తెలుగు భాషా బోధన అవసరాన్ని గుర్తింపజేసి, తెలుగు భాష యొక్కఔన్నత్యాన్ని తెలియపరుచుట. * తెలుగు భాష పరంపరను ప్రాచీన సాహిత్య ఆధారంగా తెలుసుకున్నారు. * విద్యార్థులు మానవీయ విలువలను గుర్తించి వాటిని నిత్యజీవితంలో అవలంబించారు. * విద్యార్థులు పాఠ్యాంశాల దాఖా విచక్షణ జ్ఞానాన్నిఅలవరుచుకున్నారు. * విద్యార్థులు భావనశక్తిని పెంపొందించుకొని , సమాజ పోకడను గ్రహించారు . * సమాజం లో మహిళలకు ఏర్పడే సమస్యలను గుర్తించి వాటిని ఎదురొనే సామర్థ్యాన్నిఏర్పరచుకున్నారు. * శతక పద్యాల దాఖా వక్తిత్వ నిర్మాణాన్ని ఏర్పరచుకున్నారు. * సామాజిక శ్రేయస్సులో కవి భాగస్వామ్యాన్ని విద్యార్థులు గుర్తించారు. * రాజు కన్నాకవి గొప్పవాడని అతిక్ష భావనను పెంపొందించుకున్నారు. * విద్యార్థులు తెలంగాణ ప్రాశస్తంతో కూడిన ఉదక్తసూర్తిని పొందినారు. * వృత్తి కళావైభవాన్ని గుర్తించి, ప్రాచీన కళలను , కళాకారులను ఆదరించారు. * సంపద కన్నా ప్రేమ తత్వ గొప్పతని తెలుసుకున్నారు. * భారతదేశ రుద్రమదేవి వంటి వీరనారుల ఆదర్శజీవిత చరిత్రలను తెలుసుకొని సూర్తి పొందినారు.

PRINCIPAL
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TELUGU I YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A , IMA . **SEMESTER - II**	4 CREDITS	తెలుగు భాషా భంజిర	* ఆపద సమయంలో ఎంతటి వక్తికైనా గర్వ పనికి రాదని గ్రహిస్తారు. * విద్యార్థులు లక్ష్యసాధనకు అంతర్గత ప్రేరణ పెంపొందించుకొనాళ్లు . * డాక్టర్ సి.నారాయణరెడ్డి రాసిన ప్రపంచపదులు చదువి విద్యార్థులు తమలో గూడు కట్టుకున్న దైన్యాన్నితొలగించుకొని ధైర్య తెచుక్కునాళ్లు . * ప్రతికూల భావనల స్థానంలో ఆశావాహ దృక్పథం ఆత్మవిశ్వాసం పెంపొందించుకునాళ్లు . * తెలంగాణ భాషా సద్రూప సద్భావాలను గ్రహించి , తెలంగాణ భాషాభివృద్ధిలో పాలు పంచుకునాళ్లు. * ఊరు పట్టణీకరణ చెందుతున్నదువల్ల కలిగే సమస్యలను గుర్తించి , పల్లెల సభ్యత్వను కాపాడటంలో తమ వంతు కృషిని చేస్తారు. * మూగజీవుల పట్ల ప్రేమ సానుకూలతను ఉంచుకుంటారు.

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TELUGU II YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A , IMA . **SEMESTER - III**	3 CREDITS	తెలుగు సాహిత్య చరిత్ర	* తెలంగాణ సమాజానికి సూర్తినిచ్చేఎందరో కవులకు రచయితలకు సముచిత స్థానాన్ని పాఠ్యశాలు రూపంలో అందించడం వలన అవగాహనను పెంచుకుంటారు . * విద్యార్థుల ఆలోచన పరిధిని , భావన విస్తృతిని పెంపొందింప చేసుకుంటారు. * పాఠ్యశాల ద్వారా నేటి సమాజంలోని మానవీయ విలువలని సామాజిక బాధ్యతలని అర్థం చేసుకుంటునాథ్రు. * భాషా సామర్థ్యాలను పెంపొందించుకొని ఆచరణ పూరక్షంగా అనుసరిస్తారు . * సందర్భోచితంగా సరైన అవగాహనతో మాట్లాడే వాక్ పటిమను అలవరుక్షుంటారు. * నేటి కాలంలో ఉనత్ష చదువుల యొక్కవిలువలను గుర్తెరిగి ,ఉనత్ష స్థానానికి చేరుకోవడానికి తమవంతు ప్రయతాన్నిచేస్తారు. * సమయపాలనని పాటిస్తూ క్రమశిక్షణతో విద్యార్థి జీవిత పురోగమనానికి తమను తాము సిద్ధం చేసుకుంటారు.

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TELUGU II YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A , IMA . **SEMESTER - IV**	3 CREDITS	తెలుగు సాహిత్యము	* వాగ్దానానికి గల గొప్పతనాన్ని, ప్రబోధాతత్పతని అర్థం చేసుకుంటారు . * జీవనచింతనను తెలిపే ఆణిముత్యాల లాంటి శతక పద్యాలని మరలా సూర్పణకు తెచుక్షుంటారు . * నేటి కాలంలో గురువు యొక్క ప్రాధానత్పని తెలుసుకొని ఆచరణ పూరక్షంగా మస లుకొంటారు . * దళితుల , అణగారిన వర్గాల వారి అభ్యుత్పతి కోసం పాటుపడతారు . * చారిత్రక కట్టడాల ప్రాశిస్త్యాన్నితెలుసుకొని వాటిని కాపాడడంలో తమ వంతు బాధత్పను నిరక్షిస్తారు. * స్థానిక చరిత్రలను తెలుసుకొని పరిశోధనాతత్ప విశ్లేషణను అభివృద్ధి చేసుకుంటారు. * పాఠ్యాశంలోని కథల దాక్షా సూర్తిని పొంది జీవితాన్నిఉనత్పంగా మలుచుకుంటారు * తెలంగాణ వైభవాన్నితెలుసుకొని , అమర వీరుల త్యాగాన్నిగుర్తిస్తారు . * చరిత్రలో దాగిన సత్యాలు , చేదు నిజాలు అవగాహన చేసుకుంటారు . * మానవ అనుబంధాలకు అసలైన అర్థం తెలుసుకొని కుటుంబ సామాజిక సంబంధాలను మెరుగుపరుచుకుంటాడు .

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TELUGU III YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A . **SEMESTER - V**	3 CREDITS	తెలుగు సాహిత్య చరిత్ర	* విద్యార్థులు ఈ పాఠ్యాంశం ద్వారా పద్యం నిర్వచనం, పద్యం లక్షణాలు, పద్యంలో వైవిధ్యం, పద్యం చారిత్రక నేపథ్యం, పద్యం నిర్మాణం, పద్యం ఏ విధంగా రాయాలో తెలుసుకుంటారు. * పాట, నిర్వచనం, లక్షణాలు, శిల్పం తెలుసుకుని పాటలు రాయడము నేర్చుకుంటారు. * వివిధ ప్రక్రియల గురించి ఆయా అంశాలు భావనకు సంబంధించిన ప్రాథమిక విషయాలను తెలుసుకొని, అభ్యసన దిశగా అడిగేసే సృజన శీలతను పెంపుదల చేసుకునే విధంగా తమ అభ్యసన వ్యక్తిత్వంలో కావలసిన మార్పులు చేపడతారు. * * వ్యాసం గురించి తెలుసుకొని, వ్యాసకర్తలుగా రూపొందటానికి విద్యార్థినులు కృషి చేస్తారు. * ఈ పుస్తకం వైవిధ్య అధ్యాయానికి సృజనకు దారి చూపుతుంది. పద్యం , పాట, వచన కవిత , లఘు కవిత , మినీ కవిత , హైకూ, నానీలు , గజల్, రుబాయిలు, వ్యాసం , ముందుమాట , పుస్తక సమీక్ష , జానపదం మొదలైన ప్రక్రియలు విద్యార్థి సర్వతో ముఖ వ్యక్తిత్వ అభివృద్ధికి ప్రేరకాలుగా ఉపయోగపడతాయి.

