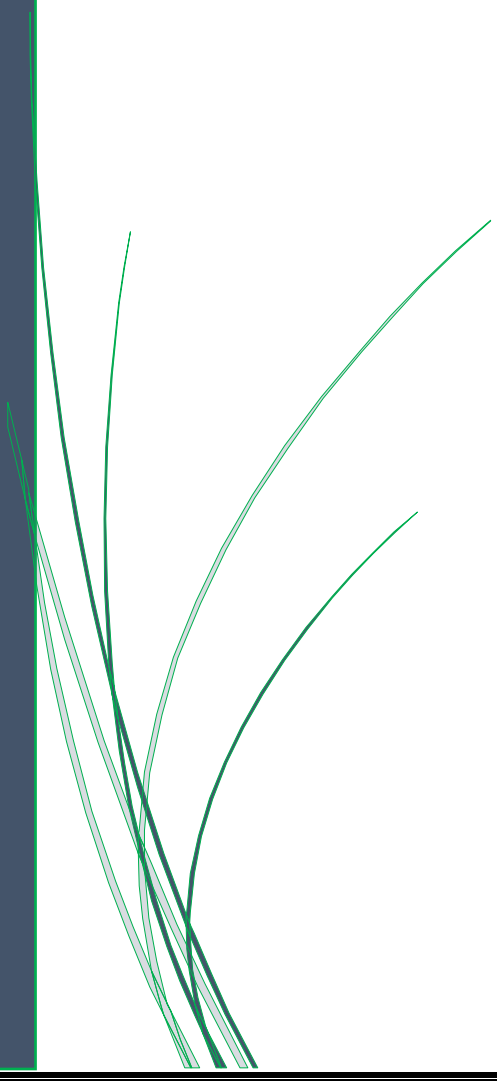
For the Year 2025

Accountancy/ Book Keeping – 301 Syllabus for CUET (UG)



Unit I: ***Accounting for Partnership***

- Nature of Partnership Firm: Partnership deed (meaning, importance).
- Final Accounts of Partnership: Fixed v/s Fluctuating capital,
- Division of profit among partners, Profit and Loss Appropriation account.

Unit II: ***Reconstitution of Partnership***

- Changes in profit sharing ratio among the existing partners – Sacrificing ratio and Gaining ratio.
- Accounting for Revaluation of Assets and Liabilities and Distribution of reserves and accumulated profits.
- Goodwill: Nature, Factors affecting and Methods of valuation: Average profit, Super profit, Multiplier and Capitalisation methods.
- Admission of a Partner: Effect of admission of partner, Change in profit sharing ratio, accounting treatment for goodwill, Revaluation of assets and liabilities, Reserves (accumulated profits) and adjustment of capitals.
- Retirement/Death of a Partner: Change in profit sharing ratio, accounting treatment of goodwill, revaluation of assets and liabilities, Adjustment of accumulated profits (Reserves).

Unit III: ***Dissolution of Partnership Firm***

- Meaning, Settlement of accounts: Preparation of realisation account and related accounts (excluding piecemeal distribution, sale to a company and insolvency of a Partner)

Unit IV: Company Accounts: Accounting for Share and Debenture

- Share Capital: Meaning, Nature and Types
- Accounting for Share Capital: Issue and Allotment of Equity and Preference Shares; Over subscription and under subscription; Issue at par, premium and at discount; Calls in advance, Calls in arrears, Issue of shares for consideration other than cash.
- Forfeiture of Shares: Accounting treatment, Re-issue of forfeited shares.
- Presentation of shares and Debentures Capital in company's balance sheet.
- Issue of Debenture – At par, premium and discount; Issue of debentures for consideration other than cash.

Unit V: ***Analysis of Financial Statements***

- Financial Statements of a Company: Preparation of simple financial statements of a company in the prescribed form with major headings only.
- Financial Analysis: Meaning, Significance and Purpose, Limitations.
- Tools for Financial Analysis: Comparative statements, Common size statements.
- Accounting Ratios: Meaning and Objectives and types: Liquidity Ratio, Solvency Ratio, Activity Ratio, Profitability Ratio
- Cash Flow Statement: Meaning and Objectives, Preparation, Adjustments related to depreciation, dividend and tax, sale, and purchase of non-current assets (as per revised standard issued by ICAI).

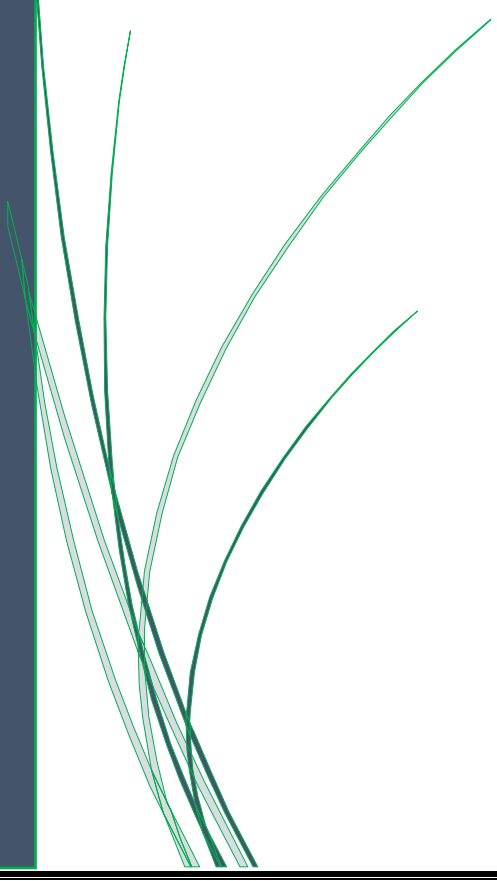
Optional to Unit V

Unit V: *Computerised Accounting System*

- Overview of Computerised Accounting System
- Concept and Types of Computerised Accounting System (CAS),
- Features of a Computerised Accounting System, Advantages, limitations
- Structure of a Computerised Accounting System: chart of accounts, Codification and Hierarchy of account heads.
- Accounting Applications of Electronic Spreadsheet
- Features offered by Electronic Spreadsheet. Applications of Electronic Spreadsheet in generating accounting information, preparing depreciation schedule, loan repayment schedule, payroll accounting.
- Graphs and Charts in electronic spreadsheet

For the Year 2025

Agriculture – 302 Syllabus for CUET (UG)



Unit-1: Agrometeorology, Genetics and Plant Breeding, Biochemistry and Microbiology

Agrometeorology: Elements of Weather-rainfall, temperature, humidity, wind velocity, Sunshine weather forecasting, climate change in relation to crop production, climate classification; Monsoon in India

Genetics & Plant Breeding:

(a) Cell and its structure, cell division-mitosis and meiosis and their significance (b) Organization of the genetic materials in chromosomes, DNA, and RNA (c) Mendel's laws of inheritance. Reasons for the success of Mendel in his experiments, Absence of linkage in Mendel's experiments. (d) Quantitative inheritance, continuous and discontinuous variation in plants. (e) Monogenic and polygenic inheritance. (f) Role of Genetics in Plant breeding, self and cross-pollinated crops, methods of breeding in field crops-introduction, selection, hybridization, mutation and polyploidy, tissue and cell culture. (g) History and importance of plant breeding, objective and role of plant breeding, Breeding methods in self and cross-pollinated crops (h) Plant Biotechnology-definition and scope in crop production, Biotechnology of plant breeding

Biochemistry: pH and buffers, Classification and nomenclature of carbohydrates; proteins; lipids; vitamins, and enzymes; Nucleic acids

Microbiology: Microbial cell structure, Micro-organisms- Algae, Bacteria, Fungi, Actinomycetes, Protozoa and Viruses. Role of micro-organisms in respiration, fermentation, and organic matter decomposition; Soil flora and fauna

Seed Science: Seed structure of monocots and dicots, mode of reproduction, pollination, fertilization, Seed dormancy, types of seeds.

Unit-2: Livestock Production

Scope and importance : (a) Importance of livestock in agriculture and industry, White revolution in India. (b)Important breeds Indian and exotic, distribution of cows, buffaloes, goats, sheeps and poultry in India.

Care and management : (a) Systems of cattle and poultry housing (b) Principles of feeding, and feeding practices.

Balanced ration definition and ingredients. (d) Management of calves, bullocks, pregnant and milch animalsas well as chicks cockerels and layers, and poultry. (e) Signs of sick animals, symptoms of common diseases in cattle and poultry, Rinderpest, black quarter, foot and mouth, mastitis and haemorrhagic septicaemia coccidiosis,Fowl pox and Ranikhet disease, their prevention, and control.

Artificial Insemination: Reproductive organs, collection, dilution, and preservation of semen and artificial insemination, role of artificial insemination in cattle improvement.

Livestock Products: Processing and marketing of milk and Milk products.

Fisheries: Definition of fish, fisheries, aquaculture; General characteristics of fish, types of fishes.

Unit-3: Crop Production

Introduction : (a) Targets and achievements in food grain production in India since independence and its future projections, sustainable crop production, commercialization of agriculture and its scope in India. (b) Classification of field crops based on their utility-cereals, pulses, oils seeds, fibre, sugar, and forage crops.

Soil, Soil fertility, Fertilizers, and Manures: (a) Soil, soil pH, Soil texture, soil structure, soil organisms, soil tilth, soil fertility, and soil health. (b) Essential plant nutrients, their functions, and deficiency symptoms. (c) Soil types of India and their characteristics. (d) Organic manure, common fertilizers including straight, complex, fertilizer mixtures and biofertilizers; integrated nutrient management system. (e) Problem soils, soil erosion, soil pollution. (f) Soil analysis for nutrient availability

Irrigation and Drainage: (a) Sources of irrigation (rain, canals, tanks, rivers, wells, tubewells). (b) Schedulingof irrigation based on critical stages of growth, time interval, soil moisture content, and weather parameters. (c) Water requirement of crops. (d) Methods of irrigation and drainage. (e) Watershed management. (f) Irrigation water quality

Weed Control: Weed classification and weed characteristics; Principles of weed control, methods of weed control (cultural, mechanical, chemical, biological, and integrated weed management).

Crops: Seedbed preparation, seed treatment, time and method of sowing/planting, seed rate; dose, method, and time of fertilizer application, irrigation, intercultural and weed control; common pests and diseases, caused by bacteria, fungi viruses, and nematode and their control, integrated pest management, harvesting, threshing, post-harvest technology: storage, processing, and marketing of major field crops-Rice, wheat, maize, sorghum, pearl millet, groundnut, mustard, pigeon-pea, gram, sugarcane, cotton, and berseem. Millets and their importance

Modern agriculture: Challenges in modern agriculture; conservation agriculture; precision agriculture; natural farming; organic farming; remote sensing in agriculture

Unit-4:Horticulture

(a) Importance of fruits and vegetables in the human diet, Crop diversification & processing Industry. (b) Orchard- location and layout, ornamental gardening, and kitchen garden. (c) Planting system, training, pruning, intercropping, protection *from frost* and sunburn. (d) Trees, shrubs, climbers, annuals, perennials-definition and examples. Propagation by seed, cutting, budding, layering, and

grafting. (e) Cultivation practices, processing, andmarketing of (i) Fruits - mango, papaya, banana, guava, citrus, grapes. (ii) Vegetables - Radish, carrot, potato, onion, cauliflower, brinjal, tomato, spinach, and cabbage. (iii) Flowers - Gladiolus, canna, chrysanthemums, roses and marigold. (f) Principles and methods of fruit and vegetable preservation. (g) Preparation of jellies, jams, ketchup, chips and their packing.

FOR THE YEAR 2025

Anthropology -(303)

Syllabus for

CUET (UG)

ANTHROPOLOGY (303)

Unit-1: Physical/Biological Anthropology

(i) Human Evolution: Theories of evolution (Darwinism, Lamarckism, Neo-Darwinism and Neo-Lamarckism); Living Primates and their features, Hominid evolution: Australopithecus, Homo habilis, Homo erectus, Homo sapiens;
(ii) Human Variation (Body size, Body shape, Skin color, Genetic traits)
(iii) Human Genetics: Mendelian Genetics (Laws of Inheritance), Dominant, recessive, sex-linked, sex-limited and sex-influenced traits, Chromosomes and their aberrations
(iv) Genetic Drift, Mutation, Natural Selection and Gene flow
(v) Blood Groups (ABO, MN and Rh), DNA Structure

Unit-2: Archaeological Anthropology

(i) Stone Age: Paleolithic, Mesolithic, Neolithic Cultures;
(ii) Development of tools and evolution of stone tool technology: Choppers, Hand Axes, Microliths, unifacial and bifacial tools, Pottery
(iii) Metal Age: Discovery and use of Bronze and Iron
(iv) Stratigraphy, Archeological dating (Dating of sites and materials)
(v) Important Archaeological Sites; Indus Valley Civilization

Unit-3: Socio-Cultural Anthropology

(i) Family: Types (Nuclear, Joint, Extended) and Functions; Marriage: Cultural variation in Forms of Marriage (Monogamy, Polygamy); Kinship: rules of Descent (Matrilineal, Patrilineal)
(ii) Concepts of Culture: Cultural Relativism, Ethnocentrism; Socialization and Cultural Change (Diffusion, Acculturation)
(iii) Functions of religion in Society; Beliefs: Totemism, Animism, Animatism, Magic, and Shamanism
(iv) Subsistence Strategies: Hunting, Gathering, Agriculture
(v) Traditional Political Systems: Bands, Tribes, Chiefdoms; Power, Authority, and Social Control in Traditional Societies

Unit-4: Linguistic and Tribal Anthropology

(i) Language as a Cultural and Social Phenomenon
(ii) Linguistic Diversity in India
(iii) Characteristics of Tribes in India: Economic, Social, and Political Organization
(iv) Major Indian Tribes (Santhals , Bhils , Gonds, etc.), Particularly Vulnerable Tribal Groups (PVTGs)
(v) Social Movements: Features; Ecological, Class Based, Caste Based and Tribal Movements.

Unit-5: Social Change and Applied Anthropology

(i) Caste System and Social Stratification in India
(ii) Impact of Colonialism on Indian Society; Changes in Indian Society: Modernization, Globalization
(iii) Role of Anthropology in Public Health
(iv) Change and development in Industrial Society
(v) Challenges of Cultural Diversity

FOR THE YEAR 2025

ASSAMESE 103

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR ASSAMESE-103

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

BENGALI-104

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR BENGALI 104

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

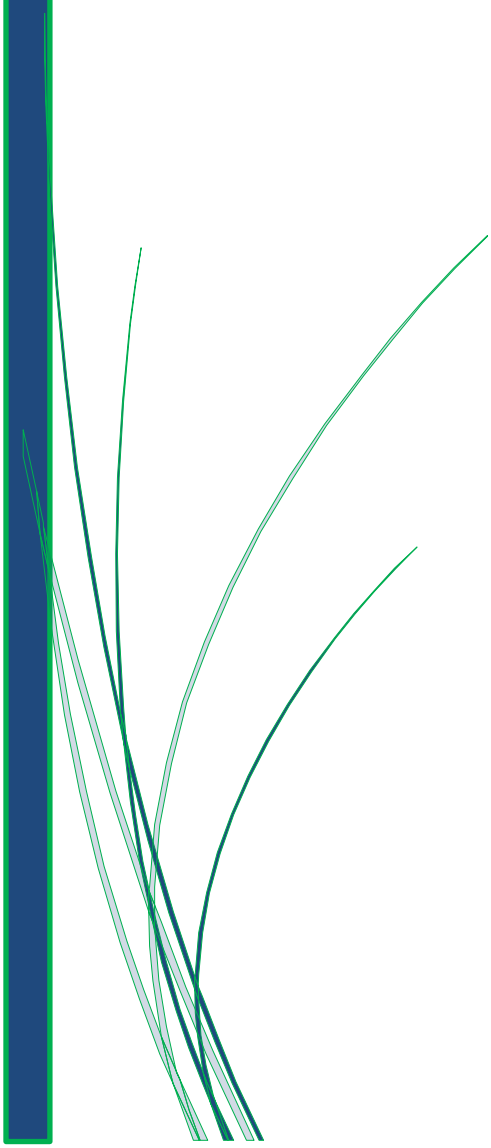
i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

Biology/Biological Science/Biotechnology/ Biochemistry (304) Syllabus for CUET (UG)



Unit-I Reproduction

Chapter-1: Sexual Reproduction in Flowering Plants Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Chapter-2: Human Reproduction Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis -spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).

Chapter-3: Reproductive Health Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control - need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).

Unit-II Genetics and Evolution

Chapter-4: Principles of Inheritance and Variation Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in humans, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans - thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

Chapter-5: Molecular Basis of Inheritance Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting.

Chapter-6: Evolution Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy- Weinberg's principle; adaptive radiation; human evolution.

Unit-III: Biology and Human Welfare

Chapter-7: Human Health and Disease Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse.

Chapter-8: Microbes in Human Welfare
Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicioususe.

Unit-IV Biotechnology and its Applications

Chapter-9: Biotechnology : Principles and Processes Genetic Engineering (Recombinant DNA Technology).

Chapter-10: Biotechnology and its Applications Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, biopiracy and patents.

Unit-V Ecology and Environment

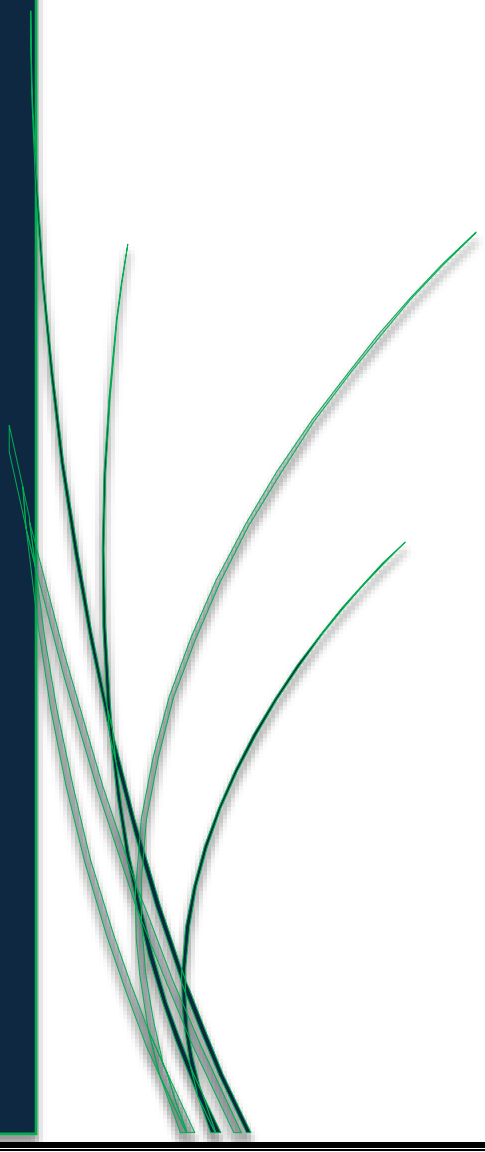
Chapter-11: Organisms and Populations Population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution. (Topics excluded: Organism and its Environment, Major Aboitic Factors, Responses to Abioitic Factors, Adaptations)

Chapter-12: Ecosystem Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy (Topics excluded: Ecological Succession and Nutrient Cycles).

Chapter-13: Biodiversity and Conservation Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.

For the year 2025

Business Studies-305 Syllabus for CUET (UG)



Unit I: ***Nature and Significance of Management***

- Management – concept, objectives, importance.
- Nature of management; Management as Science, Art, Profession.
- Levels of management – top, middle supervisory (First level).
- Management functions – planning, organising, staffing, directing and controlling.
- Coordination – nature and importance.

Unit II: ***Principles of Management***

- Principles of Management – meaning, nature and significance.
- Fayol's principles of management.
- Taylor's Scientific Management – Principles and Techniques.

Unit III: ***Business Environment***

- Business Environment – meaning and importance.
- Dimensions of Business Environment – Economic, Social, Technological, Political and Legal.

Unit IV: ***Planning***

- Meaning, features, importance, limitations.
- Planning process.
- Types of Plans – Objectives, Strategy, Policy, Procedure, Method, Rule, Budget, Programme.

Unit V: ***Organising***

- Meaning and importance.
- Steps in the process of organising.
- Structure of organization – functional, and divisional.
- Formal and informal organisation.
- Delegation: meaning elements and importance.
- Decentralization: meaning and importance.
- Difference between delegation and decentralisation.

Unit VI: ***Staffing***

- Meaning, need and importance of staffing.
- Staffing as a part of Human Resources Management.
- Steps in staffing process.
- Recruitment – meaning and sources.
- Selection – meaning and process.
- Training and Development – meaning, need, methods – on the job and off the job methods of training.

Unit VII: *Directing*

- Meaning, importance and principles.
- Elements of Direction:
  - Supervision – meaning and importance
  - Motivation – meaning and importance, Maslow's hierarchy of needs; Financial and non- financial incentives.
  - Leadership – meaning, importance;
  - Communication – meaning and importance, formal and informal communication; barriers to effective communication.

Unit VIII: *Controlling*

- Meaning and importance.
- Relationship between planning and controlling.
- Steps in the process of control.

Unit IX: *Business Finance*

- Business finance – meaning, role, objectives of financial management.
- Financial planning – meaning and importance.
- Capital Structure – meaning and factors.
- Fixed and Working Capital – meaning and factors affecting their requirements.

Unit X: *Marketing*

- Marketing – meaning, functions, role.
- Distinction between marketing and selling.
- Marketing mix – concept and elements:
  - Product – nature, classification, branding, labeling and packaging
  - Physical distribution: meaning, role; Channels of distribution, – meaning, types, factors, determining choice of channels.
  - Promotion – meaning and role, promotion mix, Role of Advertising and personal selling; objections to Advertising.
  - Price: factors influencing pricing.

Unit XI: *Consumer Protection*

- Importance of consumer protection.
- Consumer rights.
- Consumer responsibilities.
- Ways and means of consumer protection – Consumer awareness and legal redressal with special reference to Consumer protection Act.
- Role of consumer organizations and NGOs.

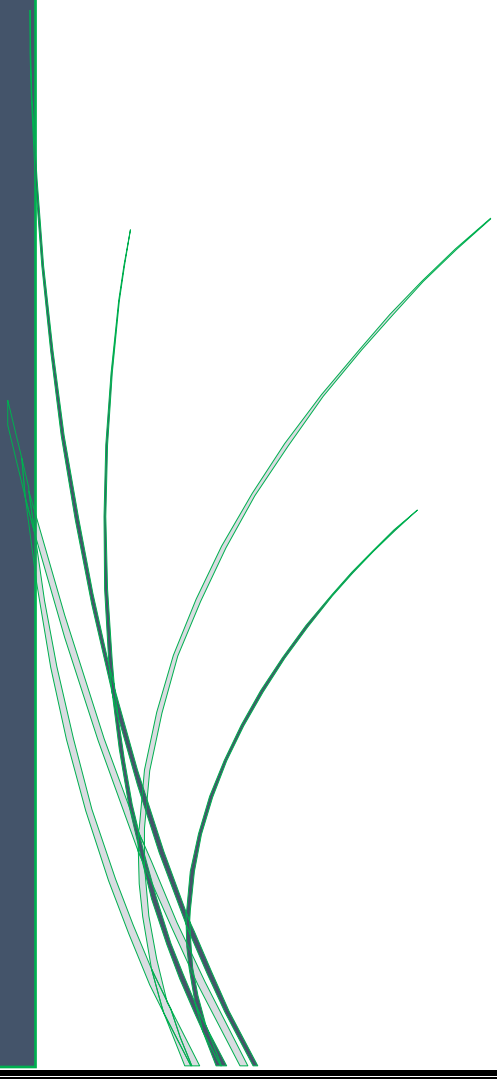
Unit XII: *Entrepreneurship Development*

- Concept, Functions and Need.
- Entrepreneurship Characteristics and Competencies.
- Process of Entrepreneurship Development.
- Entrepreneurial Values, Attitudes and Motivation – Meaning and Concept.

For the Year 2025

Chemistry – 306

Syllabus for CUET (UG)



Unit I: Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor.

Unit II: Electrochemistry

Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.

Unit III: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.

Unit IV: d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first

row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$. Lanthanoids - Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. Actinoids - Electronic configuration, oxidation states and comparison with lanthanoids.

Unit V: Coordination Compounds

Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).

Unit VI: Haloalkanes and Haloarenes

Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

Unit VII: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special

reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.

Unit VIII: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit IX: Amines

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

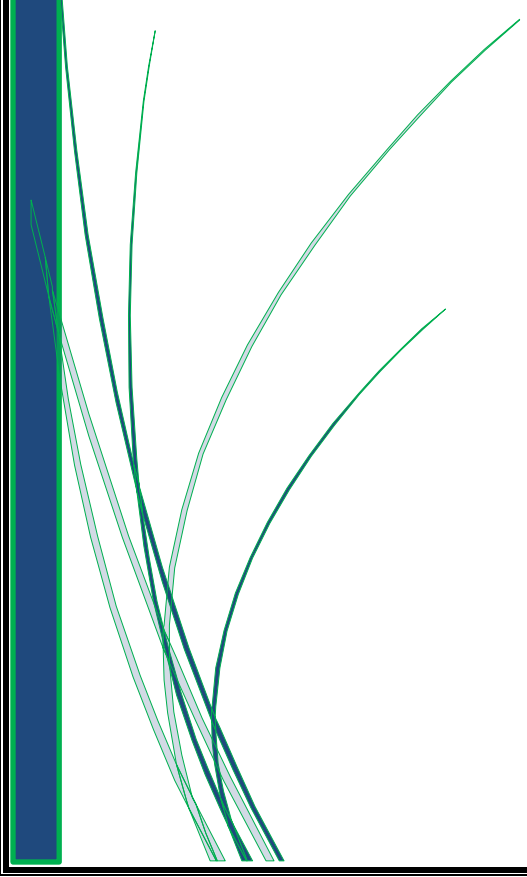
Unit X: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. Proteins -Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea

excluding structure. Vitamins - Classification and functions. Nucleic Acids: DNA and RNA

For the year 2025

Computer Science/Information Practices -308 Syllabus for CUET(UG)



Section A

1: Database Concepts

- Introduction to database concepts, difference between database and file system, relational data model: concept of domain, tuple, relation, keys - candidate key, primary key, alternate key, foreign key.
- *Relational algebra:* selection, projection, union, set difference and cartesian product.

2: Structured Query Language - I

- Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, Creating a database using MySQL, DataTypes
- Data Definition: CREATE TABLE, DROP TABLE, ALTER TABLE,Data Query: SELECT, FROM, WHERE
- Data Manipulation: INSERT, UPDATE, DELETEMath functions: POWER (), ROUND (), MOD ().Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (),LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().

3: Structured Query Language - II

- Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME ().
- Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT(*). Querying and manipulating data using Group by, Having, Order by.
- Operations on Relations - Union, Intersection, Minus, Cartesian Product, JOIN

4: Computer Networks

- Introduction to computer networks, Evolution of networking,
- *Network types:* LAN, WAN, MAN
- Network devices: Modem, Ethernet Card, Repeater, Hub, Switch, Router, Gateway.Network Topologies: Mesh, Ring, Bus, Star, and Tree topologies.
- Basic concept of MAC and IP Address Difference between Internet and web.

Section B1: Computer Science

1: Exception and File Handling in Python

- Exception Handling: syntax errors, exceptions, need of exception handling, user-defined exceptions, raising exceptions, handling exceptions, catching exceptions, Try - except - else clause, Try - finally clause, recovering and continuing with finally, built-in exception classes.
- File Handling: text file and binary file, file types, open and close files, reading and writing text files, reading and writing binary files using pickle module, file access modes.

2: Stack

- Stack (List Implementation): Introduction to stack (LIFO Operations), operations on stack (PUSH and POP) and its implementation in python. Expressions in Prefix, Infix and postfix notations, evaluating arithmetic expressions using stack, conversion of Infix expression to postfix expression

3: Queue

- Queue (List Implementation): Introduction to Queue (FIFO), Operations on Queue (INSERT and DELETE) and its implementation in Python.
- Introduction to DQueue and its implementation in Python.

4: Searching

- Searching: Sequential search, Binary search, Analysis of Sequential and Binary Search. Dry run to identify best, worst and average cases. Implementation of searching techniques in Python.

5: Sorting

- Overview of sorting techniques, Bubble Sort, Selection Sort and Insertion Sort. Dry run to identify best, worst and average cases. Implementation of sorting techniques in Python.
- Hashing: Hash Functions, Collision Resolution.

6: Understanding Data

- Data and its purpose, collection and organization; understanding data using statistical methods:

mean, median, standard deviation, variance; data interpretation.

7: Database Concepts

- Introduction to database concepts, difference between database and file system, relational data model: concept of domain, tuple, relation, keys - candidate key, primary key, alternate key, foreign key;
- Relational algebra: selection, projection, union, set difference and cartesian product.

8: Structured Query Language

- Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, Creating a database using MySQL, Data Types
- Data Definition: CREATE TABLE, DROP TABLE, ALTER TABLE,
- Data Query: SELECT, FROM, WHERE
- Data Manipulation: INSERT, UPDATE, DELETE
- Math functions: POWER (), ROUND (), MOD ().
- Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (),LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().
- Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (),DAYNAME ()
- Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT(*). Querying and manipulating data using Group by, Having, Order by.
- Operations on Relations - Union, Intersection, Minus, Cartesian Product, JOIN

9: Computer Networks

- Introduction to computer networks, Evolution of networking,
- *Network types:* LAN, WAN, MAN
- Network devices: Modem, Ethernet Card, Repeater, Hub, Switch, Router, Gateway.Network Topologies: Mesh, Ring, Bus, Star, and Tree topologies
- Basic concept of MAC and IP Address.
- Difference between Internet and web

10: Data Communication

- Concept of communication, Types of Data Communication, switching techniques
- *Communication Media*: Wired Technologies – Twisted pair cable, Co-axial cable, Ethernet Cable,Optical Fibre;
- Introduction to mobile telecommunication technologies
- Wireless Technologies – Bluetooth, WLAN, Infrared, Microwave
- *Network Protocol:* Need for Protocol, Categorization and Examples of protocol, HTTP, FTP, IP, PPP;electronic mail protocol
- Concept of Channel, Bandwidth (Hz, KHz, MHz) and Data Transfer rate (bps, Kbps, Mbps, Gbps,Tbps)

11: Security Aspects

- Threats and prevention: Viruses, Worms, Trojan horse, Spam, Cookies, Adware, Firewall, http vs https.
- Network Security Concepts: Firewall, Cookies, Hackers and Crackers
- Antivirus and their workings
- Network security threats: Denial of service, Intrusion problems, Snooping, Eavesdropping.

Section B2: Informatics Practices

1: Database Query using SQL

- *Math functions:* POWER (), ROUND (), MOD ().
- *Text functions:* UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (),LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().
- *Date Functions:* NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME ().
- *Aggregate Functions:* MAX (), MIN (), AVG (), SUM (), COUNT ();

  using COUNT (*).

- Querying and manipulating data using Group by, Having, Orderby.
- *Operations on Relations* - Union, Intersection, Minus, Cartesian Product, JOIN

2: Data Handling using Pandas – I

- Introduction to Python libraries-Pandas, NumPy, Matplotlib.
- Data structures in Pandas - Series and DataFrames.
- Series: Creation of Series from – and array, dictionary, scalar value; mathematical operations; Head and Tail functions; Selection, Indexing, and Slicing.
- DataFrames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration; Operations on Rows and columns: add, select, delete, rename; Head and Tail functions;Indexing using Labels, Boolean Indexing; Styling & Formatting data, Head and Tail functions; Joining, Merging and Concatenations.
- Importing/Exporting Data between CSV files and DataFrames.

3: Data Handling using Pandas – II

- Descriptive Statistics: max, min, count, sum, mean, median, mode, quartile, Standard deviation,variance.
- DataFrame operations: Aggregation, group by, Sorting, Deleting and Renaming Index, Pivoting.
- Handling missing values – dropping and filling.
- Importing/Exporting Data between MySQL database and Pandas.

4: Plotting Data using Matplotlib

- Purpose of plotting; drawing and saving the following types of plots using Matplotlib – line plot, bargraph, histogram, pie chart, frequency polygon, box plot, and scatter plot.
- Customizing plots: color, style (dashed, dotted), width; adding label, title, and legend in plots.