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TELUGU III YR- COURSE OUTCOMES 2024

PROGRAMME	COURSE CREDITS	COURSE CODE	COURSE OUTCOMES
B.SC LIFE SCIENCES (BZC, MZC) B.SC PHYSICAL SCIENCES (MPC,MSCS) BCOM COMPUTERS, B.A. **SEMESTER - VI**	3 CREDITS	తెలుగు సాహిత్య చరిత్ర	. ఈ పాఠ్యాంశంలోని ప్రక్రియలు విద్యార్థి ఆలోచనలకు , అవగాహనకు ,అంతిమ సృజనశీల వ్యక్తిత్వ నిర్మాణానికి ఎంతగానో తోడ్పడతాయి. * విద్యార్థులు నాటకం , నవల , జీవిత చరిత్ర, ఉపన్యాస కళ మొదలైన ప్రక్రియలలో విద్యార్థులు సాహిత్యాన్ని రాయగలరు. * జర్నలిజంలో మౌలిక అంశాల దృశ్య నిరంతర వార్త ప్రసారాన్ని అందిస్తూ, రోజు రోజుకు అనేక ఉపాధి అవకాశాలను కల్పిస్తూ విస్తరిస్తున్న ప్రింట్, ఎలక్ట్రానిక్ మీడియాలో పనిచేయడానికి కావాల్సిన మౌలిక అవగాహనను పొందుతారు. * ' జర్నలిజంలో మౌలిక అంశాలు ' అధ్యాయనం ద్వారా విద్యార్థినిలు జర్నలిజం రంగంలో విరివిగా ఉపాధి అవకాశాలు పొందుతారు. * ప్రాజెక్టు అధ్యయనం, పరికల్పన,నివేదిక ద్వారా విద్యార్థులు సర్వతోముఖ వ్యక్తి అభివృద్ధి ప్రేరకాలుగా నిలుస్తాయి . * ప్రాజెక్టు పరిచయం ద్వారా ఉన్నత చదువులో , పరిశోధన రంగంలో రాణించడానికి ,అనేక ఉపాధి అవకాశాలను పొందవచ్చును. *ఈ పుస్తకం ఒక సృజన వేదికగా ఉపయోగపడుతూ విద్యార్థుల వ్యక్తిత్వ వికాసానికి , ఆత్మవిశ్వాసానికి , జీవితంలో గెలిచిపోవడానికి మార్గాలను చూపుతూ ,భవిష్యత్తులో ఉపాధి అవకాశాలకు , రచయితలుగా రాణించడానికి తగిన మూల వనరుగా ఉపయోగపడుతుంది.

TSWRAFP DEGREE COLLEGE FOR WOMEN * BHONGIR *

PRINCIPAL
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TELANGANA SOCIAL WELFARE RESIDENTIAL ARMED FORCES PREPARATORY DEGREE COLLEGE FOR WOMEN, BHONGIR
YADARI BHONGIR (DIST), TELANGANA, 508126

Affiliated to Mahatma Gandhi University, Nalgonda

DEPARTMENT OF PHYSICS

COURSE SPECIAL OUTCOMES (COs)

(PHYSICAL SCIENCES)

B.Sc Physical Sciences MPC (Mathematics, Physics, Chemistry)

Course with Title	Course Outcomes
SEM I: Mechanics and Oscillations	The students will be able to • understand the difference between scalars vectors and tensors • explain basic physical laws and concepts in Newtonian mechanics • find relation between linear and rotational kinematic relations • understand collisions in two and three dimensions • apply conservation laws and conservation principles • know about central forces and Kepler's laws of planetary motion • know special theory of relativity: relativity in length, time, mass, space in different inertial frames of references • learn simple harmonic motion and Lissajous figures in waves and oscillations • understand Damped harmonic oscillator (under damped, critical damped and over damped oscillations)
SEM II: Thermal Physics	The students will be able to • understand kinetic theory of gases • explain basic physical laws and concepts in thermodynamics • apply concept on entropy • derive Maxwell's equations, specific heats • understand Joule Kelvin effect • learn Principle of adiabatic demagnetization, refrigeration • apply concept on entropy and related radiation laws • derive radiation laws • measure temperature using optical pyrometer • calculate solar constants • explain basic physics laws and concepts n statistical mechanics • derive Maxwell's distribution law, Bose-Einstein distribution law,

	Fermi-Dirac distribution law • compare three distribution laws • solve all problems for each concept. • do the experiments and able to apply concept for new inventions
SEM III: Electromagnetic Theory	The students will be able to • explain basic physical laws and concepts in electrostatics, magneto statics and electromagnetism • correlate content with household, industrial electrical appliances • understand electric fields, electric potential and apply the principles of Coulomb's Law and Gauss's law to calculate electric fields in various charge distributions • understand magnetic fields and apply the principles of Biot-savart law and Ampere's law to calculate magnetic fields in various systems • understand the depth of static and time-varying electromagnetic field as governed by Maxwell's equations • apply concepts of this subject in Antenna Engineering and its applications • use fundamental laws and relations to solve problems in electromagnetic theory • draw the graphs for different electric field and magnetic field with respect to distance. • do the experiments and able to apply concept for new inventions

SEM IV: Waves and Optics	Students will be able to • know the transverse and longitudinal waves • to derive equations and solution for transverse wave propagation • get knowledge on overtones, energy transport, transverse impedance • understand longitudinal vibrations in bars • gain knowledge on transverse in bar • clear idea about conditions for interference of light • know the division of wave front • understand the division of wave amplitude • get knowledgeable about wedge shape film, Newton's rings • understand importance of Michelson Interferometer • differentiate Fresnel and Fraunhofer diffraction • get knowledge on diffraction due to single slit, double slit, diffraction grating • know the concept of Fresnel's half period zones, • compare zone plate and convex lens • get complete picture on polarization • understand types of polarization • get clear idea on alpha decay and Beta decay • clear idea about Brewster's law, Malus law • gain knowledge of Nicol prism • distinguish wave plates • understand the Babinet's compensator • gain knowledge on Laurent's half shade polarimeter • solve the problems • do the experiments and able to apply concept for new inventions
SEM V: Modern Physics	• Students will be able to • know the merits and demerits of different atomic models • get knowledge on Coupling schemes and selection rules • understand Start, Zeeman and Paschen Back effect • get clear idea on different types of molecular spectrums • gain knowledge on Raman effect • clear idea about photoelectric effect and Compton effect • know the quantum theory of matter waves • understand the wave properties of particles • differentiate phase and group velocities • get knowledgeable about Particle diffraction (Davisson -Germer , Double slit experiments). • apply uncertainty principle to x and p_x, E and t • derive Schrodinger time independent and dependent wave equations • know the concept of the wave function • operator Eigen functions • get complete picture on properties of nucleus • calculate binding energy of nucleus • understand nuclear models • get clear idea on alpha decay and Beta decay

	• clear idea about particle detectors and counters • gain knowledge of basic theories of solid state structure • recognize the X-ray diffraction and Bragg's law • understand the influence of crystal binding energy • calculate the Madelung constant of crystal • do the experiments and able to apply concept for new inventions
SEM VI: Basic Electronics	• Students will be able to • gain knowledge on energy bands in solids • clear idea bout N-type, P-type semiconductors • derive continuity equation • know about P-N junction diode, Half-wave, full-wave and bridge rectifier. • get clear idea about Zener diode and its characteristics. • prove Zener diode as voltage regulator • understand p-n-p and n-p-n transistors, current components in transistors • know the importance of RC coupled amplifier • construct Photo diode, Shockley diode, Solar cell Opto couplers, • FET, UJT, SCR • able to convert FET as amplifier, UJT as a relaxation oscillator, SCR as a switch, • able to solve problems related to Binary, decimal, hexadecimal number system, Binary addition and subtraction • able to conversion of binary to decimal, binary to hexadecimal, decimal to hexadecimal and vice versa • clear idea about logic gates • verify De Morgan's laws • solve the problems • do the experiments and able to apply concept for new inventions

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TSWRAFP DEGREE COLLEGE FOR WOMEN * BHONGIR *

COURSE SPECIFIC OUTCOMES (COs)

Chemistry (BSc):

S.No	Class	Semester	Course Outcomes
1	B.Sc I	I	• Understand covalent – bonding metallic bonding and describe structure of molecule with regular and distorted geometry by using various theories of bonding. • Understand about structures of special type compounds of p-Block elements. • Able to understand structural theory in organic chemistry, applies to various organic molecules. • Differentiate Acyclic & Aromatic Compounds. • Interpret aromaticity and based on that distinguish aromatic, and non- aromatic compounds able to know the structure of Benzene and its electrophilic substitution reactions. • Able to know elementary concepts in quantum mechanics. • Able to understand states of matter & their properties • Understand general principles of inorganic Qualitative Analysis. And able to analyze anions and cations. • Understanding the concept of isomerism, applies to various simple organic Molecules.