5: Introduction to Computer Networks

- Introduction to Networks, Types of networks: LAN, MAN,WAN.
- Network Devices: modem, hub, switch, repeater, router, gateway
- Network Topologies: Star, Bus, Tree, Mesh.
- Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP.
- Website: Introduction, the difference between a website and webpage, static vs dynamic webpage, webserver, and hosting of a website.

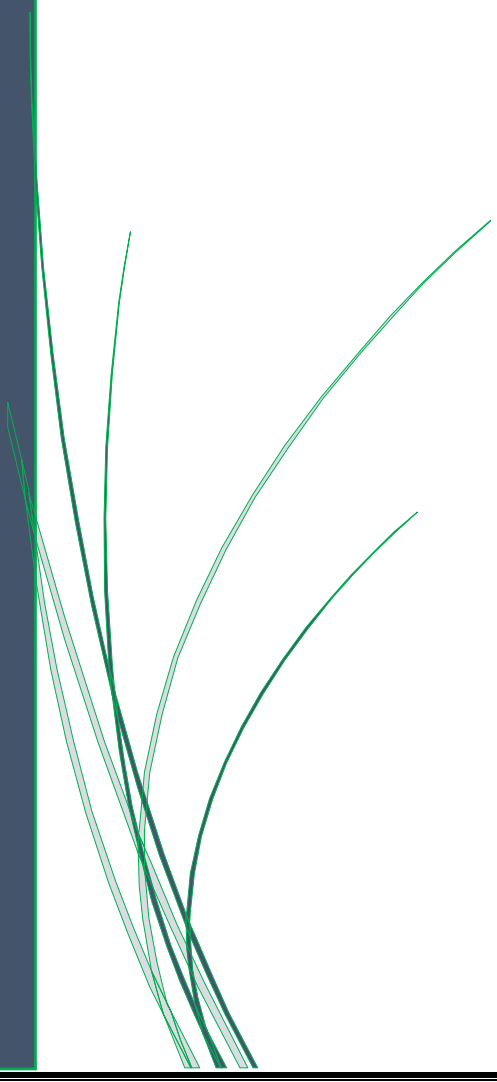
- Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.

6: Societal Impacts

- Digital footprint, Etiquettes for Net surfing and for communicating through social media, data protection, Intellectual Property Rights (IPR) and their violation, plagiarism licensing and copyrights, Free and Open Source Software (FOSS), creative commons, Cybercrime and cyber laws, hacking, phishing, cyberbullying, Overview of Indian IT Act, preventing cybercrime
- .E-waste : hazards and management.
- Awareness about health concerns related to the usage of technology-like effect on eyesight,physiological issues, and ergonomic aspects.

For the Year 2025

Economics/Business Economics – 309 Syllabus for CUET(UG)



Course I: Introductory Microeconomics

This course introduces the learner to economics as a science of abstraction and reasoning. It introduces some basic concepts and tools to understand economic issues of an individual or a firm and how decisions are taken in variety of markets. It also intends to provide exposure to the learners on how choices are made and how a variety of statistical tools are used to optimally

allocate the resources.

Unit I: *Introduction*

- What is microeconomics?
- Central problems of an economy, production possibility curve and opportunity cost.

Unit II: *Consumer Behaviour and Demand*

- *Consumer's Equilibrium:* meaning and attainment of equilibrium through Utility Approach: One and two commodity cases.
- *Demand:* market demand, determinants of demand, demand schedule, demand curve, movement along and shifts in demand curve, price elasticity of demand, measurement of price elasticity of demand – percentage, total expenditure and geometric methods

Unit III: *Producer Behaviour and Supply*

- *Production function:* returns to factor and returns to scale
- *Supply:* market supply, determinants of supply, supply schedule, supply curve movement along and shifts in supply curve, price elasticity of supply, measurement of price elasticity of supply – percentage and geometric methods
- *Cost and Revenue:* Concepts of costs; short-run cost curves (fixed and variable costs; total, average and marginal costs); concepts of revenue – total, average and marginal revenue and their relationship. Producer's equilibrium – with the help of MC and MR.

Unit IV: *Forms of Market and Price Determination*

- Forms of market – perfect competition
- Price determination under perfect competition – equilibrium price, effects of shifts in demand and supply.

Unit V: *Simple Applications of Tools of Demand and Supply Curves*

The teachers can be given the flexibility to choose the issues: rationing, floors and ceilings and Food Availability Decline (FAD) Theory (the teachers may also choose alternative examples that

are simple and easy to understand)

Course II: Introductory Macroeconomics

The overall working of an economy and some of its economic theorisation are introduced in this course. The learners will get some basic idea of how the government regulates the functioning of economic aspects of a country through accounting of the production activities, running financial institutions, budgeting and the accounting of its economic interaction with other countries. The impact it will have on citizens is also briefly introduced.

Unit I: *National Income and Related Aggregates - Basic Concepts and Measurement*

- *Macroeconomics:* meaning.
- Circular flow of income, concepts of GDP, GNP, NDP, NNP (at market price and factor cost), National Disposable Income (gross and net); Private Income, Personal Income and Personal Disposable Income
- Measurement of National Income –Value Added method, Income method and Expenditure Method

Unit II: *Determination of Income and Employment*

- Aggregate demand, aggregate supply and their components
- Propensity to consume and propensity to save (average and marginal)
- Meaning of involuntary unemployment and full employment
- Determination of income and employment: two sector model
- Concept of investment multiplier and its working
- Problems of excess and deficient demand
- Measures to correct excess and deficient demand – availability of credit, change in
- government spending

Unit III: *Money and Banking*

- *Money:* meaning, evolution and functions
- *Central bank:* meaning and functions
- *Commercial banks:* meaning and functions
- *Recent significant reforms and issues in Indian Banking System:* privatisation and modernization

Unit IV: *Government Budget and the Economy*

- Government budget – meaning and its components
- Objectives of government budget
- Classification of receipts – revenue and capital; classification of expenditure – revenue and capital, plan and non-plan, and developmental and non-developmental
- Balanced budget, surplus budget and deficit budget: meaning and implications
- Revenue deficit, fiscal deficit and primary deficit: meaning and implications; measures to contain different deficits
- Downsizing the role of government: meaning and implications

Unit V: *Balance of Payments*

- Foreign exchange rate – meaning (fixed and flexible), merits and demerits; determination through demand and supply
- Balance of payments accounts – meaning and components
- A brief analysis about recent exchange rate issues

FOR THE YEAR 2025

ENGLISH-101

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR ENGLISH-101

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

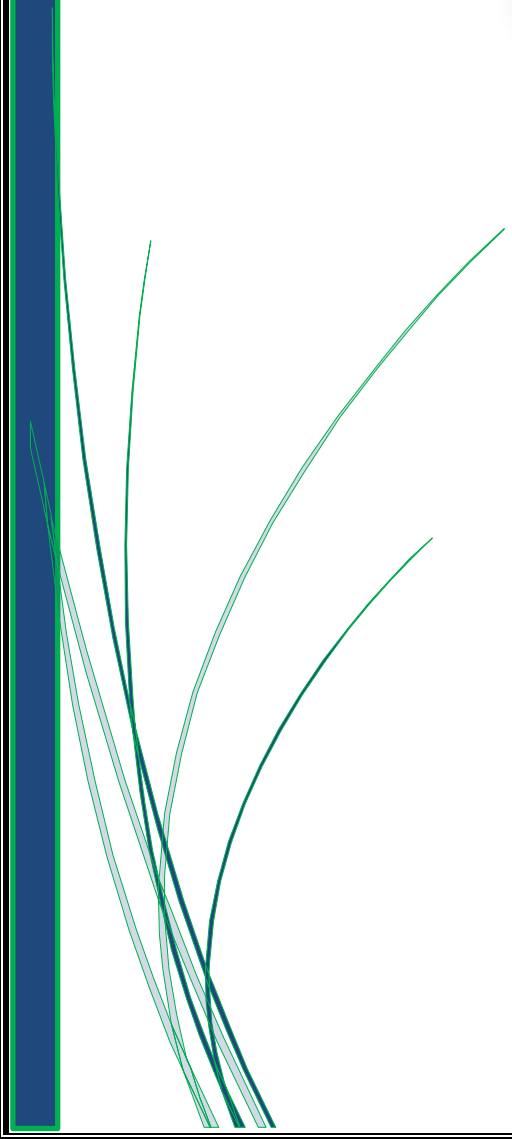
i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For The Year 2025

Environmental Science- 307 Syllabus for CUET(UG)



1. Human Beings and Nature

(i) Modern schools of ecological thought.

(ii) Deep ecology (Gary Snyder, Earth First) vs.shallow ecology.

(iii) Stewardship of land (e.g. Wendell Berry).

(iv) Social ecology [Marxist environmentalismand socialist ecology (Barry Commoner)].

(v) Feminism.

(vi) Green Politics (e.g. Germany and England).

(vii) Sustainable Development.

Modern schools of ecological thought;definition and basic understanding of DeepEcology as opposed to Shallow Ecology; Stewardship, Social Ecology - Marxist environmentalism and Socialist Ecology, Eco feminism, Green political movements of Germany and England and Sustainable Development (basic concepts).

World Wide Fund for Nature – organisation, mission, strategy for conservation.

Greenpeace – organisation, mission statement, core values, objectives and strategy.

2. Population and Conservation Ecology

(i) Population dynamics: factors causing population change (birth, death, immigration and emigration); relation between the factors; age structure and its significance; population pyramids; survivorship curves; three general shapes r and K strategies.

Factors causing population change (birth, death, immigration and emigration); relation between the factors; Age structure and its significance; Population Pyramids –interpretation and implications. Rate of change of population – the three general shapes of Survivorship Curves, r and K strategies and differences between the two.

(ii) Human populations (Malthusian model and demographic transition).

Definition of Carrying Capacity; Malthusian view: concept of 'over-population' and shortage of resources; Questioning Malthus. Population Growth vs. Disparate Consumption of resources within and amongst nations. Definition and understanding of Demographic Transition; Factors influencing demographic transition.

Population Regulation: growth without regulation (exponential); simple population regulation (logistic growth curve); factors regulating population size (space, food andwater, territories, predators, weather and climate, parasite and diseases, disasters and self-regulation). Basic understanding of the Exponential growth curve (J – shaped) and Logistic growth curve (S - shaped); Factors regulatingpopulation size (space, food and water, territories, predators, weather and climate, parasite and diseases, disasters and self-regulation).

Human population control: family planning; education; economic growth; status of women.

Strategies for human population control with emphasis on women's empowerment. (Details of methods of family planning not required.)

(iii) Threats to the ecosystem: habitat destruction; genetic erosion; loss of diversity; expanding agriculture; impound water; waste from human societies; increasing humanconsumption.

Only a brief understanding of the causes and consequences of threats to provisioning and regulatory functions of the ecosystem with suitable examples.

(iv) Conservation: importance; the critical state of Indian forests; conflicts surrounding forested areas - populations and tribals and their rights

- tourism - poaching - roads - development projects - dams; scientific forestry and its limitations; social forestry; the role of the forest department; NGOs; joint forestry management; wild life - sanctuaries, conservation and management in India; Project Tiger as a case study in conservation.

Definition of: Conservation, in situ and ex situconservation. Importance of Conservation.

In-situ conservation: Wildlife sanctuaries,National parks, Biosphere reserves (definition, objectives, features, advantages and disadvantages).

Ex-situ conservation: zoos, aquaria, plant collection (objectives, features, advantages and disadvantages).

Conflicts in managing and conserving Forests: India's forest cover, issues concerning people living in and around forests with particular reference to tribal rights; threats to forests: poaching, developmental projects like roads and dams, over exploitation of forest resources (direct and indirect).

The role of the forest department and NGOsin managing forests.

Some management measures: scientific forestry, social forestry (various types of social forestry), Joint Forestry Management (JFM), ecotourism.

Definition, scope, advantages and disadvantages of each of the above.

Project Tiger as a case study in conservation: Origin, aims, and objectives, successes, failures.

3. Monitoring Pollution

(i) Pollution monitoring.

Primary and secondary pollutants.Importance of monitoring air pollutionincluding Ambient Air Quality Monitoring (gaseous and particulate). Concept of carbon credits and carbon trading in regulating emissions. Causes for excessive vehicular pollution and various steps taken to regulate pollution-emission standards for new vehicles,implementation of CNG programme,inspection & maintenance programme for in-use vehicles, phasing out of old commercialvehicles and promotion of public transport.

(ii) Monitoring the atmosphere: techniques.

Monitoring at emission source and of ambientair quality, criteria for monitoring stations, types of stations, number of stations,frequency of data collection, characteristicsof ambient air sampling, basic consideration for sampling (to be dealt with in brief). Classification of techniques- manual and instrumental. Manual-Passive samplers, HighVolume Samplers and Bubbler Systems. Instrumental-photometric techniques-NDIR,Chemiluminescence - principle and use.

(iii) International and national air qualitystandards.

National Ambient Air Quality Monitoring (NAAQM); the main functions of the Central Pollution Board and the State Pollution Control Board, objectives of air quality standards, New name of NAAQM, NationalAir Monitoring Programme (NAMP)objectives of the NAMP.

Definition of air quality standards and importance; National air quality standards for gases/particulate matter covered under WHO guidelines.

(iv) Water testing: indicators of water quality.

Indicators (electrical conductivity, turbidity, pH, dissolved oxygen, faecal waste, temperature, hardness, nitrates and sulphates)the significance of each and their interpretations. B.O.D. and C.O.D., theoretical concept only (lab work for better understanding and not for testing)

(v) Soil testing: indicators of soil type and qualityand laboratory work.

Soil indicators- the characteristics of a good soil indicator, the three basic types of soilindicators-biological, physical and chemical, two examples of each. The information provided by each of these types of indicators. Definitions, effects and experiments to find out soil respiration, soil pH, soil aggregate, infiltration rate and simple methods of controlling each of these.

4. Third World Development

(i) Urban-rural divide: urbanisation - push andpull factors; consequences on rural and urban sectors; future trends and projections.

Causes of migration - push and pull factors, consequences on rural and urban areas and ways to reduce migration. Future trends and projections.

(ii) A critical appraisal of conventional paradigm of development from the viewpoints of sustainability, environmental impact andequity.

Definition of Development.

An understanding that development has become synonymous with growth. Thisapproach has the following impacts on theenvironment: (a) Ignoring negative environmental impacts; (b) Changing patternsof resource use due to market pressures;
(c) Overuse and exploitation of resources;
(d) Diversion of scarce resources to luxurygoods; (e) Disparate access to resources;
(f) Increasing wastes and pollution.

The above to be explained with suitableexamples.

(iii) A case study of Gandhian approach in termsof its aims and processes.

Local self-governance – basic principles behind village policy, Antoday, Sarvoday, Panchayati Raj; local self-sufficiency, localmarkets and environmental sustainability. Village as the basis of development; promotion of cottage industries and

intermediate technologies;

focus on employment.

The above to be contrasted with today's paradigm of growth.

(iv) Urban environmental planning andmanagement: problems of sanitation; water management; transport; energy; air quality; housing; constraints (economic, political) in tackling the problems; inapplicability of solutions that have worked in the First World and the need for indigenous approach to urbanenvironment.

A basic understanding of the following urban environmental problems: problems of sanitation, water management, transport, energy; air quality and housing.

Awareness of some indigenous solutions:Rainwater harvesting, garbage segregation,composting, energy from solid and liquid wastes, sewage management (dry toilets, Decentralized Water Management System (DEWATS)

Features of new urbanism, goals of smart growth. The following examples of urban planning and management from the third world to be studied:

- Bogota – Bolivia (Traffic Management);
- Cuba (Urban agriculture using organicmethods);
- Curitiba – Brazil (Traffic planning andurban renewal using innovative measures);
- Cochabamba – (Water management and protests against privatisation of water supply).

5. Sustainable Agriculture

(i) Traditional Agriculture in India: irrigation systems; crop varieties; techniques for maintaining soil fertility; impact of colonialism; Indian agriculture at independence - food scarcity - food import - need for increasing production - the need for land reform; green revolution - HYVs - fertilizers - pesticides - large irrigation projects (dams); critical appraisal of the green revolution from the viewpoints of agro-bio diversity; soil health; ecological impact of pesticides; energy (petroleum and petrochemicals); ability to reach the poorer sections of the rural communities; sustainability - need for sustainable agriculture - characteristics for sustainable agriculture; techniques of water soil and pest management.

Definition of the following terms: traditional agriculture, natural farming, organic agriculture, modern agriculture (use of hybrid seeds, high yielding varieties, chemical fertilizers and pesticides), gene revolution (genetically modified seeds) and sustainable agriculture.

Irrigation systems:

Macro vs micro irrigation systems - canal irrigation/dam as compared to sprinkler/ drip/ trickle drip/dug wells. Basic features, advantages and disadvantages of each kind. Traditional rainwater harvesting- tankas, khadins, ahar, pynes, zings, johads and eris (suitability of each type in the particular region).

Features of pre-colonial agriculture in India: growing for sustenance rather than market; multi-cropping, management of soil health, diversity in seed.

Colonial influence: punitive taxation, commercial crops for export and British industry, devaluation of sustainable traditional practices. Bengal famine. Comparative study of pre-colonial, colonial

and post- colonial agriculture and theirimpact.

Green Revolution: Origin (food scarcity - food import - need for increasing production).

Basic principles of Green Revolution- Development of High Yielding Varieties (HYV); introduction of fertilizers and pesticides; mono cropping.

Environmental, social and economic impacts -advantages and disadvantages (from the viewpoints of agro-bio diversity; soil health; ecological impact of pesticides; energy use; input costs; benefits to small and medium farmers, community level and household level food security).

Land reform – need, advantages, failures and successes.

Elements of sustainable agriculture: Mixed farming, mixed cropping, inter-cropping, croprotation, use of sustainable practices of water soil and pest management for improving soil fertility (organic fertilizers, bio-fertilizers, green manure, with two examples) and pest control (bio pesticides). Integrated Pest Management (IPM); eating local foods

Management of agricultural produce: Storage; Food preservation-different methods like use of low temperatures, hightemperatures, drying, canning, preservation by salt and sugar. Transportation of Food.

Food processing - Definition, food preservation, packaging, grading.

Food adulteration and Food additives- definitions; types of adulteration, harmful effects of adulteration.

Quality Marks - ISI (Indian StandardInstitute); AGMARK (Agricultural Marketing); FPO(Fruit Product Order) - abrief explanation only.

(ii) Food: the twin problems of production and access; food situation in the world; integrated and sustainable approach to food security for the Third World. Food Security.

Meaning of Food Security, need for food security. The problems in attaining foodsecurity - those

of production, storage andaccess. Integrated and sustainable approach to food security for the Third World including working for environmental sustainability and social and economic sustainability through land reform, credit support to farmers, market support to farmers, inadequacies in the present marketing system, ways to improvemarketing system, improving access to food, ownership of seeds.

An understanding that national level food security may not translate into household and community level food security or long term environmental sustainability unless the above factors are addressed. Main features of the Food Security Law 2013.

6. Environmental and Natural Resource Economics

(i) Definition: resources; scarcity and growth; natural resource accounting.

Classification of natural resources - on the basis of origin (abiotic and biotic), on thebasis of renewability (renewable and non- renewable), on the basis of development(potential and actual), on the basis of distribution (ubiquitous and localized); scarcity and growth, natural resource accounting.

Classification of resources as renewable and non-renewable.

Definition, basic principles, advantages and disadvantages of Physical accounting.

(ii) GNP vs. other forms of measuring income. GDP, GNP – definitions, advantages anddisadvantages of using them as tools formeasuring growth.

(iii) Economic status and welfare (net economic welfare, nature capital, ecological capital, etc.)

A broad overview of the purpose of environmental economics.

Definition and classification: Defensiveexpenditure (its classification); natural/ ecological capital.

(iv) Externalities: cost benefit analysis (social, ecological).

Externalities – definition, kinds (positive andnegative), impacts.

Cost Benefit analysis - Definition, the processin brief, advantages and disadvantages.

EPR (Extended Producer Responsibility) -definition, examples, advantages.

(v) Natural capital regeneration.

What is natural capital? Kinds of natural capital; classification of ecosystem services, causes of degradation (acid deposition, airpollution, deforestation, loss of biodiversityand emission of carbon dioxide), ecological footprint and man's disproportionate use of natural resources, importance of preserving and regenerating natural capital.

7. International Relations and the Environment

(i) Trans-national characteristics of environmental issues using case study of Amazonia, Trade in Wild Life and Ozone Depletion.

Case study of Amazonia - causes for exploitation of forests, reasons for acceleration of deforestation, effects of government policies, ecological value of rainforests and possible solutions to theproblem.

Case study of ivory trade in Africa - reasons for flourishing trade of ivory in the past, steps taken to curb the trade and the consequences of ban in trade.

Case study of ozone depletion - what is meantby ozone layer and how does it get depleted, (Chapman's cycle), potential effects of ozone depletion, common ozone depleting substances (halons, carbon tetrachloride, CFCs, methyl chloroform, methyl bromide and HCFCs) and their life span in the atmosphere; Ozone hole; steps taken to control ozone depletion.

(ii) Impact of international politics, national sovereignty and interest.

(iii) International trade: a theoretical perspective; free trade vs. protectionism; import barriers; domestic

industry vs. free trade; transnational companies - a historical perspective (colonialism and its lasting impact today); trade between the first and the third world - characteristics - terms of trade; India's international trade - characteristics - major imports and exports - foreign exchange crises

- the export imperative and its impact on the environment; the case study of aquaculture in India; diversion of scarce resource fromproduction of subsistence needs to commercial products; toxic waste trade - extent and impact; Globalisation - trade regimes (WTO, GATT, IPR) and their impact on third world.

Definition, advantages and disadvantages of globalization, free trade, protectionism.
Transnational Companies (TNCs) – definition; TNCs and environment – conflictof interest.

History of third world countries' trade withthe developed countries (with special reference to India) with regards to composition and terms of trade (export of primary goods and import of finished goods at higher cost tapping of primary goods leading to environment degradation- open castmining, agriculture, aquaculture, etc.).

Case study of aquaculture in India to understand the impact of free trade.

Economic allocation of scarce resources and its impact on environment.

Toxic waste trade – definition, origin, factors sustaining, impact on third world countries(example – health and environmental impacts)and steps to mitigate it (Bamako and Basel Conventions).

GATT – the organization and its metamorphosis into WTO.

Principles and functions of WTO: creating a level playing field for international trade through MFN (Most Favoured Nation), NT(National Treatment) and reduction of import barriers - tariff and non tariff barriers and trading to comparative advantages.

Full forms of and areas addressed in the WTOGATT, TRIPS, TRIMS, Agreement on Agriculture (AOA). A brief understanding of how these agreements impacted India's trade, food security, economic well-being, environmental sustainability.

Definition of IPR and its categories: copyrights, patents, trademarks, industrial design rights, geographical indicators and trade secrets.

A brief understanding of each of the above categories.

(iv) International aid: agencies; advantages; limitations; need for re-orienting aid; aid vs. self-reliance.

International aid – advantages and disadvantages; Types of Aid: Tied and Untied Aid - advantages and limitations of each.

FOR THE YEAR 2025

Fine Arts/Visual Arts/Commercial Arts – 312 Syllabus for CUET (UG)

Unit 1: The Rajasthani and Pahari Schools of Miniature Painting

Unit 2: The Mughal and Deccan schools of miniature painting

Unit 3: The Bengal School and Cultural Nationalism

Unit 4: The Modern trends In Indian Art

Unit 1: The Rajasthani and Pahari Schools of Miniature Painting (16th Century A.D. to 19th Century A.D.)

Introduction to Indian Miniature Schools: Western-Indian, Pala, Rajasthani, Mughal, Central India, Deccan and Pahari.

(A) The Rajasthani Schools

- Origin and development of following schools in brief:
  Mewar, Bundi, Bikaner, Kishangarh and Jaipur, and main features of the Rajasthani schools.
- Study of the following Rajasthani paintings:

Title / Set / Painter	School
(i) A Folio from Ramayana paintings of Sahibdin	Mewar
(ii) One Court scene or Hunting scene or Festival scene Jagat Singh II	Mewar
(iii) One Folio from Ragamala or Rasikapriya	Bundi
(iv) One painting of Hunting scene in a Forest with Kotah Maharaja	Kotah
(v) Radha (Bani-Thani) by Nihal Chand	Kishangarh
(vi) Pabuji Ki Phad, Folk Scroll painting	Bhilwada

(B) The Pahari Schools:

- Origin and development of Basohli, Guler and Kangra schools in brief and main features of the Pahari schools
- Study of the following Pahari Paintings:

Title / Set / Painter	School
(i) One Folio of Ramayana (Sangri – Early Phase)	Basohli
(ii) One Folio of Gita Govinda of Jaideva by Manaku	Guler
(iii) One Krishna Lila or Bhagavata Purana Folio by Nain Sukh	Kangra
(iv) One painting from Nayaka Nayika or Baramasa or Ragamala	Guler or Kangra

Unit 2: The Mughal and Deccani Schools of miniature painting (16th Century A.D. to 19th Century A.D.)

(A) The Mughal School

- Origin and development of the Mughal school in brief and main features of the Mughal School.
- Study of the following Mughal Paintings:

Title	**Painter**	**School**
(i) A Folio from Akbar Namah	Basawan	Akbar
(ii) Baber Crossing the river Sone	Jagannath	Akbar
(iii) Jahangir holding the picture of Madonna	Abul Hassan	Jahangir
(iv) Falcon	Ustad Mansoor	Jahangir
(v) Kabir and Raidas	Ustad Faquirullah Khan	Shajahan
(vi) Marriage procession of Dara Shikoh	Haji Madni	Provincial Mughal (Oudh)

(B) The Deccani School

- Origin and development of the Deccani school and Main features of the Deccan School.
- Study of the following Deccani Paintings:

(i) Ibrahim Adil Shah II of Bijapur	Bijapur
(ii) Raga Hindola	Ahmednagar

Unit 3: The Bengal School and Cultural Nationalism

- New Era in Indian art - an introduction
- Study of the following paintings:

(i)	Rama Vanquishing the pride of the ocean	Raja Ravi Verma
(ii)	Journey's End	Abanidranath Tagore
(iii)	Parthasarthi	Nandlal Bose
(iv)	Ghalib's Poetry Painting	M.A.R. Chughtai
(v)	Select a cubistic painting	Gaganendranath Tagore
(vi)	Mother and child	Jamini Roy
(vii)	Female Face	Rabindranath Tagore
(viii)	Hill Women	Amrita Sher Gill

Unit 4: The Modern trends In Indian Art Introduction

Study of the following Sculptures:

(i)	Triumph of Labour	D. P. Roychowdhury
(ii)	Santhal Family	Ramkinker Vaij
(iii)	Standing Woman	Dhanraj Bhagat
(iv)	Cries Unheard	Amar Nath Sehgal
(v)	Ganesha Figure	P.V. Jankiram
(vi)	Dhanpal	Sankho Chaudhuri

Study of the following Paintings:

(i)	Mother Teresa	M.F. Hussain
(ii)	Birth of Poetry	K.K. Hebbar
(iii)	Gossip	N.S. Bendre
(iv)	Tantric Painting	G.R. Santosh
(v)	Words and images	K.C.S. Pannikar
(vi)	Children	Somnath Hore

For The Year 2025

General Aptitude Test- 501 Syllabus for CUET(UG)

The Question paper will contain questions from the following topics:

- General Knowledge, Current Affairs,
- General Mental Ability, Numerical Ability,
- Reasoning (Simple application of basic mathematical concepts Quantitative arithmetic / algebra geometry / mensuration / statistics)
- Logical and Analytical Reasoning.
- General Science and Environment Literacy

For the year 2025

GEOGRAPHY/ GEOLOGY - 313

Syllabus for CUET(UG)

A. Fundamentals of Human Geography.

Unit - I ***Human Geography – Nature and Scope***

Unit - II ***People***

- Population of the world- distribution, density and growth;
- Population change – spatial patterns and structure determinants of population change;
- Human development – concept; selected indicators, international comparisons.

Unit - III ***Human Activities***

- Primary activities – concept and changing trends; gathering, pastoral, mining, subsistence Agriculture, modern agriculture; people engaged in agriculture and allied activities – some examples from selected countries;
- Secondary activities – concept; manufacturing; agro-processing, household, small scale, large scale Industries.
- Tertiary activities – some examples from selected countries;
- Quaternary activities – concept; knowledge based industries; people engaged in quaternary activities – some examples from selected countries.

Unit – IV ***Transport, Communication and Trade***

- Land transport – roads, railways – rail network; trans – continental railways;
- Water transport – inland waterways; major ocean routes;
- Air transport – Intercontinental air routes;
- Oil and gas pipelines;
- Satellite communication and cyber space;
- International trade – basis and changing patterns; ports as gateways of international trade, role of WTO in International trade.

B. India: People and Economy

Unit - I ***People***

- Population – distribution density and growth; composition of population; linguistic and religious; rural – urban population change through time-regional variations; occupation

Unit - II ***Human Settlements***

- Rural settlements – types and distribution;
- Urban settlements – types, distribution and functional classification

Unit - III ***Resources and Development***

- Land resources-general land use; agriculture land use – major crops; agricultural development and problems, common property resources;
- Water resources – availability and utilization – irrigation, domestic, industrial and other uses; scarcity of water and conservation methods – rain water harvesting and watershed management
- Mineral and energy resources – metallic and non-metallic minerals and their distributions; conventional and non-conventional energy sources;
- Planning in India – target area planning; idea of sustainable development.

Unit - IV ***Transport, Communication and International Trade***

- Transport and communication – roads, railways, waterways and airways; oil and as gas pipelines; communication networkings – radio, television, satellite and internet;
- International trade – changing pattern of India's foreign trade; sea ports and their hinterland and airports.

Unit – V ***Geographical Perspective on selected issues and problems***

- Environmental pollution; urban – waste disposal;
- Urbanization-rural-urban migration; problems of slumps;
- Land degradation.

FOR THE YEAR 2025

GUJARATI-105

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR GUJARATI-105

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

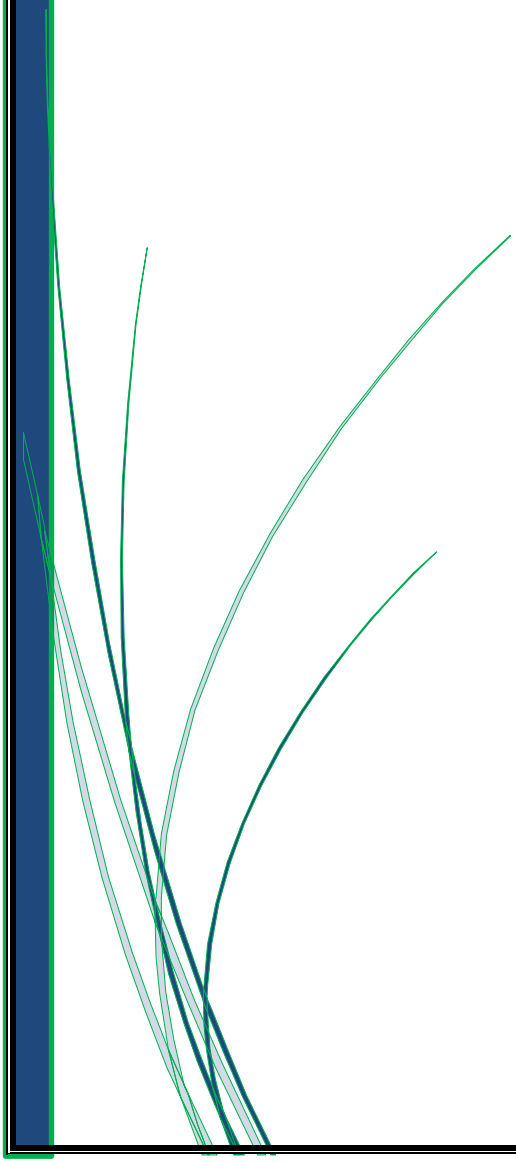
i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

HINDI-102

SYLLABUS FOR

CUET (UG)



SYLLABUS FOR HINDI-102

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For the Year 2025

History -314 Syllabus for CUET(UG)

HISTORY

Themes in Indian History.