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S.No	Class	Semester	Course Outcomes
2	B.Sc I	II	• Understand about structures of Oxides, Oxyacid's of p-Block elements. • Differentiate Interhalogens and Polyhalides. • understand the chemistry elements in transition series • Acquire knowledge about Primary, Secondary and Tertiary alkyl halides, and, understand, differentiate Nucleophilic Substitution Reactions. • Learn synthesis of alcohols and ethers, understand reaction mechanisms of named reactions in phenols & Ethers. • Acquire knowledge about synthesis and properties of carbonyl compounds • Differentiate aldehydes and ketones • Express & evaluate fundamentals of electrochemistry. • Recognize the electrochemical processes. • Explains & Evaluates the types of Electrodes and Cells. • Know the study of chemistry as a green approach with respect to green Chemistry. • Distinguish between different kinds of isomers, Draw the E or Z-isomer of a given alkene, Apply priority rules to assign R, S-configurations to stereo genic centers. • Understand how the properties of the solution are linked to the concentration of solute in the solution

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S.No	Class	Semester	Course Outcomes
3	B.Sc II	III	• Understand the properties of f block elements. • Acquire knowledge on the IUPAC Nomenclature and solve the EAN of coordination compounds • Learn the postulates and limitations of Werner's, VBT and Sidgwick theory. • Learn about metal carbonyls, its preparation methods and properties. • Learn about the preparation methods and properties of carboxylic acid and its derivatives. • Learn the preparation and chemical and physical properties of nitro hydrocarbons, amines, cyanides and isocyanides. • Gain an extensive knowledge on thermodynamics with reference to different thermodynamics functions, processed, work of expansion and laws of thermodynamics. • Understand applications of thermodynamics in basic Sciences for deriving equation, learn about entropy and changes and Gibb's equation and Maxwell relations. • Understand about evaluation of analytical data. • Understand the preparation and synthetic applications in industry of carbanions. • Understand the phase systems of one component and two component system with congruent and incongruent melting point.

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S.No	Class	Semester	Course Outcomes
4	B.Sc II	IV	• Know about crystal field theory and splitting patterns in octahedral and tetrahedral and Square planar complexes applications of coordination compounds. • Acquire the knowledge of HSAB concept. • Analyze the thermodynamic and kinetic stability of transition metal complexes. • Know about the biological significance of Na, K, Mg, Ca and other toxic metals. Acquire the knowledge of structure and functions of hemoglobin and chlorophyll. • Acquire knowledge about carbohydrates, its classification and evaluation of structure from reactions, understanding its interconversions. • Understand the preparation and properties of amino acids and proteins. • Understand about Hetero cyclic compounds and its chemical properties. • Developed the concept on reaction kinetics with reference to its factors about first, second, zero order reaction its derivation with examples. • Learn to analyze the consequence of light absorption with respect to its laws, understand the photochemical reactions with high and low Quantum yields, jablonski diagram. • Understand the theories of bonding in metals and its properties. • Understand the synthetic applications of acetoacetic Ester and malonic Ester. • Know about the preparation and properties of colloids, gels and emulsions.

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S.No	Class	Semester	Course Outcomes
5	B.Sc III	V	• Know about electromagnetic radiation and its interaction with molecules. Understand various types of molecular spectra. • Learn the classification of molecules based on moment of inertia and understand their determination of Bond length. • Learn about the simple harmonic oscillator and its energy levels. • Learn about modes of vibrations and types of electronic transitions in a molecule. • Know about the characteristic absorption bands of various functional groups and know about fingerprint regions. • Know about the general features of absorption and learn Beer- Lambert's law. • Learn about the selection rules of IR electronic • Understand the principle of NMR, chemical shift and splitting of signals and spin- spin coupling. • Implement the concept in analyzing the NMR spectrum of some molecules. • Understand the basic principle of mass spectrometry, types of ions and learn to determine the mass spectrum of some molecules. • Acquire the knowledge of principle and methods of solvent extraction and its applications. • Understand the classification of chromatographic methods and principle involved in it. • Understand and evaluate the principle instrumentation and applications of TLC, paper, column, Ion exchange, Gas and HPLC.

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S.No	Class	Semester	Course Outcomes
6	B.Sc III	VI	• Acquire the knowledge on diseases like insect borne, air-borne, water- borne and hereditary diseases. • Learn about terminology in medicinal chemistry. • Understand the nomenclature and classification of drugs. • Understand the concept of absorption, distribution, metabolism and excretion of drugs. • Acquire the knowledge of mechanism of action of drugs and factors affecting it. Understand the mechanism of action of enzymes and its inhibition. • Know the mechanism of drug receptor interactions and understand the SAR of drug molecules • Evaluate the synthesis and therapeutic activity of drugs related to chemotherapeutics, metabolic disorders and drugs acting on the nervous system. • Analyzing the function of molecular messengers and health promoting drugs.

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DEPARTMENT OF BOTANY

BOTANY COURSE OUTCOMES (2018-19)

SEMESTER-I

Botany paper -I Microbial Diversity of Lower Plants.	CO1	1. Identify and describe the morphological characters of different types of Algae
	CO2	2. Gain knowledge about the economic importance (useful and harmful activities) of bacteria, viruses, algae and fungi and their role in plant diseases. Practicing different lab techniques employed for microbial identification and their study
	CO3	3. To know the structure and reproduction and evolution of sporophytes in bryophytes.
	CO4	4.To understand the structure and reproduction and stelar evolution and seed formation habit in pteridophytes.

SEMESTER-II

Botany Paper-II Gymnosperms, Taxonomy of Angiosperms and Ecology.	CO1	1.To gain knowledge about life cycles of gymnosperm plants. To explain about fossils and fossilization. To understand about geological time scale.
	CO2	2.By learning taxonomy, they can identify the plants, pen down different plant classifications and can prepare herbarium.
	CO3	3.Know the biotic and abiotic components of ecosystem. Food chain & food web in ecosystem
	CO4	4.Understand plant community & ecological adaptation in plants.

SEMESTER-III

Botany paper-III Taxonomy	CO1	1. By learning taxonomy, they can identify the plants, pen down different plant classifications and can prepare herbarium.

of Angiosperms and Medicinal Botany	**CO2**	To recognize the major groups of vascular plants and their phylogenetic relationships. To gain proficiency in the use of keys and identification manuals for identifying any unknown plants to species level.
	CO3	To explore the uses of plants as medicine by traditional indigenous approaches. To get introduced to different perspectives on treating ailments.
	CO4	To understand different systems of medicine and their uses.

SEMESTER-IV

Botany Paper-IV Plant Anatomy, Embryology and Palynology	**CO1**	To gain knowledge of plant cells, tissues and their functions. To make connections between plant anatomy and the other major disciplines of biology.
	CO2	To identify and compare structural differences among different taxa of vascular plants.
	CO3	To know the structure and development of monocot and dicot embryos.
	CO4	To compare the function and morphology of pollen grains. Describe and illustrate modern and fossil spores and pollen grains.

SEMESTER-V

Botany Paper-V Cell Biology and Genetics	**CO1**	1. Understand cell science, the components of the cell, its structure and functions.
	CO2	2. Get an overview of role of genetics in human welfare.
	CO3	To have knowledge of the nature and function of genes, processes of inheritance.
	CO4	To describe linkage, crossing over and mutations.
Botany paper-VI Ecology and Biodiversity	**CO1**	1.Learn the Approaches to the study of Ecology
	CO2	2.Understand the population & Community Ecology - concept of metapopulation
	CO3	3.Understand diversity among various groups of plant kingdom.
	CO4	4.Scope , importance and management of biodiversity.

SEMESTER-VI

Botany paper-VII Plant Physiology	**CO1**	1. Equip to conduct physiology experiments to understand the functioning of various metabolic activities performed by the plants.
	CO2	To explain the role of micro nutrients in plant growth and development
	CO3	To relate photosynthesis with the formation of primary and secondary metabolites.
	CO4	Respiration and Nitrogen metabolism in plants
Botany paper-VIII Tissue culture and Biotechnology	**CO1**	1. Practically gain knowledge about industry base techniques related to biotechnology, seed technology and horticulture.
	CO2	2.Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.
	CO3	3.Learn about the production of Synthetic seeds & significance.
	CO4	4.Study about the role of tissue culture in crop improvement.