Themes in Indian History Part - I

Theme - I

- The Story of the First Cities: Harappan Archeology

Theme - II

- Political and Economic History: How Inscriptions tell a story

Theme - III

- Social Histories: Using the Mahabharata

Theme - IV

- A History of Buddhism: Sanchi Stupa

Themes in Indian History Part - II

Theme - V

- Agrarian Relation: The Ain-i-Akbari

Theme - VI

- New Architecture Hampi

Theme - VII

- Religious History: The Bhakti-Sufi Tradition

Theme - VIII

- Medieval Society through Traveller's Accounts

Themes in Indian History Part - III

Theme - IX

- Colonialism and Rural Society: Evidence from Official Reports

Theme - X

- Representation of 1857

Theme - XI

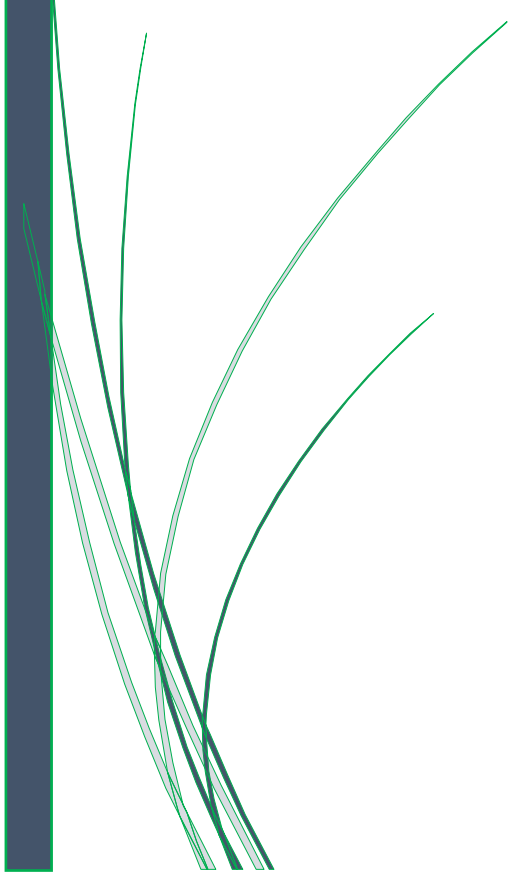
- Mahatma Gandhi through Contemporary Eyes

Theme - XII

- The making of the Constitution

For the Year 2025

Home Science – 315 Syllabus for CUET(UG)



Theory

Unit I: Work, livelihood and career; Preparation, choices and selection

- Work, age and gender
- Occupational heritage of India
- Career options
- Entrepreneurship and self-employment
- Life skills for career building

Unit II: Career Opportunities

Scope of Human Ecology and Family Sciences in higher education and careers Major concepts, relevance and skills in the following areas;

A. Nutrition, Food Science and Technology

Specific Careers and Areas

- Clinical nutrition and dietetics
- Public nutrition and health
- Catering and food services management
- Food processing and technology
- Food quality and food safety

B. Human Development and Family Studies

Specific Careers and Area

- Early childhood care and education
- Guidance and counseling
- Special education and support services
- Support services for children in difficult circumstances
- Management of institutions and programs for children, youth and elderly

C. Fabric and Apparel

Specific Careers and Areas

- Care and maintenance of fabrics in institutions
- Design for fabric and apparel
- Retailing and merchandising
- Production and quality control in garment industry
- Museumology and textile conservation

D. Resource Management

Specific Careers and Areas

- Human Resource Management
- Hospitality management
- Designing of interior and exterior space
- Event management
- Consumer services

E. Communication and Extension

Specific Careers and Areas

- Management of development programs
- Development communication and journalism
- Media management and advocacy
- Media design and production
- Corporate communication and public relations

FOR THE YEAR 2025

KANNADA-106

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR KANNADA 106

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

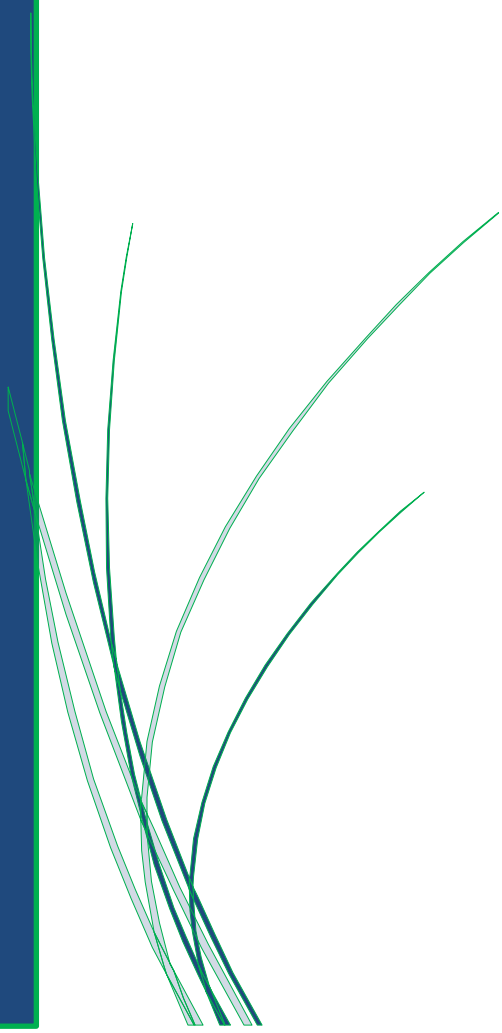
i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For The Year 2025

Knowledge Tradition-Practices In India-316

Syllabus for

CUET(UG)



Knowledge Traditions and Practices of India

1 **Agriculture: A Survey**

Agriculture in Prehistory and Protohistory/ Textual Sources/ Types of Lands/ Rain-Fed and Irrigated Crops/ Implements/ Seed and Sowing/ Manures/ Pests and Their Management/ Cattle Management/ Horticulture and Arboriculture/ Fishing/ Agriculture and Society

Agricultural Heritage: Excerpts from Primary Texts

Rigveda, *Kṛṣiparāśara* (c. 400 BCE) Kauṭilya (3rd or 4th century BCE) *Kaśyapiyakṛṣisukti* (800 CE) *Vṛkṣāyurveda* (c. 1000 CE) *Kṛṣigītā* (c. 1500 AD)

2 **Architecture: A Survey**

(1.) Early and Classical Architecture

Temple Architecture/ Rock-Cut Structures/ Monolithic Temples/ Constructed Temples/ Public and Private Architecture

Architecture: Excerpts from Primary Texts

Viṣṇudharmottarapurāṇa Kautilya's *Arthaśāstra* *Mayamata* *Mānasāra*

Architecture: A Survey

(2.) Medieval & Colonial Architecture

Fort and Palace Architecture/ Mosques/ Mausoleums/ Colonial Architecture

3 **Dance: A Survey**

(1.) Classical Dance Forms

Classical Period/ Middle Period/ Modern Period/ Classical Dance Forms/ Bharatanatyam/ Kathakali/ Kathak/ Kuchipudi/ Manipuri/ Odissi/ Sattriya

Primary Texts on Dance in India : A Selection

Nāṭyaśāstra (tr. Manomohan Ghosh)

Dance : A Survey

(2.) Folk Dance Forms

Chau/ Bihu/ Rauf/ Padayani/ DolluKunitha/ Dandiya/ Ghumar/ Kalbelia/ Chaufla/ Bhangra/Giddha/ Garba/ Lavani/ Bamboo Dance

4 **Education Systems and Practices: A Survey**

Goals of Indian Education/ Teaching and Learning/The Teacher and the Student/ Centres of Education/ Temples as First Schools/ Gurukulas/ Viharas and Universities/Community-Supported Education/ The Continuing System

Primary Texts on Education in India: A Selection

Two Types of Knowledge and the Right Pupil/ Mere Intellectual Knowledge Is Not Enough/The Link between Teacher and Pupil/ Teachers Invite Students to come to Them/Controlling the Mind and the Senses: the Goal of Indian Education/ Teacher's Directives to Students on their Completion of Study/ What is a Useful Life?/Hsüan-tsang's (Xuanzang) Impressions of Indian Education/ Hsüan-tsang's (XuanZang) Description of Nalanda University

Narratives of Indian Education in the 17th, 18th and 19th Centuries

An Italian Explorer's Record of Indian Education in the 17th Century/ A Description of Indian Education in the 18th Century/ The Teacher's Subsistence/ Respect for the Teacher/Physical Education and Sports/ Description of the University at Navadveep (Nuddeah) in Bengal in 1791/ Love of Learning and Support for Education among Indians/ A Widespread Colonial Network of Indigenous Schools

5 **Indian Ethics: Individual and Social**

The Cosmic Order/ Buddhist Ethics/ Jain Ethics/ Sikh Ethics/The Bhakti Movement

Primary Texts on Ethics: Individual and Social: A Selection

From Jain Granthas/ From Buddhist Granthas/ From Asoka's Edicts/ From the Kural (tr. P.S. Sundaram)

6 **Martial Arts Traditions:A Survey**

- Texts/ Practice of Martial Arts/ Stick Combat/ Kalarippayattu
- **Martial Arts Traditions: A Selection from Primary Texts**

  Wrestling in the Mahabharata/ Mallapurana/ Marmasastram

7 **Language and Grammar**

Languages of India/ Study of Language in India/ Disciplines of Language Studies in India/ Classification of Speech-Sounds/ Theory of Grammar/ Chanda (Prosody)

Primary Texts on Language: A Selection

Reflections on Language from Vedic Sources, Phonetics Paniniya siksha (tr. & ed., Manomohan Ghosh), Nirukta (Etymology), The Nighantu and the Nirukta of SriYaskacharya (tr. Ed., Lakshman Sarup) Patañjali's Mahabhasya (adapted from S.N. Dasgupta's translation) Grammar, Language and Knowledge Bhartṛhari's Vakyapadiya, Brahmakanda, (tr. K. A. Subramania Iyer)

8 **Other Technologies: A Survey**

Harappan Technologies/ Later Pottery/ Glass/ Water Management/ Textile Technology/

Writing Technology/ Pyrotechnics/ Cosmetics and Perfumes

Other Technologies: A Selection from Primary Texts

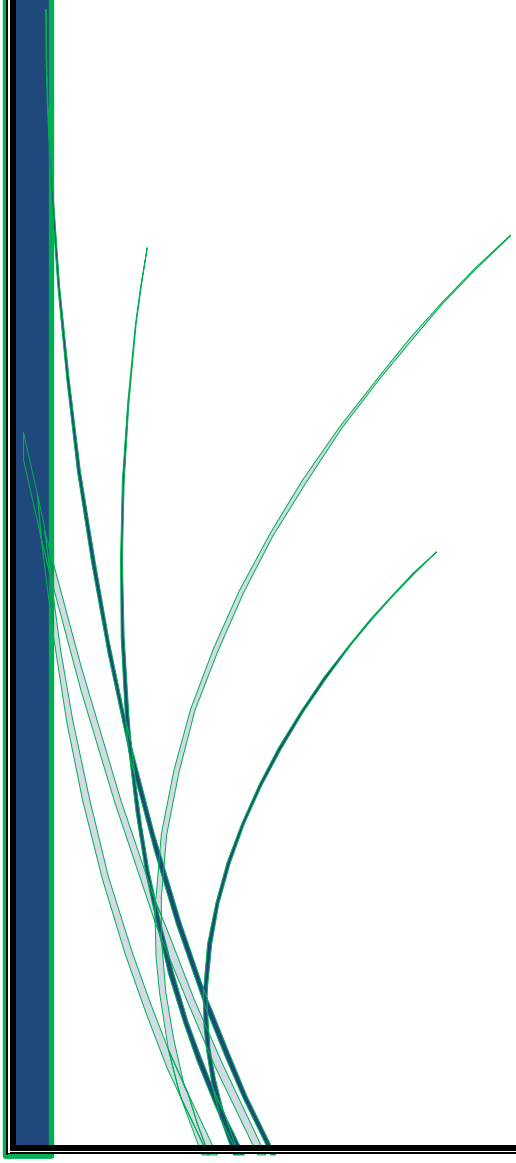
Gemmology/ Water Management/ Textiles and Garments/ Cosmetics and Perfumes

FOR THE YEAR 2025

MALAYALAM-107

SYLLABUS FOR

CUET (UG)



SYLLABUS FOR MALAYALAM-107

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

MARATHI-108

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR MARATHI-108

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For The Year 2025

Mass Media/ Mass Communication - 318 Syllabus for CUET(UG)

1. Communication

(i) Culture and Communication

What is culture? Relationship between culture and mass media; communication in the cultural context; media as a vehicle of cultural transmission; representation and stereotyping in Mass Media.

(ii) Communication and Social Change

Social change: meaning; media as a catalyst for social change (with examples of various social movements).

(Iii) History of Newspapers, Radio and Television in India and History of New Media

2. Journalism

(i) Qualities of a good Journalist.

An understanding of the following: a nose for News, inquisitiveness, language skills, trustworthiness, and empathy.

(ii) Ethical Issues in Journalism.

A brief understanding of each of the following with examples: sensationalism, fake news, paid news, plagiarism, advertorials, partisan reporting, and sting operations, defamation, freedom of speech and expression.

3. Advertising and Television Production

A. Advertising

(i) Advertising concepts & process,
(ii) \Functions of Advertising,
(iii) Types of Advertising (Cross promotions, Merchandise, Convert Advertising),
(iv) Forms of Advertising

B. TV

(i) Pre-production stage.
(ii) Production stage
***(iii)** Post-production Stage.*

4. Radio

(i) Writing for Radio

Characteristics of a Radio Script: conversational language, active voice, simple sentences, avoidance of technical jargons, and capability of creating

(ii) RECORDING RADIO PROGRAMING IMAGERIES.

Brief understanding of the radio studio and transmission equipment: types of microphones; amplifier, sound mixer, speakers; audio recording.

5. Cinema

(i) History of Cinema

A brief understanding of the early experiments done by the following: Lumiere Brothers, John Grierson, Robert Flaharty and Dada Saheb Phalke.

(ii) Cinema Genres.

Defining genre theory; an understanding of the various types of genres (with suitable examples): action, westerns, comedy, crime, drama, fantasy/sci-fi, historical, animation, romance and musical.

(iii) Cinema and Social Change.

Parallel Cinema movement in India: Issues depicted and low budget production process (with reference to examples such as Shyam Benegal's Manthan).

6. Social Media

(i) Definition of social media.

(ii) Types of social media platforms.

Self-explanatory.

(iii) Role of social media in democracy.

Role of social media in creating collective identities with reference to sharing of information; cyber activism (with suitable examples)

(iv) Cyber Crime.

An understanding of online bullying; stalking; trolling; online frauds.

(v) Netiquettes.

Meaning and importance of netiquettes; an understanding of netiquettes such as: identification of oneself; respect for others' privacy, use of appropriate language and imagery; do not spam.

7. New Media

(i) Internet as the meeting point of all the mass media.

(ii) Broadcasting

(iii) Mass communication model of a few transmitting to a vast number of receivers.

(iv) Gigantic organization.

(v) Huge technical infra-structure

(vi) Large scale revenue.

(vii) The changed paradigm due to the Internet.

(viii) Empowering an individual to post data on the Internet.

(ix) Information, message in one medium triggering off activity in the others.

(x) Many sources of the same information.

(xi) Distribution of the information between individuals on an unprecedented global scale.

(xii) Rapidity of opinion generation on a local, national and gloabal scale.

(xiii) The socio-political implications of the new information order.

(xiv) The Strengthening of democracy.

(xv) Emerging trends in Mass Communication

For the Year 2025

Mathematics/ Applied Mathematics – 319 Syllabus for CUET(UG)

Section A1

1. Algebra	(iv). Application of Integration as area under the curve (simple curve)
(i) Matrices and types of Matrices	
(ii) Equality of Matrices, transpose of a Matrix, Symmetric and Skew Symmetric Matrix	4. Differential Equations
(iii) Algebra of Matrices	(i) Order and degree of differential equations
(iv) Determinants	(ii) Solving of differential equations with variable separable
(v) Inverse of a Matrix	
(vi) Solving of simultaneous equations using Matrix Method	5. Probability Distributions
	(i) Random variable
2. Calculus	
(i) Higher order derivatives(second order)	6. Linear Programming
(ii) Increasing and Decreasing Functions	(i) Graphical method of solution for problems in two variables
(iii). Maxima and Minima	(ii) Feasible and infeasible regions
	(iii). Optimal feasible solution
3. Integration and its Applications	
(i) Indefinite integrals of simple functions	
(ii) Evaluation of indefinite integrals	
(iii) Definite Integrals	

Section B1: Mathematics

UNIT I: RELATIONSAND FUNCTIONS

1. **Relations and Functions**

   Types of relations: Reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

2. **Inverse Trigonometric Functions**

   Definition, range, domain, principal value branches. Graphs of inverse trigonometric functions.

UNIT II: ALGEBRA

1. Matrices

Concept, notation, order, equality, types of matrices, zero matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operations on matrices: Addition, multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants

Determinant of a square matrix (up to 3 × 3 matrices), minors, cofactors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

UNIT III: CALCULUS

1. **Continuity and Differentiability**

   Continuity and differentiability, chain rule, derivatives of inverse trigonometric functions, like $\sin^{-1} x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concepts of exponential, logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second-order derivatives.

2. **Applications of derivatives**: Rate of change of quantities, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real-life situations).

3. Integrals

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 + a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{a^2 - x^2}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}},$$

$$\int \frac{(px + q)dx}{ax^2 + bx + c}, \quad \int \frac{(px + q)dx}{\sqrt{ax^2 + bx + c}}, \int \sqrt{a^2 \pm x^2}\, dx, \int \sqrt{x^2 - a^2}\, dx$$

Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

4. Applications of the Integrals

Applications in finding the area under simple curves, especially lines, circles/parabolas/ellipses (in standard form only)

5. Differential Equations

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

$\frac{dy}{dx} + Py = Q$, where P and Q are functions of x or constants

$\frac{dx}{dy} + Px = Q$, where P and Q are functions of y or constants

UNIT IV: VECTORSAND THREE-DIMENSIONALGEOMETRY

1. Vectors

Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.

2. Three-dimensional Geometry

Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.

Unit V: Linear Programming

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Unit VI: Probability

Conditional probability, Multiplications theorem on probability, independent events, total probability, Baye's theorem. Random variable.

Section B2: Applied Mathematics

Unit I: Numbers, Quantification and Numerical Applications

A. Modulo Arithmetic

- Define modulus of an integer
- Apply arithmetic operations using modular arithmetic rules

B. Congruence Modulo

- Define congruence modulo
- Apply the definition in various problems

C. Allegation and Mixture

- Understand the rule of allegation to produce a mixture at a given price
- Determine the mean price of a mixture
- Apply rule of allegation

D. Numerical Problems

- Solve real life problems mathematically

E. Boats and Streams

- Distinguish between upstream and downstream
- Express the problem in the form of an equation

F. Pipes and Cisterns

- Determine the time taken by two or more pipes to fill or empty the tank

G. Races and Games

- Compare the performance of two players w.r.t. time, distance

H. Numerical Inequalities

- Describe the basic concepts of numerical inequalities
- Understand and write numerical inequalities

UNIT II: ALGEBRA

A. Matrices and types of matrices

- Define matrix
- Identify different kinds of matrices

B. Equality of matrices, Transpose of a matrix, Symmetric and Skew symmetric matrix

- Determine equality of two matrices
- Write transpose of given matrix
- Define symmetric and skew symmetric matrix

C. Algebra of Matrices

- Perform operations like addition & subtraction on matrices of same order
- Perform multiplication of two matrices of appropriate order
- Perform multiplication of a scalar with matrix

D. Determinant of Matrices

- Find determinant of a square matrix
- Use elementary properties of determinants
- Singular matrix, Non-singular matrix
- $|AB|=|A||B|$
- Simple problems to find determinant value

E. Inverse of a Matrix

- Define the inverse of a square matrix
- Apply properties of inverse of matrices
- Inverse of a matrix using: a) cofactors

If A and B are invertible square matrices of same size,

i) $(AB)^{-1}=B^{-1}A^{-1}$

ii) $(A^{-1})^{-1}=A$

iii) $(A^T)^{-1} = (A^{-1})^T$

F. Solving system of simultaneous equations (upto three variables only (non-homogeneous equations))

UNIT III: CALCULUS

A. Higher Order Derivatives

- Determine second and higher order derivatives
- Understand differentiation of parametric functions and implicit functions

B. Application of Derivatives

- Determine the rate of change of various quantities
- Understand the gradient of tangent and normal to a curve at a given point
- Write the equations of tangents and normal to a curve at a given point

C. Marginal Cost and Marginal Revenue using derivatives

- Define marginal cost and marginal revenue
- Find marginal cost and marginal revenue

D. Increasing/Decreasing Functions

- Determine whether a function is increasing or decreasing
- Determine the conditions for a function to be increasing or decreasing

E. Maxima and Minima

- Determine critical points of the function
- Find the point(s) of local maxima and local minima and corresponding local maximum and local minimum values
- Find the absolute maximum and absolute minimum value of a function
- Solve applied problems

F. Integration

- Understand and determine indefinite integrals of simple functions as anti-derivative

G. Indefinite integrals as family of curves

- Evaluate indefinite integrals of simple algebraic functions by methods of
  (i) substitution
  (ii) partial fraction
  (iii) by parts

H. Definite Integral as area under the curve

- Define definite integral as area under the curve
- Understand fundamental theorem of integral calculus and apply it to evaluate the definite integral
- Apply properties of definite integrals to solve problems

I. Application of Integration

- Identify the region representing C.S. and P.S. graphically
- Apply the definite integral to find consumer surplus-producer surplus

J. Differential Equations

- Recognize a differential equation
- Find the order and degree of a differential equation

K. Formulating and solving differential equations

- Formulate differential equations

- Verify the solution of differential equation
- Solve simple differential equation

L. Application of Differential Equations

- Define growth and decay model
- Apply the differential equations to solve growth and decay models

UNIT IV: PROBABILITY DISTRIBUTIONS

A. Probability Distribution

- Understand the concept of Random Variables and its Probability Distributions
- Find probability distribution of discrete random variable

B. Mathematical Expectation

- Apply arithmetic mean of frequency distribution to find the expected value of a random variable

C. Variance

- Calculate the Variance and S.D. of a random variable

D. Binomial Distribution

- Identify the Bernoulli Trials and apply Binomial Distribution
- Evaluate Mean, Variance and S.D. of a Binomial Distribution

E. Poisson Distribution

- **Understand the conditions of Poisson Distribution**
- **Evaluate the Mean and Variance of Poisson distribution**

F. Normal Distribution

- **Understand normal distribution is a continuous distribution**
- **Evaluate value of Standard normal variate**
- **Area relationship between Mean and Standard Deviation**

UNIT V: INDEX NUMBERS AND TIME BASED DATA

A. Time Series

- Identify time series as chronological data

B. Components of Time Series

- Distinguish between different components of time series

C. Time Series analysis for univariate data

- Solve practical problems based on statistical data and Interpret

D. Secular trend

- Understand the long term tendency

E. Methods of Measuring trend

- Demonstrate the techniques of finding trend by different methods

UNIT VI: INFERENTIAL STATISTICS

A. Population and Sample

- Define Population and Sample
- Differentiate between population and sample
- Define a representative sample from a population
- Differentiate between a representative and a non-representative sample
- Draw a representative sample using simple random sampling
- Draw a representative sample using a systematic random sampling

B. Parameter and Statistics and Statistical Interferences

- Define Parameter with reference to Population
- Define Statistics with reference to Sample
- Explain the relation between Parameter and Statistic
- Explain the limitation of Statistic to generalize the estimation for population
- Interpret the concept of Statistical Significance and Statistical Inferences
- State Central Limit Theorem

- Explain the relation between Population-Sampling Distribution-Sample

C. t-Test (one sample t-test and two independent groups t-test)

- Define a hypothesis
- Differentiate between Null and Alternate hypothesis
- Define and calculate degree of freedom
- Test Null hypothesis and make inferences using t-test statistic for one group/two independent groups

UNIT VII: FINANCIAL MATHEMATICS

A. Perpetuity, Sinking Funds

- Explain the concept of perpetuity and sinking fund
- Calculate perpetuity
- Differentiate between sinking fund and saving account

B. Calculation of EMI

- Explain the concept of EMI
- Calculate EMI using various methods

C. Calculation of Returns, Nominal Rate of Return

- Explain the concept of rate of return and nominal rate of return
- Calculate rate of return and nominal rate of return

D. Compound Annual Growth Rate

- Understand the concept of Compound Annual Growth Rate
- Differentiate between Compound Annual Growth rate and Annual Growth Rate
- Calculate Compound Annual Growth Rate

E. Linear method of Depreciation

- Define the concept of linear method of Depreciation
- Interpret cost, residual value and useful life of an asset from the given information
- Calculate depreciation

UNIT VIII: LINEAR PROGRAMMING

A. Introduction and related terminology

- Familiarize with terms related to Linear Programming Problem

B. Mathematical formulation of Linear Programming Problem

- Formulate Linear Programming Problem

C. Different types of Linear Programming Problems

- Identify and formulate different types of LPP

D. Graphical Method of Solution for problems in two Variables

- Draw the Graph for a system of linear inequalities involving two variables and to find its solution graphically

E. Feasible and Infeasible Regions

- Identify feasible, infeasible and bounded regions

F. Feasible and infeasible solutions, optimal feasible solution

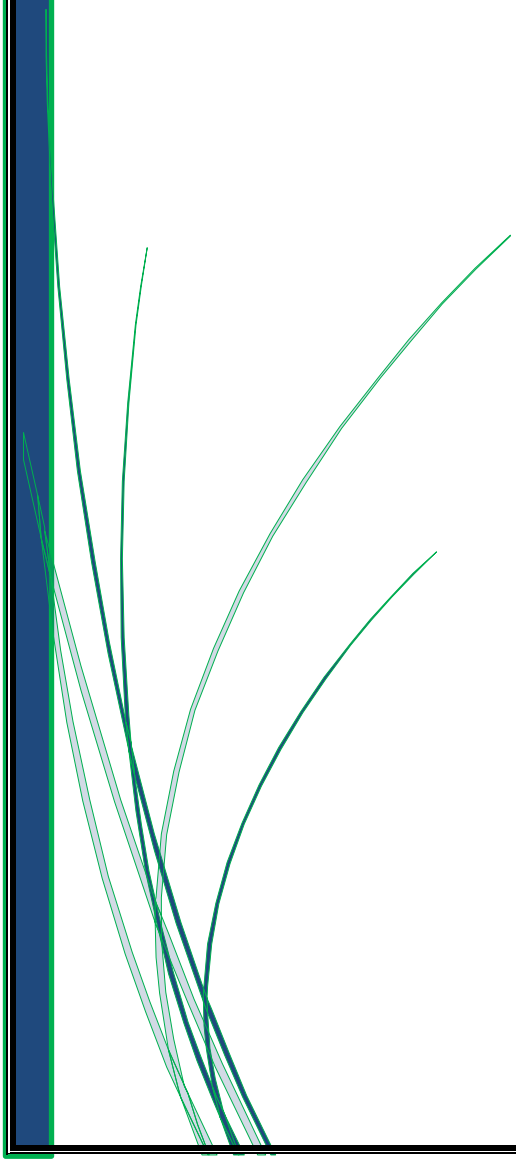
- Understand feasible and infeasible solutions
- Find optimal feasible solution

FOR THE YEAR 2025

ODIA-109

SYLLABUS FOR

CUET (UG)



SYLLABUS FOR ODIA 109

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For the Year 2025

Performing Arts (Dance, Drama, Music) – 320 Syllabus for CUET(UG)

Syllabus for Vocal- Instrumental Melodic

Section A- Hindustani- Karnatak Music

UNIT I- Definition of the following:

Sangeet, Nad, Shruti, Swara- Shuddha, Komal, Teevra, Pitch-Intensity – Timbre, Gram-Murcchana, Varna, Alankar, Raga, Alap Tana, Gamak, Meend, Kan.

UNIT II- Basic knowledge of the following concepts:

Vadi, Samvadi, Anuvadi, Vivadi,Uttarang, Puravang, Aroh, Avroh, Pakad, Thata(Mela) Jati-Audav,Shadav, Sampurna and its varieties.

UNIT III- Laya & Tala

Laya – Vilambit,Madhya, Drut
Layakari- Dagun, Tigun, Chaugun, Chegun, Tala, Matra, Tali, Khali, Sam, Vibhag, Avartan,
Knowledge of prominent Talas:
Teental,Ektala, Dadra, Keharwa, Jhaptala, Rupak, Adi, Saptala, Chaputala, Rupakam.

UNIT IV- Knowledge of Musical Forms

Prabandh, Drupad, Khayal, Thumri, Tarana, Maseet Khani-Razakhani Gat, Kriti,Pallavi, Padam, Tillana

UNIT V- Contribution of musicians & composers:

V.N Bhatkhande, Omkar Nath thakur, Allaudin Khan, Mushtaq Ali Khan, Tyagraja, Purandardas, Ravindra Nath tagore, Kazi narrul Islam.

UNIT VI- Musical Instruments & its Classification: string (Tatta)- Sitar, Tanpura, Saraswati Veena, Sarod, sarangi

Violon percussion (Avnadha) Tabla, Pakhawaj, Mrindangam, Khatam, Khanjira, Dholak
Wind (Sushir) – Flute, Shehnai, Nagaswaram, Harmonium
Metallic (Ghan)- Chimta, Cymbal, Ghungaroo, Khadtala, Chipla,Morchung

UNIT-VII- Knowledge of Salient features of the following ragas: -

1.Yaman/Kalyani, 2. Bhairav/ Mayamalavgaula, 3. Alhaiya Bilwal/Shankra bharnam,
4. Malkaun/Hindolam, 5. Bageshree/Shri Ranjani, 6. Bhupali/Mohnam

Performing Arts-320: Dance (Section B)

UNIT I – Brief knowledge of classical dances of India.
(Kathak, Bharatnatyam, Manipuri, Kathakali, Odissi, Kuchipudi, Mohiniattam, Sattriya)

I. History
II. Dance repertoire
III. Music both vocal and instrumental
IV. Costume and makeup

UNIT II- Life sketches of chief exponents and contributors of different dance forms, past and present.

UNIT III- Knowledge of the following terms:

I. Sangeet, Natan Bheda (Natya,Nritta, Nritya)
II. Tandav, Lasya
III. Lokdharmi, Natyadharmi

UNIT IV- Basic knowledge of the following: -

I. Texts: Abhinaya Darpan, Natya Shastra, Abhinaya Chandrika, Hasta Lakshana deepika.
II. Major folk dances of India.

UNIT V- Basic knowledge of Abhinaya and Rasa theory.

I. Aangika, Vachika, Aaharya, Satwika
II. Nav rasa and sthayi bhaav.
III. Bhaav, Vibhaav, Anubhaav, Sanchari.

UNIT VI- Survey of classical dance practice:

I. Elementary information and knowledge of premier classical dance gharanas/ organisations/ institutions/ University-departments.
II. Major dance festivals.

Syllabus for Percussion Music- Hindustani & Karnataka (Section-C)

UNIT I- Basic knowledge of structure of Tabla, Pakhawaj & Mridangam

UNIT II- Varnas of Tabla, Pakhawaj and Mridangam.

UNIT III- Knowledge of following terms:

a) Tala, Matra,Tali, Khali, Vibhag, Tihai, Sam
b) Theka, Kayada,Rela, Tukda, Paran, Peshkar, Uthan, Chakradar & Farmaishi chakradar.
c) Sarvlaghu,Gati, Koraipu,Korvai,Pharan,Mohra, Chapu, Muktayipu
d) Study of Laya,Laykari & Jati

UNIT IV- Elementary knowledge of Bhatkhande Tala Notation system & Karnatak Tala Notation System.

UNIT V- a) Brief study of origin of Tabla,Pakhawaj and Mridangam.

b) Brief study of Gharana of Tabla and Pakhawaj

UNIT VI- Knowledge of prescribes Talas:

a) Teentala, Jhaptala,Ektala, Rupak, Keharwa & Dadra
b) Chautala, Sooltala,Khemtas, Dhamar
c) Dhurva,Mathya Rupak,Jhampa,Triput,Ata,Eka.