HEAD
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DEPARTMENT OF BOTANY

BOTANY COURSE OUTCOMES (2019-20)

SEMESTER-I

Botany paper -I Microbial Diversity of Lower Plants.	**CO1**	1. Identify and describe the morphological characters of different types of Algae
	CO2	2. Gain knowledge about the economic importance (useful and harmful activities) of bacteria, viruses, algae and fungi and their role in plant diseases. Practicing different lab techniques employed for microbial identification and their study
	CO3	3. To know the structure and reproduction and evolution of sporophytes in bryophytes.
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	CO4	To compare the function and morphology of pollen grains. Describe and illustrate modern and fossil spores and pollen grains.

SEMESTER-V

Botany Paper-V Cell Biology and Genetics	**CO1**	1. Understand cell science, the components of the cell, its structure and functions.
	CO2	2. Get an overview of role of genetics in human welfare.
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BOTANY COURSE OUTCOMES (2020-21)

SEMESTER-I

Botany paper -I Microbial Diversity of Lower Plants.	CO1	1. Identify and describe the morphological characters of different types of Algae
	CO2	2. Gain knowledge about the economic importance (useful and harmful activities) of bacteria, viruses, algae and fungi and their role in plant diseases. Practicing different lab techniques employed for microbial identification and their study
	CO3	3. To know the structure and reproduction and evolution of sporophytes in bryophytes.
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	CO3	To know the structure and development of monocot and dicot embryos.
	CO4	To compare the function and morphology of pollen grains. Describe and illustrate modern and fossil spores and pollen grains.

SEMESTER -IV

Botany Paper-IV:Cell Biology, Genetics and Plant physiology	**CO1**	1. Understand cell science, the components of the cell, its structure and functions.
	CO2	2. Get an overview of role of genetics in human welfare.
	CO3	3.To have knowledge of the nature and function of genes, processes of inheritance. 4.To describe linkage, crossing over and mutations
	CO4	5. To know about physiological metabolism in plants.

SEMESTER-V

Botany Paper-V Cell Biology and Genetics	**CO1**	1. Understand cell science, the components of the cell, its structure and functions.
	CO2	2. Get an overview of role of genetics in human welfare.
	CO3	To have knowledge of the nature and function of genes, processes of inheritance.
	CO4	To describe linkage, crossing over and mutations.
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DEPARTMENT OF BOTANY

BOTANY COURSE OUTCOMES (2021-22)

Note: No BZC I year course

SEMESTER-III

Botany Paper-III Plant Anatomy, Embryology and Palynology	**CO1**	To gain knowledge of plant cells, tissues and their functions. To make connections between plant anatomy and the other major disciplines of biology.
	CO2	To identify and compare structural differences among different taxa of vascular plants.
	CO3	To know the structure and development of monocot and dicot embryos.
	CO4	To compare the function and morphology of pollen grains. Describe and illustrate modern and fossil spores and pollen grains.

SEMESTER -IV

Botany Paper-IV: Cell Biology, Genetics and Plant physiology	**CO1**	1. Understand cell science, the components of the cell, its structure and functions.
	CO2	2. Get an overview of role of genetics in human welfare.
	CO3	3.To have knowledge of the nature and function of genes, processes of inheritance. 4.To describe linkage, crossing over and mutations
	CO4	5. To know about physiological metabolism in plants. 6. Equip to conduct physiology experiments to understand the functioning of various metabolic activities performed by the plants.

SEMESTER-V

Botany paper-V Biodiversity and conservation	**CO1**	1.Learn the Approaches to the study of Biodiversity
	CO2	2.Understand the- concept of biodiversity and its conservation
	CO3	3.Understand diversity among various groups of plant kingdom and treats.

	CO4	4.Scope, importance and management of biodiversity and their conservation and value added.

SEMESTER-VI

Botany paper-VI Tissue culture and Biotechnology	**CO1**	1. Practically gain knowledge about industry base techniques related to biotechnology, seed technology and horticulture.
	CO2	2.Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.
	CO3	3.Learn about the production of Synthetic seeds & significance.
	CO4	4.Study about the role of tissue culture in crop improvement.
Project	CO	1. To know about basic research of plant and applied sciences
		2. To understand research and developments in plant sciences
		3. To understand the interdisciplinary science and research
		4. To apply the research to local areas and respective fields.

HEAD
Department of Botany
TSWRAFPDCW, Bhongir

T.S.W.R.A.F.P.D.C.W. BHONGIR

Principal
T.S.W.R.A.F.P.D.C.W.
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TELANGANA SOCIAL WELFARE RESIDENTIAL ARMED FORCES
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DEPARTMENT OF BOTANY

BOTANY COURSE OUTCOMES (2022-23)

Note: No BZC I & II year courses

SEMESTER-V

Botany paper-V Biodiversity and conservation	**CO1**	1.Learn the Approaches to the study of Biodiversity
	CO2	2.Understand the- concept of biodiversity and its conservation
	CO3	3.Understand diversity among various groups of plant kingdom and treats.
	CO4	4.Scope, importance and management of biodiversity and their conservation and value added.

SEMESTER-VI

Botany paper-VI Tissue culture and Biotechnology	**CO1**	1. Practically gain knowledge about industry base techniques related to biotechnology, seed technology and horticulture.
	CO2	2.Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.
	CO3	3.Learn about the production of Synthetic seeds & significance.
	CO4	4.Study about the role of tissue culture in crop improvement.
Project	CO	1. To know about basic research of plant and applied sciences
		2. To understand research and developments in plant sciences
		3. To understand the interdisciplinary science and research
		4. To apply the research to local areas and respective fields.

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Department of Zoology

SEMESTER I

Animal Diversity – Invertebrates

Course Outcomes

After completion of the course the student is able to:

CO1. Knowledge about the Diversity and Phylogeny of Invertebrate Phyla

CO2. Discuss the Diversity of Invertebrate and their Economic Significance

CO3. Know about some of the important and common Protozoans and Helminthes of parasitic nature causing diseases in human beings.

CO4. Understood the diversity and classification and functional aspects of different systems of Arthropoda, Mollusca and Echinodermata.

CO5. Identify the resemblance and evolutionary significance of larval forms of Echinoderms

SEMESTER –II

Animal Diversity- Vertebrates

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Knowledge about the Diversity and Phylogeny of Vertebrates Phyla

CO2. Understand the Nomenclature and Classification of the Major Vertebrate Phyla

CO3. Describe the Morphology and Anatomy of various Vertebrates through type Study

CO4. Understand the Evolutionary importance of Temporal Fossae in Reptiles

CO5. Knowledge about the significance of various types of Adaptations in different Phyla.

SEMESTER –III

Animal Physiology and Animal Behaviour

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the composition of food and mechanism of digestion absorption and assimilation.

CO2. Describe the mechanism of circulation and composition and functions of blood

CO3. Knowledge of Neuromuscular coordination, Osmoregulation in animals and Endocrine system and their functions

CO4. Understand the process of respiration and excretion and the mechanism of transport of gases

CO5.Analyze various types of Animal Behaviour and their significance in their Learning, Memory, Social Behaviour and Communication

SEMESTER –IV

Cell Biology, Genetics & Developmental Biology

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Describe the composition of prokaryotic and eukaryotic cells.

CO2. Understand the structure of cells and cell organelles in relation to their functional aspects.

CO3. Understand the Structure and functions of Nucleic acids and their role in Protein Synthesis

CO4. Apply the various concepts of Genetics in Problem Solving.

CO5. Understand the Process of Gametogenesis and its significance in the development of an Organism

SEMESTER – V

Physiological Chemistry and Endocrinology

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the composition of food and types of Biomolecules.