UNIT VII Biographies: -

a) Pt.Kishan Mharaj,Ustad Zakir Hussain.
b) Raja Chatrapati Singh,Guru Purushotam Das.
c) Palani Subramanya Pillai, Palghat Mani Iyer.

Drama- Theatre (Section D)

UNIT I- Introduction to Indian Classical and Traditional Theatre

I. Leading Sanskrit Playwrights
II. Bhasa, Kalidasa, Sudraka, Bhavabhuti [The student can identify and study one text (one play) of the above-mentioned Playwrights]
III. Major Traditional Theatre forms

UNIT II- Modern/ Contemporary Indian Theatre

I. Survey of major modern and contemporary styles and works in Hindi/ English
II. Rabindranath Tagore, Bhartendu Harishchandra,Vijay Tendulkar, Mohan Rakesh, Dharamveer Bharti, Badal sarcar, Shankar Shesh, Girish Karnad, Chandrasekhar Kambar, Madhu Rye.
[The student can identify and study one text (one play) of the above-mentioned playwrights]
III. Partitioners of modern Indian Theatre Shambhu Mitra, B.V.Karanth, Habib Tanvir,K.N.Panikkar,Ratan Thiyam, Utapal Dutt, Rajender Nath, Jabbar Patel, Vijya Mehta, Satyadev Dubey, E.Alkazi, Pravin Joshi.

UNIT III- Introduction to western classical and Medieval Drama

I. Leading Greek Playwrights
II. Aeschylus, Sophocles, Euripedese
[The student can identify and study one text (one play) of the above-mentioned playwrights]
III. Shakesperean Dramas
[The student can identify and study one text (one play) of the Shakespeare]

UNIT IV- Modern/Contemporary Western Theatre

I. Survey of major contemporary styles and works in English or English Translation
II. Chekov, Ibsen, Strindberg, Shaw,O'Neil, Miller, Ionesco, Beckett, Pinter Stoppard,Pirandello
[The student can identify and study one text (one play) of the playwrights above-mentioned]
III. Practitioners of Modern Western Drama
a. Stanislavsky, Lee Strasberg, Bertolt Brecht, Meyerhold, Peter Brook
b. Marlin Brando, Lawrence Olivier, John Grilgood

UNIT V- Theatre Production/Architecture/ Design

I. Types of Theatres: Proscenium, Arena, Theatre in Round, Thrust.
II. Elements of play production: Set, Light, Costume, Make up, Sound- Music.

UNIT VI-

I. Review of Indian Theatre Organizations-NSD, University Theatre Deptts, Sangeet Natak academy, Zonal Cultural Centres.

II. Developing and Documenting the Research project – Examples of research projects in different aspects of theatre; using media and sources for the project.

For the Year 2025

Physical Education (Yoga, Sports) – 321 Syllabus for CUET(UG)

UNIT - I: ***Health Status and Programmes In India Major Diseases and Health Policies Present Health Status***

- Major diseases: Communicable – Typhoid, Influenza, Malaria, Dengue, HIV Infection Non Communicable – Diabetes, Hypertension, Depression
- Nutritional status: Hypo and Hyper nutrition Health Policies and Programmes
- National Health Policies (National Health Policy documents, Mental Health etc). • National Policy on Education.
- School health services and midday meal programme.
- National Rural Health Mission.
- Adolescence Education programme.

Unit – II ***: Psychological and Sociological Aspects of Physical Education and Sports Psychological Aspects***

- Role of Psychology in Games and Sports.
- Interest, Aptitude and Motivation in sports.
- Personality development through sports.
- Role of sports in managing emotion, stress and aggression.

Sociological Aspects

- Socialization through sports (Impact of sports on society).
- Understanding the impact of caste, class, and gender and differently disabled on health and sports.
- Development of leadership qualities through games and sports.

Unit - III: ***Theoretical Aspect of Games, Sports and Yogic Practice Basics of Games and Sports Athletics, Badminton, Basketball, Cricket, Football, Gymnastics, Hand ball, Hockey, Judo, Kabbadi, Kho-kho, Volleyball, Swimming, Table tennis and Wrestling Handball. (One to be opted of your choice)***

1) Individual/Team

2) Indoor/Outdoor

3) Number of players, Equipment/gears

4) Play field areas

5) General rules

6) Interpretation of Rules

7) Advance skills of the Games and Sports

8) Basic Strategies of the Games and Sports

9) Criteria of participation

10) Fouls and penalties

11) Scoring rules

12) Winning or losing parameters

13) Safety and Guidelines Awards

Unit - IV: ***Yoga Basics of Yogic Practices***

- Suryanamaskar/Sun Salutation
- Asanas: - Standing: Uttrikshasana , Trikonasana,Padhatasana, Utkatsana, Ardhchakrasana, - Sitting: Pravatasana, Urstasana, Yogmudrasana, Simhasana, Dhanurasana, Sukhasana - Lying: Proline-Makarasana, Shalbhasana; Supine-Viparitakarani, Sarvangasana - Advance Asana- Utkatasana, Kukutasana
- Kriya: Kapalbhati
- Bandha:Uddiyana
- Pranayama:Bhramari, Sheetli and Sheetkari
- Yognidra - Knowledge of Do's and don'ts of yogic practices

Unit - V: ***Nutrition and Athlete's Care Food and Nutrition***

- Importance of balanced diet for sports persons.
- Diet for Power Sports, Short and long duration sports.
- Food adulteration and awareness. Athlete's Care
- Causes and management of Common Sports Injuries: Sprain, Strain, Contusion, Abrasion, Cramp, Muscle Pull, Dislocation and Fracture.
- Obesity and its Management
- Drugs and doping Education.

Unit - VI: ***Policy, Programmes and Career Options (10 Periods)***

- National Sports Policies in India.
- Sports Awards-Rajiv Gandhi Khel Ratna Award, Arjuna Award, Dronacharya Award.
- Career Opportunities in Physical Education, Sports and Yoga in India.
- Courses offered in Physical Education, Sports and Yoga in India.

Unit-VII: Skill Related Physical Fitness Means and methods for improvement of

- Power.
- Speed.
- Agility.
- Balance.

Unit-VIII: ***Measurement and Evaluation***

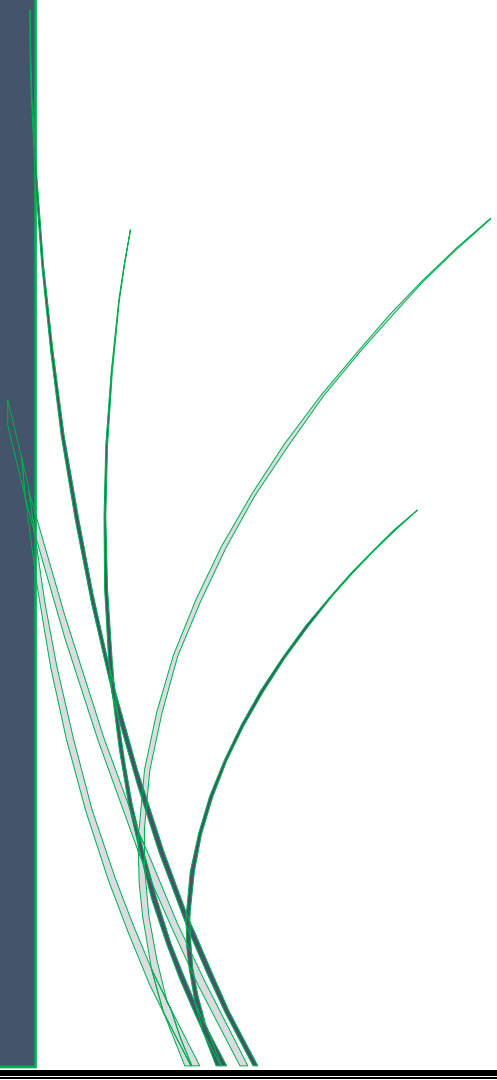
- Power: Standing Broad Jump: Backward Medicine Ball Throw
- Speed: Sprint- (40 Meters) Sprint- (50 Meters)
- Agility: Shuttle Run (4X10 Meters) SEMO Agility test
- Balance: Static Balance (Stroke Stand Test) Dynamic Balance (Modified Bass Test)

For the Year 2025

Physics – 322

Syllabus for CUET

(UG)



PHYSICS-(322)

Unit 1: Electrostatics

- Electric charges and their conservation. Coulomb's law – force between two-point charges, forces between multiple charges; superposition principle and continuous charge distribution.
- Electric field, electric field due to a point charge, electric field lines; electric dipole, electric field due to a dipole; torque on a dipole in a uniform electric field.
- Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).
- Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipoles in an electrostatic field.
- Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor.

Unit 2: Current Electricity

- Electric current, flow of electric charges in a metallic conductor, drift velocity and mobility, and their relation with electric current; Ohm's law, electrical resistance, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance. Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel.
- Kirchhoff 's laws, Wheatstone bridge.

Unit 3: Magnetic Effects of Current and Magnetism

- Concept of magnetic field, Oersted's experiment. Biot-Savart law and its application to current carrying circular loop.
- Ampere's law and its applications to infinitely long straight wire, straight solenoid. Force on a moving charge in uniform magnetic and electric fields.
- Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current carrying conductors – definition of ampere. Torque experienced by a current loop in a magnetic field; moving coil galvanometer – its current sensitivity and conversion to ammeter and voltmeter.

- Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines. Para-, dia- and ferro-magnetic substances, with examples.

Unit 4: Electromagnetic Induction and Alternating Currents

- Electromagnetic induction; Faraday's law, induced emf and current; Lenz's Law, Eddy currents. Self and mutual inductance.
- Alternating currents, peak and rms value of alternating current/voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current.
- AC generator and transformer

Unit 5: Electromagnetic Waves

- Need for displacement current.
- Electromagnetic waves and their characteristics (qualitative ideas only). Transverse nature of electromagnetic waves.
- Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays) including elementary facts about their uses.

Unit 6: Optics

- Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens-maker's formula. Magnification, power of a lens, combination of thin lenses in contact combination of a lens and a mirror. Refraction and dispersion of light through a prism.
- Scattering of light – blue colour of the sky and reddish appearance of the sun at sunrise and sunset.
- Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.
- Wave optics: Wavefront and Huygens' principle, reflection and refraction of plane wave at a plane surface using wavefronts.
- Proof of laws of reflection and refraction using Huygens' principle.
- Interference, Young's double hole experiment and expression for fringe width, coherent sources and sustained interference of light.
- Diffraction due to a single slit.
- Polarisation, plane polarised light.

Unit 7: Dual Nature of Matter and Radiation

- Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation – particle nature of light.
- Matter waves – wave nature of particles, de Broglie relation.

Unit 8: Atoms and Nuclei

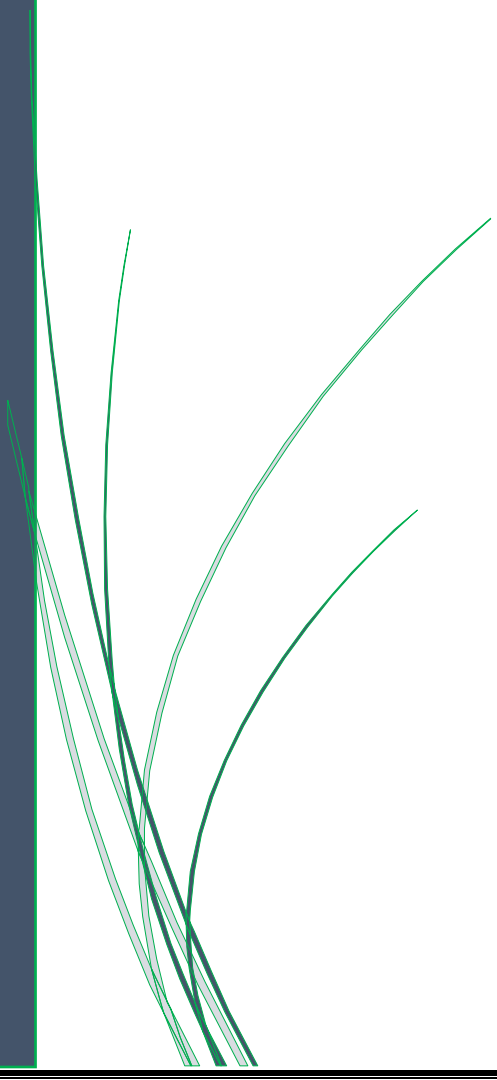
- Alpha - particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones.
- Radioactivity – alpha, beta and gamma particles/rays and their properties. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission and fusion.

Unit 9: Electronic Devices

- Energy bands in solids (qualitative ideas only), conductors, insulators and semiconductors; semiconductor diode – I-V characteristics in forward and reverse bias, diode as a rectifier.

For the Year 2025

Political Science – 323 Syllabus for CUET(UG)



Political in India Since Independence.

Course Content

1. **Era of One-Party Dominance**: First three general elections, nature of Congress dominance at the National level, uneven dominance at the state level, coalitional nature of Congress. Major opposition parties.

2. **Nation** - Building and Its Problems: Nehru's approach to nation-building: Legacy of partition: challenge of 'refugee' resettlement, the Kashmir problem. Organisation and reorgansation of states; Political conflicts over language.

3. **Politics of Planned Development**: Five year plans, expansion of state sector and the rise of new economic interest.

4. **India's External Relation**: Nehru's foreign policy. Sino-Indian war of 1962, Indo-Pak war of 1965 and 1971. India's nuclear programme and shifting alliance in world politics.

5. **Challenge to and Restoration of Congress System**: Political succession after Nehru. NonCongressism and electoral upset of 1967, Congress split and reconstitution, Congress' victory in 1971 elections, politics of 'garibi hatao'.

6. **Crises of the Constitutional Order**: Search for 'committed' bureaucracy and judiciary. Navnirman movement in Gujarat and the Bihar movement. Emergency: context, constitutional and extra-constitutional dimensions, resistance to emergency. 1977 elections and the formation of Janata Party. Rise of civil liberties organisations.

7. **Regional Aspiration and Conflicts:** Rise of regional parties. Punjab crisis and the anti-Sikh riots of 1984. The Kashmir situation. Challenges and responses in the North East.

8. **Democratic Upsurge and Coalition Politics:** Participatory upsurge in 1990s. Rise of the JD and the BJP. Increasing role of regional parties and coalition politics. UF and NDA governments. Elections 2004-2019 and UPA government with addition of NDA government.

9. **Recent Issues and Challenges:** Challenge of and responses to globalization: new economic policy and its opposition. Rise of OBCs in North Indian politics. Dalit politics in electoral and non-electoral arena. Challenge of communalism: Ayodhya issue.

Contemporary World Politics.

Course Content

1. **Disintegration of the 'Second World' and the Collapse of Bipolarity:** New entities in world politics: Russia, Balkan states and, Central Asian states, Introduction of democratic politics and capitalism in post-communist regimes. India's relations with Russia and other postcommunist countries.

2. **Alternative Centers of Economic and Political Power**: Rise of China as an economic power in post-Mao era, creation and expansion of European Union, ASEAN. India's changing relations with China, Japan and South Korea.

3. **South Asia in the Post Cold War Era:** Democratisation and its reversals in Pakistan and Nepal. Ethnic conflict in Sri Lanka. Impact of economic globalization on the region. Conflicts and efforts for peace in South Asia. India's relation with its neighbours.

4. **International Organisations in a Unipolar World:** Restructuring and the future of the UN. India's position in the restructured UN. Rise of new international actors: new international economic organisations, NGOs. How democratic and accountable are the new institution of global governance?

5. **Security in Contemporary World:** Traditional concerns of security and politics of disarmament. Non-traditional of human security: global poverty, health and education. Issues of human rights and migration.

6. **Environment and Natural Resources in Global Politics**: Environment movement and evolution of global environmental norms. Conflicts over traditional and common property resources. Right of indigenous people. India's stand in global environmental debates.