CO2. Describe the oxidation of lipids and mechanism of enzyme action

CO3. Knowledge of chemical messengers and action of various types of hormones

CO4. Understand the concept of internal environment and Homeostasis

CO5. Understand the structure and functions of Endocrine glands

SEMESTER – VI

Ecology, Zoogeography and Evolution

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the concept of Ecosystem

CO2. Describe the concept of species, types of pollutions and conservation of wildlife

CO3. Knowledge of Zoogeographical regions and concept of Biodiversity

CO4. Understand the theories of Evolution and Evidences of Evolution

CO5. Understand the concepts of Isolation and Speciation

SEMESTER – VI

Optional paper in place of the Project

Tools and Techniques in Biology

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the Microscopy and Centrifugation Techniques

CO2. Describe the concepts of Calorimetry and Spectrophotometry

CO3. Knowledge of Electrophoresis, ELISA and RIA techniques

CO4. Understand the concept of DNA extraction and PCR technique

CO5. Understand the basic concepts of Statistics

SEMESTER – III

Skill Enhancement Course

Apiculture

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the present status of Apiculture in India

CO2. Describe the social organization and selection of bee species

CO3. Knowledge of rearing methods and bee keeping equipment

CO4. Understand the concept of Honey extraction

CO5. Understand the bee diseases, enemies, control and preventive methods

SEMESTER – IV

Skill Enhancement Course

Vermiculture

COURSE OUTCOMES

After completion of the course the student is able to:

CO1. Understand the difference between vermiculture and vermicomposting

CO2. Describe the Earthworm diversity and types of vermiculture

CO3. Knowledge of vermiculture techniques and essential parameters for vermiculture

CO4. Understand the nutritive value of vermicomposting and applications of vermicomposting

CO5. Understand the economic importance and NABARD support for vermiculture

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DEPARTMENT: MICROBIOLOGY

PROGRAMME: B.Sc.

Statements of Programme Specific Outcomes (PSOs)

By the end of this course, the students will be able to:

1. Comprehend the contributions of various scientists to the field of microbiology and know the scope of various branches

2. Know the significance of biodiversity and appreciate different kinds of prokaryotic & eukaryotic microbes and their interactions

3. Learn the involvement of microorganisms in the fermentation of different food items and spoilage of food by microbes

4. Understand the concept of disease development, spread, control and eradication from society

5. Explain DNA, RNA and protein structure and their synthesis and understand the basic concepts of gene and their regulation of action

6. Explain and write various industrial fermentations and bioinstrumentation.

Statements of Course Outcomes (COs) Course:

Course with Title	Course outcomes
SEMESTER-I, **GENERAL MICROBIOLOGY**	• Learn the history and major developments in Microbiology • Understand the basics of microbiology • Learn the various methods and techniques like microscopy, staining and pure culture, sterilization methods used in Microbiology • Show evidence of some breadth and depth understanding of bacterial growth • Learn different phases of bacteria • Know about the morphology and general characteristics of viruses
SEMESTER-II, **MICROBIAL DIVERSITY**	• Learn the concept of biodiversity and conservation. • Learn the classification of living organisms. • Understand the prokaryotic microbial diversity. • Show evidence of some breadth and

	depth understanding of eukaryotic microbial diversity. • Learn different microbial interactions. • Know different methods to assesses the microbial diversity.
SEMESTER-III, FOOD & ENVIRONMENTAL MICROBIOLOGY	• know about preparation and health aspects of fermented foods • understand about the significance of probiotics and prebiotics • learn about food spoilage and poisoning • Gain the knowledge of food quality control and assessment • learn about air and water microbiology and sewage treatment. • know about the properties of soil and learn about soil • microorganisms • learn about microbial interactions and microbial bioremediation
SEMESTER-IV, MEDICAL MICROBIOLOGY AND IMMUNOLOGY	• Learn the history of Medical Microbiology and importance of medical bacteriology • Understand the importance of Medical virology and parasitology • Learn the history and important aspects of Immunology • Show evidence of some breadth and depth understanding of types of immune response • Know about the immunological disorders and different antigen-antibody interactions
SEMESTER-V, MOLECULAR BIOLOGY AND MICROBIAL GENETICS	• Learn the fundamentals of microbial genetics • Understand the importance of mutations and genetic recombination • Learn the gene expression in prokaryotes • Show evidence of some breadth and depth understanding of genetic code and regulation of gene expression • Know about the recombinant DNA technology

SEMESTER-VI, **INDUSTRIAL MICROBIOLOGY**	• Learn the fundamentals of fermentation and microbial products • Understand the importance of microorganisms and their selection for industrial fermentations • Learn about fermenter design and stages of industrial fermentation • Show evidence of some breadth and depth understanding of types of fermentation • Know about the fermentation of different microbial products

DEPARTMENT OF POLITICAL SCIENCE

POLITICAL SCIENCE:(B.A) (H.E.P)

- **Political science outcomes include the establishment of stable governments that ensure the orderly functioning of societies.**
- **Representation is a critical outcome, allowing diverse groups to have a voice in decision-making processes.**
- **Effective policy formulation and implementation address societal needs and promote public welfare.**
- **Good governance ensures accountability, transparency, and the rule of law.**
- **Finally, political science seeks to achieve justice by advocating for equitable treatment and protection of human rights**

S.N	Class	Semester	Course Outcomes
1	B.AI	1 Understanding Political Theory	• Political outcomes are the results of political processes and decisions, impacting laws, policies, governance, and societal dyna • The results of political processes and decisions, impacting laws, policies, governance, and societal dyna • Political ideologies shape societal norms and policies, guiding governance and influencing

			public attitudes and behaviors. • Political ideologies shape societal norms and policies, guiding governance and influencing public attitudes and behaviors. • Understand key political concepts like power, authority, and justice. • Develop analytical skills to evaluate political texts and arguments. • Apply theories to contemporary political issues. • Enhance research and writing abilities. • Engage in debates and discussions. • Evaluate political systems ethically.

S.No	Class	Semester	Course Outcomes
2	**B.A I**	**II** Western Political Thought	• Greek political thought, influential through philosophers like Plato and Aristotle, laid foundational ideas for governance, citizenship, and justice in Western political theory. • [Medieval and early modern political thought saw the development of ideas on monarchy, divine right, natural law, and the social contract, shaping governance and rights in Europe. • : Social contract theory posits that individuals consent to form a government in exchange for security and protection of their natural rights, influencing modern ideas of democracy and political legitimacy. • Utilitarian thought emphasizes maximizing overall happiness or utility as the basis for ethical decision-

			making and social policies, advocating for actions that produce the greatest good for the greatest number of people. • The philosophy of dialectics explores the evolution of ideas through the clash and resolution of opposing viewpoints, revealing insights into how societies and thought systems develop over time.

S.No	**Class**	**Semester**	• **Course Outcomes**
3	**B.A II**	**III** Indian Political Thought	• **The philosophy of dialectics explores the evolution of ideas through the clash and resolution of opposing viewpoints, revealing insights into how societies and thought systems develop over time.** • **Medieval political thought centered on the relationship between church and state, divine right of kings, and hierarchical social order, shaping governance and society in Europe.** • **Renaissance thought marked a revival of classical learning, humanism, and individualism, influencing art, literature, politics, and philosophy across Europe.** • **Reformist thought advocates for gradual or radical changes within existing systems or institutions to address social, political, or economic inequalities, aiming for improvement or transformation.** • **Socialist thought seeks to establish collective ownership and democratic control over the means of production, aiming to reduce inequality and achieve social and economic justice**

S.No	**Class**	**Semester**	• **Course Outcomes** • **The constitutional development in India led to the**

4	**B.AII**	**IV** Constitution and Politics of India	**establishment of a democratic republic with a framework that guarantees fundamental rights and the rule of law.** • **The institutional framework in India supports a federal system with a parliamentary democracy, ensuring governance through elected representatives and a separation of powers among the executive, legislature, and judiciary.** • **The institutional framework in India supports a federal system with a parliamentary democracy, ensuring governance through elected representatives and a separation of powers among the executive, legislature, and judiciary.** • **Electoral politics in India has resulted in vibrant democratic participation, periodic elections, and the formation of coalition governments, reflecting diverse political ideologies and regional interests.** • **Issues in Indian politics include challenges related to corruption, communalism, caste-based politics, and regional disparities, impacting governance and societal cohesion**
S.No	**Class**	**Semester**	**Course Outcomes**
5	**B.A III**	**V** International Relations	• International relations in India have resulted in strategic partnerships, economic collaborations, and diplomatic engagements aimed at promoting global stability and economic development. • The European conquest of Asia and Africa led to colonial domination, exploitation of resources, socio-economic disruption, and the spread of Western cultural influences across these regions. • The Cold War détente between the United States and the Soviet Union resulted in reduced tensions, arms control agreements, and increased diplomatic cooperation, contributing to a more stable global political environment. • India's foreign policy outcomes include strategic non-alignment, promoting regional stability, enhancing economic cooperation, and advocating for multilateralism and global governance reform.

			• India's relations with China involve strategic competition, economic cooperation, and efforts towards maintaining border stability; with Pakistan, it includes ongoing geopolitical tensions, occasional dialogues, • : India's relations with China involve strategic competition, economic cooperation, and efforts towards maintaining border stability; with Pakistan, it includes ongoing geopolitical tensions, occasional dialogues, and efforts towards regional stability; with Sri Lanka, it focuses on cultural ties, economic partnerships, and cooperation on regional security issues. • : India's foreign policy outcomes include strategic non-alignment, India's relations with China involve strategic competition, economic cooperation, and efforts towards maintaining border stability; with Pakistan, it includes ongoing geopolitical tensions, occasional dialogues, and efforts towards regional stability; with Sri Lanka, it focuses on cultural ties, economic partnerships, and cooperation on regional security issues. Promoting regional stability, enhancing economic cooperation, and advocating for multilateralism and global governance reform. • : India's foreign policy outcomes include strategic non-alignment, promoting regional stability, enhancing economic cooperation, advocating for multilateralism, and collaborating on global governance reform. Relations with China involve strategic competition, economic cooperation, and efforts towards maintaining border stability; with Pakistan, there are ongoing geopolitical tensions, occasional dialogues, and efforts towards regional stability; with Sri Lanka, the focus is on cultural ties, economic partnerships, and cooperation on regional security issues.

S.NO	CLASS	SEM	COURS OUT COMES
6	B.AIII	VI Global Politics	• The concept of power refers to the ability of individuals or groups to influence and control outcomes, resources, and decision-making processes within social, political, and economic contexts • Security involves measures taken to protect individuals, organizations, or nations from threats and risks, ensuring safety and stability in various domains such as personal, national, economic, and environmental spheres. • Human rights are fundamental entitlements and freedoms inherent to all individuals, safeguarding their dignity and ensuring protection from discrimination, oppression, and abuse. • The World Bank is an international financial institution that provides loans and grants to developing countries for projects aimed at reducing poverty and promoting sustainable development. Disarmament refers to the reduction or elimination of military weapons and capabilities, while an arms race describes the competitive escalation in the development and acquisition of weapons among nations

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Course Specific Outcomes

B.A. (ECONOMICS) SYLLABUS

The Telangana Social Welfare Residential Armed Forces Preparatory Degree College for Women in Bhongir is a unique institution that combines military training with academic education for women. The college offers various degree programs, including B.A. in Economics, and aims to prepare students for careers in the armed forces as well as other fields[1][2].

Here's a summary of the learning outcomes for the B.A. (Economics) syllabus:

Semester I: Micro Economics (DSC - Paper I)

- **Indifference Curve**: Understanding consumer preferences and choices.
- **Production Function**: Learning about the relationship between inputs and outputs.
- **Revenue and Cost Curves**: Analyzing how revenue and costs behave in different market conditions.
- **Market Conditions and Drawbacks**: Understanding different market structures and their limitations.
- **Price Determination**: Learning how prices are set in various markets.

Semester II: Macro Economics (DSC - Paper II)

- **Circular Flow of Income**: Understanding the flow of money in an economy.
- **National Income Estimation**: Learning methods to estimate national income and the challenges involved.
- **Income and Employment Relationship**: Understanding how income levels affect employment.
- **Consumption and Investment**: Learning about the factors that influence consumption and investment.
- **Money Demand and Supply**: Understanding how money is created and circulated in the economy.

Semester III: Statistics for Economics (DSC - Paper III)

- **Data Collection Methods**: Learning various techniques for collecting data.

- **Central Tendency Measures**: Understanding methods to measure central tendencies like mean, median, and mode.
- **Correlation**: Estimating relationships between two or more variables, including Karl Pearson's correlation function.
- **Index Numbers**: Learning to construct and interpret index numbers.
- **Chronological Data Construction**: Understanding how to organize data in chronological order and its uses.

Semester IV: Indian Economy

- **Economic Conditions at Independence**: Understanding India's economic state at the time of independence.
- **Trends in Indian Economy**: Analyzing the economic trends over the years.
- **Sectoral Importance**: Understanding the roles of primary, industrial, and tertiary sectors.
- **Planning and NITI Aayog**: Learning about economic planning and the role of NITI Aayog.
- **Public and Private Sector**: Understanding the importance of both sectors in the economy.

Semester V: Agricultural Economics (DSE - Paper V-A) & Public Economics (DSE - Paper V-B)

- **Fiscal Finance**: Understanding the role and importance of fiscal finance.
- **Government Expenditure**: Learning about various types of government spending.
- **Revenue Sources**: Understanding the sources of government revenue.
- **Budget**: Comprehensive understanding of the annual financial statement.

Semester VI: Developmental Economics (DSE)

- **Developmental Economics**: Learning about economic development theories and practices.

This curriculum is designed to provide a comprehensive understanding of both theoretical and practical aspects of economics, preparing students for various career paths

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Commerce Semester wise Course Outcomes

B.Com General

Semester I

Sl. No.	Name of the Course	Outcomes
1	Financial Accounting 1	• Acquire the basic concept of accounting terms. • Inculcates knowledge of various accounting concepts and policies • Journalize the ability to rectify the errors • Exposed to various methods of depreciation • Other special transactions culminating in the preparation of financial statements of concerns.
2.	Business Organisation and Management	• The course aims to provide basic knowledge to the students about the organisation and management of a business enterprise.
3	Foreign Trade	• An overview of Foreign Trade and Different Documents used in Foreign Trade. • Students will learn about Indian Trade Policy and its implementation • Components of balance of trade and balance of payment, causes of disequilibrium between BOT & BOP • A study will be done regarding the International Economic Institutions i.e. IBRD IMF WTO UNCTAD

Semester II

Sl.No.	Name of the Course	Outcomes
1.	Business Laws	• Generalize the understanding of Indian Contract Act • Abridge the fundamental terms of Contract • Optimize the basic concept of valid Contract • Exposed the skill towards performance of Contract • Articulate the fundamentals of Sale of Goods Act. • Attain in depth knowledge of

		Consumer rights and intellectual property rights • Information Technology Act and Environmental Protection Act.
2.	Financial Accounting II	• To acquire accounting knowledge of bills of exchange • Know and apply accounting and finance theory. • Understands the techniques of consignment •
3.	Banking and Financial Services	• To familiarize with Fund based and Non fund based Financial Services

Semester III

Sl. No.	Name of the Course	Outcomes
1.	Advance Accounting	• In the subject advanced accountancy students will develop appropriate knowledge for maintaining accounts in case of partnership on admission retirement and death of a partner. • Students will learn how to settle and close books of accounts on insolvency of a partner and dissolution of a firm. • Students will learn accounting treatment related to issue of shares and debentures . • Accounting treatment related to issue of bonus shares. • Accounting treatment related to Final Accounts of a company. • Students will learn valuation of shares and debentures.
2.	Business Statistics I	• To understand how to organize and summarize data by using descriptive

		statistics and appropriate statistical graphs. ● To enhance students to grasp the fundamentals of statistics for interpreting business data. ● To use graphical methods to display a distribution of a variable and show relationships between two variables. ● To Compute and interpret measures of central tendency ● To compute Correlation analysis
3	Financial Institutions and Markets	● Understanding Indian Financial Systems ● Review the evolution of Financial Institutions ● Money market, Debt market and Equity market
4	Principles of Insurance	● Basic understanding of the Insurance Mechanism ● Relationship between Insurers and their Customers ● Importance of Insurance ● Major Life Insurance ● General Insurance Products

Semester IV

Sl.No.	Name of the Course	Outcomes
1.	Corporate Accounting	• Articulate the fundamental concepts of corporate accounts like Issue of Shares, Underwriting of Share • Critically analyse and

		work on redemption of preference shares and debentures. • Build the ability to interpret Company Final Accounts in the Revised Format – Profit & Loss Account and Balance Sheet • Exposed the knowledge on methods of Valuation of Shares and Goodwill. • Demonstrate the concept of internal reconstruction.
2.	Income Tax	After completion of this course students will able to: • Describe the provisions in the income tax law. • Articulate the basic concept related to various heads of income • Ascertain the provisions of income from house property. • Comprehend the technical terms related to Income Tax.
3.	Business Statistics II	● To inculcate analytical and computational ability among the students.
4.	Practice of General Insurance	● To make the students understand general policies and accounting.