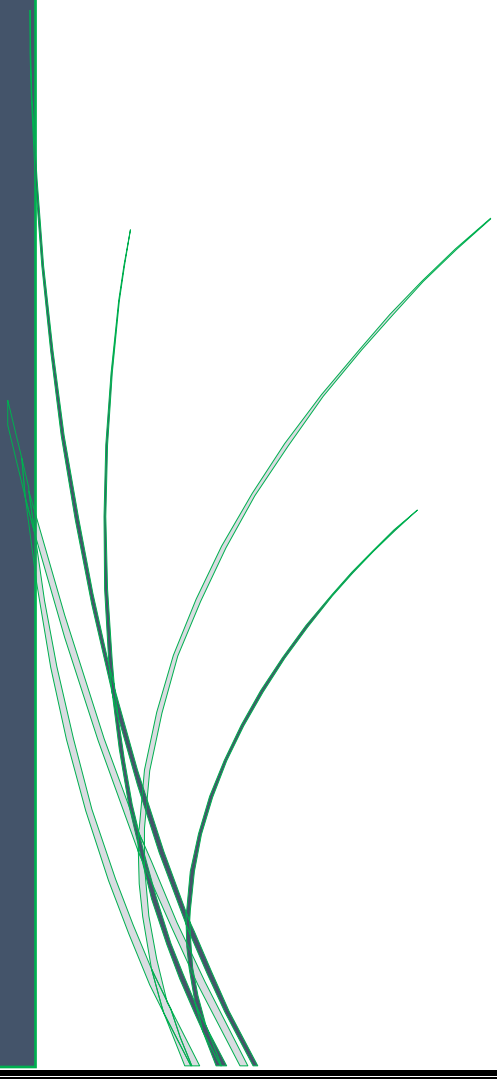
7. **Globalisation and its critics:** Economic, cultural and political manifestations. Debates on the nature of consequences of globalization. Anti-globalisation movements. India as an arena of globalization and struggles against it.

For the Year 2025

Psychology -324

Syllabus for

CUET(UG)



PHYCHOLOGY-324

Unit 1: Variations in Psychological Attributes

1. Introduction
2. Individual Differences in Human Functioning
3. Assessment of Psychological Attributes
4. Intelligence
5. Theories of Intelligence
6. Individual Differences in Intelligence
7. Culture and Intelligence
8. Emotional Intelligence
9. Special Abilities
    - Aptitude: Nature and Measurement
10. Creativity

Unit 2: Self and Personality

1. Introduction
2. Self and Personality
3. Concept of Self
4. Cognitive and Behavioural Aspects of Self
    - Self-esteem
    - Self-efficacy
    - Self-regulation
5. Culture and Self
6. Concept of Personality
7. Major Approaches to the Study of Personality
    - Type Approaches
    - Trait Approaches
    - Psychodynamic Approach
    - Behavioural Approach
    - Cultural Approach
    - Humanistic Approach
8. Assessment of Personality
    - Self-report Measures
    - Projective Techniques
    - Behavioural Analysis

Unit 3: Meeting Life Challenges

1. Introduction
2. Nature, Types and Sources of Stress
3. Effects of Stress on Psychological Functioning and Health
    - Stress and Health
    - General Adaptation Syndrome
    - Stress and Immune System
    - Lifestyle
4. Coping with Stress
    - Stress Management Techniques
5. Promoting Positive Health and Well-being
    - Life Skills

Unit 4: Psychological Disorders

1. Introduction
2. Concepts of Abnormality and Psychological Disorders
3. Classification of Psychological Disorders
4. Factors Underlying Abnormal Behaviour
5. Major Psychological Disorders
    - Anxiety Disorders
    - Obsessive-Compulsive and Related Disorders
    - Trauma- and Stressor- Related Disorders
    - Somatic Symptom and Related Disorders
    - Dissociative Disorders
    - Depressive Disorders
    - Bipolar and Related Disorders
    - Schizophrenia Spectrum and Other Psychotic Disorders
    - Neurodevelopmental Disorders
    - Disruptive, Impulse-Control and Conduct Disorders
    - Feeding and Eating Disorders
    - Substance-Related and Addictive Disorders

Unit 5: Therapeutic Approaches

1. Introduction
2. Nature and Process of Psychotherapy
    - Therapeutic Relationship
3. Types of Therapies
    - Behaviour Therapy
    - Cognitive Therapy
    - Humanistic-existential Therapy
    - Factors Contributing to Healing in Psychotherapy
    - Ethics in Psychotherapy
    - Alternative Therapies
4. Rehabilitation of the Mentally Ill

Unit 6: Attitude and Social Cognition

1. Introduction
2. Explaining Social Behaviour
3. Nature and Components of Attitudes
4. Attitude Formation and Change
5. Prejudice and Discrimination
6. Strategies for Handling Prejudice

Unit 7: Social Influence and Group Processes

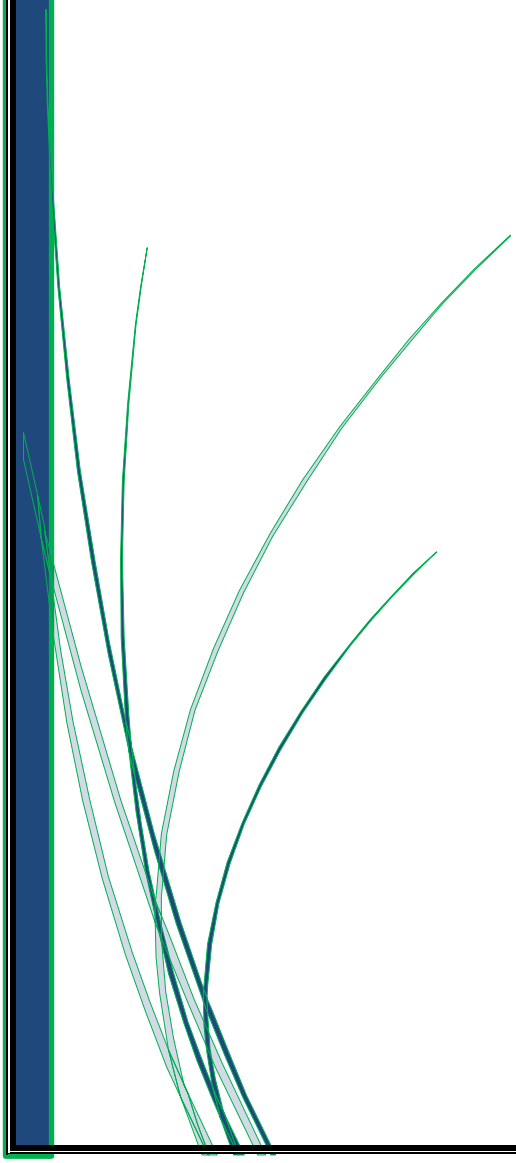
1. Introduction
2. Nature and Formation of Groups
3. Types of Groups
4. Influence of Group on Individual Behaviour
    - Social Loafing
    - Group Polarization.

FOR THE YEAR 2025

PUNJABI-110

SYLLABUS FOR

CUET (UG)



SYLLABUS FOR PUNJABI-110

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

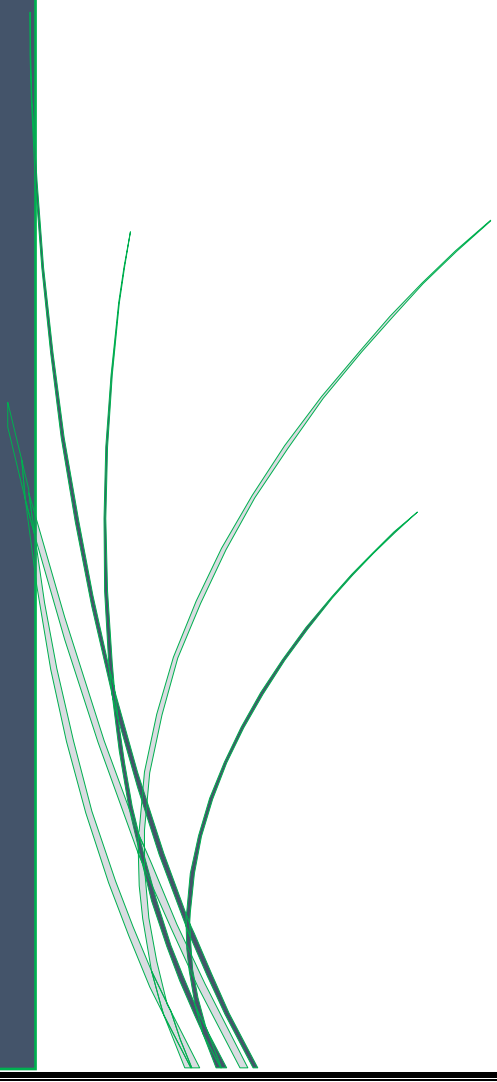
i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

For the Year 2025

Sanskrit-325

Syllabus for CUET

(UG)



1. **शब्दरूपाणि - वाक्येषु विभक्तिप्रयोगाः**
   - **अजन्ताः**

     बालक, फल, रमा, कवि, मति, वारि, नदी, शिशु, धेनु, मधु, पितृ, मातृ, कर्तृ, सखि, दातृ, नृ, स्वस्, अक्षिगो वधू।
   - **हलन्ताः**

     राजन्, भवत्, आत्मन्, विद्वस्, वाच्, पथिन्, मरुत्, तादृक्, दिश्, धनिन्, पञ्चन्, अष्टन्, नवन्, दशन्।
   - **सर्वनामानि**

     सर्व, तत्, यत्, किम्, इदम् (त्रिषु लिङ्गेषु), अस्मद्, युष्मद्।
2. **धातुरूपाणि**
   - **परस्मैपदिनः**

     गम्, नम्, अस्, हस्, श्रु, नश्, आप्, शक्, इष्, प्रच्छ्, कृ, ज्ञा, भक्ष्, चिन्त्, नृत्, कथ्, नी, पच्

     (लट्, लृट्, लोट्, लङ्, विधिलिङ् इति पञ्चलकारेषु प्रयोगाः)
   - **आत्मनेपदिनः**

     लभ्, सेव्, वन्द्, याच् (लट्-लृट्-लङ् लकारेषु)
3. **सन्धयः सन्धिविच्छेदाः च**
   - स्वरसन्धिः

     दीर्घः, गुणः, वृद्धिः, यण्, अयादिः, पूर्वरूपम्।
   - व्यञ्जनसन्धिः

     श्चुत्वम्, ष्टुत्वम्, जश्त्वम्, अनुनासिकः, अनुस्वारः, परसवर्णः।
   - विसर्गसन्धिः

     उत्वम्, रत्वम्, लोपः, विसर्गस्थाने स्, श्, ष्।

4. **समासाः विग्रहाः च**
   - **अव्ययीभावः**

     यथा, प्रति, उप, अनु, निर्, सह, अधि।
   - **द्वन्द्वः**

     इतरेतरद्वन्द्वः, समाहारः, एकशेषः।
   - **तत्पुरुषः**

     विभक्तितत्पुरुषः, कर्मधारयः, द्विगुः, उपपदतत्पुरुषः।
   - **बहुव्रीहिः**

5. **प्रत्ययाः**
   - **कृत्-प्रत्ययाः**

     क्त, क्तवतु, तव्यत्, अनीयर्, शतृ, शानच्, क्तिन् , क्त्वा, ल्यप्, तुमुन्, तृच्।
   - **तद्धित-प्रत्ययाः**

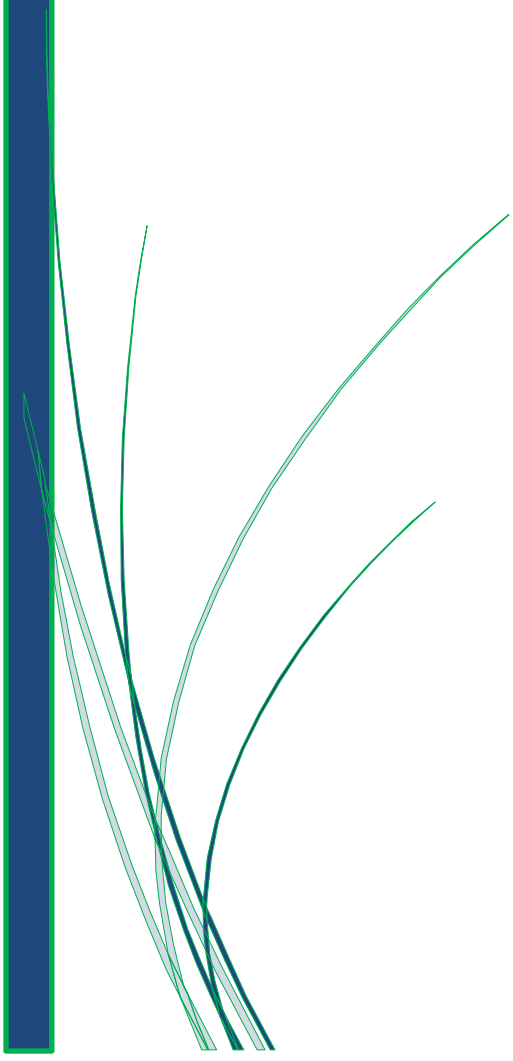
     मतुप्, इन्, ठक्, ठञ्, त्व, तल् ।
   - **स्त्री-प्रत्ययौ**

     टाप्, ङीप् ।
6. **उपपदविभक्तिप्रयोगाः**
7. **भाषिककार्यम्**
   - विशेषण-विशेष्यपदचयनम्
   - कर्तृक्रिया-पदचयनम्
   - पर्याय/विलोमपदचयनम्
8. **छन्दसां सोदाहरणलक्षणपरिचयः/श्लोकेषु छन्दोऽभिज्ञानम्**
   - छन्दांसि – अनुष्टुभ्, इन्द्रवज्रा, उपेन्द्रवज्रा, उपजातिः, वंशस्थम्, वसन्ततिलका, मालिनी, शिखरिणी, शार्दूलविक्रीडितम्, मन्दाक्रान्ता ।
9. **शब्दालङ्काराः अर्थालङ्काराः च**
   - शब्दालङ्काराः - अनुप्रासः, यमकम्, श्लेषः ।
   - अर्थालङ्काराः - उपमा, रूपकम्, उत्प्रेक्षा, अर्थान्तरन्यासः ।
10. **संस्कृतसाहित्यस्य सामान्यपरिचयः**

For the year 2025

SOCIOLOGY – 326

Syllabus for CUET (UG)



Indian Society

Unit - I: ***Structure of Indian Society***

- Demographic Structure
- Rural – Urban Linkages and Divisions

Unit - II: ***Social Institutions: Continuity and Change***

- Family and Kinship
- The Caste System
- Tribal Society
- The Market as a Social Institution

Unit - III: ***Social Inequality and Exclusion***

- Caste Prejudice, Schedule Castes and Other Backward Class
- Marginalisation of Tribal Communities
- The Struggle for Women's Equality
- The Protection of Religious Minorities
- Caring of the Different Abled

Unit - IV: ***The Challenges of Unity in Diversity***

- Problems of Communalism, Regionalism, Casteism and Patriarchy
- Role of the State in a Plural and Unequal Society
- What We Share

Change and Development in India.

Unit – I: ***Process of Social Change in India***

- Process of Structural Change: Colonialism, Industrialisation, Urbanisation
- Process of Cultural Change: Modernization, Westernisation, Sanskritisation, Secularisation
- Social Reform Movements and Laws

Unit- II: ***Social Change and the Polity***

- The Constitution as an instrument of Social Change
- Parties, Pressure Groups and Democratic Politics
- Panchayati Raj and the Challenges of Social Transformation

Unit - III: ***Social Change and the Economy***

- Land Reforms, the Green Revolution and Agrarian Society
- From Planned Industrialisation to Liberalisation
- Changes in the Class Structure

Unit - IV: ***New Arenas of Social Change***

- Media sand Social Change
- Globalisation and Social Change

Unit - V: ***Social Movements***

- Class-Based Movements: Workers, Peasants
- Caste-Based Movements: Dalit Movement, Backward Castes, Trends in Upper Caste Responses
- Women's Movements in Independent India
- Tribal Movements
- Environmental Movements

FOR THE YEAR 2025

TAMIL-111

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR TAMIL-111

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

TELUGU-112

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR TELUGU-112

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms

FOR THE YEAR 2025

URDU-113

SYLLABUS FOR

CUET (UG)

SYLLABUS FOR URDU-113

Questions from the Language Section will be from the following topics but are not limited to:

1. Reading Comprehension:

There will be three types of passages (maximum 300 words):

i. Factual
ii. Narrative
iii. Literary

2. Verbal Ability

i. Rearranging the parts
ii. Match the following
iii. Choosing the correct word
iv. Synonyms and Antonyms