Semester V

Sl. No.	Name of the Course	Outcomes
1.	Business Economics	• Understanding Business Economics • Paraphase the importance of business economics and its terms. • Learn different concepts of Utility • Supply Analysis • Production Analysis • Cost and Revenue Analysis

		• Diagnose the factors of consumer behavior • Compute the concept of Law of Variable Proportion • Enumerate and identify the types of market and product pricing
2.	Cost Accounting	By the end of the semester learner should know • Accounting Concepts and its importance and Preparation of Cost Sheet. • How to maintain stock levels and issue of stock • Methods of payment of wages and allocation and absorption of overheads • Preparation of Unit cost sheet andJjob cost sheet • Preparation of Contract account and Process account
3.	Auditing	After completion of this course students will able to: • Articulate the meaning and importance of auditing. • Summarize the concepts of vouching and verification in auditing. • Contrast the auditing standards and procedures. • Interpret the powers and duties of auditor. • Demonstrate the trends in auditing. • Defining Audit planning, Audit evidence and Audit Reports.
4.	Computerised Accounting	To make the students know the importance of accounting using the computer software and provide the knowledge of Tally accounting Software

Semester VI

Sl. No.	Name of the Course	Outcomes
1.	Accounting Standards	Introduces the students to working knowledge of Accounting Standards issued by the ICAI
2.	Research Methodology and Project work	• Delivers to students research oriented study and brings applicability of research in practical application. • application. • Creates awareness amongst

		students on importance of RM and it provides skills for all round development. • Provides learning experience to students • Provides opportunity to students to synthesize knowledge from various areas of learning
3.	Cost Control and Management Accounting	• To enhance the abilities of learners to develop the concept of management accounting and its significance in the business. • To enhance the abilities of learners to analyze the financial statements. • To enable the learners to understand, develop and apply the techniques of management accounting in the financial decision making in the business corporates. • To make the students develop competence with their usage in managerial decision making and control.
4.	Goods and Services Tax	● To equip the students with the knowledge regarding Theory and Practice GST. ● Recording advanced entries,GST adjustment and return filing ● Migration to ERP ● Computation of tax liability of an assessee underl GST for a casual non resident taxable provisions

B. Com Computers

Semester wise Course Outcomes

Semester I

Sl. No.	Name of the Course	Outcomes
1	Financial Accounting 1	• Acquire the basic concept of accounting terms. • Inculcates knowledge of various accounting concepts and policies • Journalize the ability to rectify the errors • Exposed to various methods of depreciation • Other special transactions culminating in the preparation of financial statements of concerns.
2.	Business Organisation and Management	• The course aims to provide basic knowledge to the students about the organisation and management of a business enterprise.

Semester II

Sl.No.	Name of the Course	Outcomes
1.	Business Laws	• Generalize the understanding of Indian Contract Act • Abridge the fundamental terms of Contract • Optimize the basic concept of valid Contract • Exposed the skill towards performance of Contract • Articulate the fundamentals of Sale of Goods Act. • Attain in depth knowledge of Consumer rights and intellectual property rights • Information Technology Act and Environmental Protection Act.
2.	Financial Accounting II	• To acquire accounting knowledge of bills of

		exchange • Know and apply accounting and finance theory. • Understands the techniques of consignment •

Semester III

Sl. No.	Name of the Course	Outcomes
1.	Advance Accounting	• In the subject advanced accountancy students will develop appropriate knowledge for maintaining accounts in case of partnership on admission retirement and death of a partner. • Students will learn how to settle and close books of accounts on insolvency of a partner and dissolution of a firm. • Students will learn accounting treatment related to issue of shares and debentures . • Accounting treatment related to issue of bonus shares. • Accounting treatment related to Final Accounts of a company. • Students will learn valuation of shares and debentures.
2.	Business Statistics I	● To understand how to organize and summarize data by using descriptive statistics and appropriate statistical graphs. ● To enhance students to grasp the fundamentals of statistics for interpreting business data. ● To use graphical methods to display a distribution of a variable and show relationships between two variables. ● To Compute and interpret measures of central tendency ● To compute Correlation analysis

3.	Principles of Insurance	• Basic understanding of the Insurance Mechanism • Relationship between Insurers and their Customers • Importance of Insurance • Major Life Insurance • General Insurance Products

Semester IV

Sl.No.	Name of the Course	Outcomes
1.	Income Tax	After completion of this course students will able to: • Describe the provisions in the income tax law. • Articulate the basic concept related to various heads of income • Ascertain the provisions of income from house property. • Comprehend the technical terms related to Income Tax.
2.	Business Statistics II	• To inculcate analytical and computational ability among the students.
3.	Practice of General Insurance	• To make the students understand general policies and accounting.

Semester V

Sl. No.	Name of the Course	Outcomes
1.	Business Economics	• Understanding Business Economics • Paraphase the importance of business economics and its terms. • Learn different concepts of Utility • Supply Analysis

		• Production Analysis • Cost and Revenue Analysis • Diagnose the factors of consumer behavior • Compute the concept of Law of Variable Proportion • Enumerate and identify the types of market and product pricing
2.	Cost Accounting	By the end of the semester learner should know • Accounting Concepts and its importance and Preparation of Cost Sheet. • How to maintain stock levels and issue of stock • Methods of payment of wages and allocation and absorption of overheads • Preparation of Unit cost sheet andJjob cost sheet • Preparation of Contract account and Process account
3.	Computerised Accounting	To make the students know the importance of accounting using the computer software and provide the knowledge of Tally accounting Software

Semester VI

Sl. No.	Name of the Course	Outcomes
1	Research Methodology and Project work	• Delivers to students research oriented study and brings applicability of research in practical application. • application. • Creates awareness amongst students on importance of RM and it provides skills for all round development. • Provides learning experience to students • Provides opportunity to students to synthesize knowledge from various areas of learning
2.	Cost Control and Management Accounting	• To enhance the abilities of learners to develop the concept of management accounting and its significance in the business. • To enhance the abilities of learners to analyze the financial statements. • To enable the learners to understand, develop and apply the techniques of management accounting in the financial decision making in the business corporates. • To make the students develop competence with their usage in managerial decision making and control.

3.	Goods and Services Tax	● To equip the students with the knowledge regarding Theory and Practice GST. ● Recording advanced entries,GST adjustment and return filing ● Migration to ERP ● Computation of tax liability of an assessee under GST for a casual non resident taxable provisions

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Programme Outcomes

B.Com (Bachelor of Commerce with Computer Applications)

PO1:- Enables learners to get theoretical and practical exposure in the commerce sector which includes Accounts, Commerce, Management and Economics, etc.

PO2: Develops communication skills and build confidence to face the challenges of the corporate world.

PO3: Enhances the capability of decision making at personal and professional levels.

PO4: Makes students industry ready and develop various managerial and accounting skills for better professional opportunities.

PO5: Develops entrepreneurial skills amongst learners.

PO6: Strengthens their capacities in varied areas of commerce and industry aiming towards holistic development of learners.

PO7: Thus, after completing their graduation learners develop a thorough understanding of the fundamentals in Commerce and Finance.

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B.A (Bachelor of ARTs)

PO1. Students will develop a comprehensive understanding of the theories and practice of language use.

PO2. Students will demonstrate advanced critical thinking skills, inclusive of information literacy.

PO3. Students will be able to communicate to diverse audiences in a variety of contexts and genres.

PO4. Students will be prepared for a wide range of writing-related careers or graduate

PO5. Students will have the ability to use, analyze, and learn communication technologies.

PO6. Students will develop exceptional textual, visual, and verbal communication abilities.

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B.Sc (Bachelor of Sciences)

PO1: Gain understanding in the Sciences, emphasizing fundamental principles and theories concerning various scientific phenomena and their significance in everyday life.

PO2: Graduates acquire practical knowledge through hands-on training and project experience to fulfill industry requirements.

PO3: To improve arithmetic skills and logical reasoning for enhancement.

PO4: Graduates cultivate critical thinking abilities to identify, analyze, and resolve problems within their core areas utilizing modern tools.

PO5: Proficiency in effectively communicating comprehended scientific data and knowledge, producing impactful reports, crafting documentation, and delivering effective presentations.

PO6: Capability to operate efficiently both independently and as a member or leader within diverse teams and multidisciplinary environments.

PO7: Apply ethical, moral, and social values in personal and professional life, contributing to the development of a highly cultured and civilized society.

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DEPARTMENT OF TELUGU

COURSE & PROGRAM OUTCOMES OF TELUGU

PROGRAM OUTCOMES:

POI: The Program inculcates language, oratory and literary skills in the student and gives scope to get command over all the major dialects of Telugu language.

PO2: It helps to understand the classical and modern literature and also major Genres like Story, Novel and Poetry etc. So that they can prove their talents in story writing and poetry writing etc.

PO3: This program gives path to Higher Studies to fulfill their interests in Literature field and caters the needs of competitive exams at both state and central services like Gr-I, Gr-II, Civil Services and other state services recruitment exams.

PO4: It establishes their career as language teachers at different academic levels, as freelance writers, reporters, editors, journalists in print media, as anchors, radio jockeys, ghost writers in electronic media, as script, song, dialogue writers in both small &Silver screen industries.

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DEPARTMENT OF PHYSICS

PROGRAMME OUTCOMES (POs)

(PHYSICAL SCIENCES)

B.Sc Physical Sciences MPC (Mathematics, Physics, Chemistry)

- To promote improved quality of education, knowledge and skills for employability.
- To promote a scientific temper and competitive spirit among the youth encouraging them to participate in the Inter-Collegiate programs.
- To refresh and update the faculty with the improvised curriculum developments thereby enhancing their teaching standards.
- To enhance teaching methodology through multimedia teaching aids like ICT tools, Virtual and Digital classrooms.
- To develop the basic knowledge, scientific insight and technical competence of the students for keeping abreast with the advancements in Science and Technology to meet the demands of Industry and Research.
- Bridge course classes for newly joined students.
- It is mandatory on every student's part to realize the true potential of science and enrich him/her to acquire basic strength for an enviable future.
- The Department faculty encourages the students by coaching for various entrance examinations like IIT-JAM, CUCET, BHU, HCU for Master's Program.
- The students are encouraged to take up internships during summer vacation to gain practical exposure and develop research interest.
- Students are constantly provided with information of current research trends in the subject.

Head, Dept. of Physics
TSWRAFPDCW, Bhongir

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TSWRAFPDCW, Bhongir

Principal
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PROGRAMME OUTCOMES (POs)

BACHELOR OF SCIENCE (B. Sc)

Program outcomes for a Bachelor of Science (BSc) program typically vary depending on the specific field of study, such as biology, computer science, physics, etc. However, some common program outcomes for a BSc program may include:

PO 1: Mastery of foundational knowledge in the chosen field of study.

PO 2. Ability to apply scientific methods and principles to solve problems.

PO 3. Proficiency in critical thinking, analysis, and interpretation of data.

PO 4. Effective communication skills, both written and oral, for conveying scientific information.

PO 5. Capacity for independent and collaborative research.

PO 6. Understanding of ethical considerations and responsible conduct in scientific practice.

PO 7. Adaptability to new technologies and methodologies in the field.

PO 8. Preparation for further study or careers in academia, industry, or other professional fields related to the discipline.

These outcomes are typically designed to prepare students for success in their chosen career paths or further academic pursuits

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Department of Zoology

Programme Outcomes

PO1. Domain Expertise:

• Gain thorough knowledge in the chosen domain and be able to apply it wherever necessary in an innovative manner.

PO2. Modern equipment Usage:

• Equip the students with modern technological skills, so that they are able to use software applications in their careers.

PO3. Computing Skills and Ethics:

• Students learn critical thinking and are able to analyse and solve problems rationally and ethically for communication, entertainment and for the benefit of mankind throughout one's endeavours for the wellbeing of human race.

PO4. Complex Problem Investigation & Solving

• Learn to analyse the problem, frame hypotheses, interpret empirical data and execute action

PO5. Perform effectively as Individuals and in Teams

• Be able to contribute at individual level and as team member and prioritize institutional interest over individual

PO6. Efficient Communication & Life skills

• Learn efficient communication to express, listen, understand and project views in a convincing manner clearly and concisely

PO7. Environmental Sustainability

• Understand current environmental challenges faced by the country & propagate and follow environment friendly practices.

PO8. Societal contribution

- Develop the pride in volunteering to address societal issues viz: calamities, disasters, poverty, epidemics and involve voluntarily in social development activities at Regional, National, global levels.

PO9. Effective Project Management

- Identify the goals, objectives and components of a project and then implementation so that deadlines are achieved, even when there are setbacks.

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Department of Zoology

PROGRAM SPECIFIC OUTCOMES (PSOs) OF B. SC., ZOOLOGY

PSO1 Demonstrated a broad understood of animal diversity, including knowledge of the scientific classification and evolutionary relationships of major groups of animals.

PSO2 Recognized the relationships between structure and functions at different levels of biological organization (e.g., molecules, cells, organs, organisms, populations, and species) for the major groups of animals.

PSO3 Characterized the biological, chemical, and physical features of environments (e.g., terrestrial, freshwater, marine, host) and that of animals inhabit.

PSO4 Explained how animals function and interact with respect to biological, chemical and physical processes in natural and impacted environments.

PSO5 Explained how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system.

PSO6 Drawing upon this knowledge, they are able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.

PSO7 Understood the applied biological sciences or economic Zoology such as Apiculture, Vermiculture, Techniques in Biology Biotechnology and Medicine for their Higher studies and Career opportunities.

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DEPARTMENT OF ECONOMICS

BA (ECONOMICS , HISTORY AND POLTICAL SCIENCE)

Programme Outcomes (POs)

1. **Holistic Understanding**:
   - **Explanation**: This outcome focuses on providing students with a broad and integrated understanding of economics. It means students will learn both microeconomics (which deals with individual and business decisions) and macroeconomics (which deals with national and global economies). By the end of the program, students will be able to understand how different parts of the economy are interconnected and how economic theories apply in real-world scenarios.
   - **Example**: A student will be able to analyze how a change in interest rates (a macroeconomic policy) might affect consumer spending (a microeconomic behavior).
2. **Analytical and Critical Thinking**:
   - **Explanation**: Students will develop the ability to critically evaluate economic data and issues. This involves understanding complex economic problems, breaking them down into manageable parts, and using logical reasoning to solve them. This outcome prepares students to think like economists—identifying problems, considering various solutions, and evaluating the outcomes.
   - **Example**: A student may analyze the causes of unemployment in a specific region, consider different economic theories to explain the issue, and propose potential solutions.
3. **Effective Communication**:
   - **Explanation**: The ability to communicate is essential for economists, whether it's writing reports, delivering presentations, or engaging in discussions. This outcome ensures that students can clearly express economic concepts, data interpretations, and policy suggestions to both specialized and general audiences.
   - **Example**: A student will learn how to write a report on the impact of a new tax policy and present it to stakeholders in a way that is understandable and persuasive.
4. **Quantitative and Statistical Skills**:
   - **Explanation**: Modern economics heavily relies on quantitative methods, including statistics and econometrics. This outcome ensures that students are proficient in using statistical software and tools to analyze economic data. These skills are crucial for roles in research, finance, and policy analysis.

- **Example**: A student might use regression analysis to determine the relationship between education levels and income, using real-world data to draw conclusions.

5. **Research and Data Interpretation**:
   - **Explanation**: This outcome emphasizes the importance of research skills. Students will learn how to design and conduct economic research, collect data, and interpret the findings. This prepares them for roles that require data-driven decision-making and contributes to evidence-based policy-making.
   - **Example**: A student might conduct a research project on the economic impact of climate change on agriculture in a specific region, using data to support their findings.
6. **Policy Assessment and Application**:
   - **Explanation**: Understanding how policies affect different sectors of the economy is crucial for economists. This outcome ensures that students can critically evaluate the effectiveness of policies, suggest improvements, and understand their broader implications.
   - **Example**: A student could assess the impact of a subsidy on renewable energy on the economy, considering both the benefits and potential drawbacks.
7. **Ethical and Sustainable Economic Practices**:
   - **Explanation**: This outcome ensures that students consider the ethical implications of economic decisions and understand the importance of sustainability. It prepares them to think about the long-term impact of economic activities on society and the environment.
   - **Example**: A student might analyze the trade-offs between economic growth and environmental preservation, proposing policies that balance both.
8. **Global Economic Perspective**:
   - **Explanation**: In an increasingly globalized world, it's essential to understand how national economies interact with the global economy. This outcome ensures that students are aware of international trade, finance, and the global economic environment.
   - **Example**: A student might analyze the effects of international trade agreements on local industries and the economy.

Principal

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