SYLLABUS FOR ENTRANCE TESTS TO PG PROGRAMMES

The contents of the model syllabus provided by the UGC for UG programmes (visit: *www.**ugc**.ac.in/page/**Model**-**Curriculum**.aspx*) is taken as indicative of the topics on which the test items will be based for programmes whenever the major subject of study at the PG level (or a closely allied subject) is covered by this link.

The entrance test for Management programmes (including Business Management /Tourism management) will be on the CAT Pattern.

The entrance test for Architecture programme will be based on the B.Arch. Syllabus of the Architecture Council of India.

Some subjects for PG programmes are unique and the candidates will be tested for their aptitude to learn the subject.

Some subjects for PG programmes are interdisciplinary in nature and the candidates will be tested for their foundational knowledge in the relevant (possibly diverse) disciplines and general aptitude for learning interdisciplinary areas.

In some subjects an indicative syllabus is provided below.

Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.Pharm. (2 years)	M.Pharm. (Pharmaceutical Chemistry)	Central University of Rajasthan
M.Pharm. (2 years)	Medicinal Chemistry	Central University of Punjab
M.Pharm. (2 years)	Pharmacognosy and Phytochemistry	Central University of Punjab

1. Medicinal Chemistry: Structure, nomenclature, classification, synthesis, SAR and metabolism of the following category of drugs, which are official in Indian Pharmacopoeia and British Pharmacopoeia. Hypnotics and Sedatives, Analgesics, NSAIDS, Neuroleptics, Antidepressants, Anxiolytics, Anticonvulsants, Antihistaminics, Local Anaesthetics, Cardio Vascular drugs–Antianginal agents Vasodilators, Adrenergic & Cholinergic drugs, Cardiotonic agents, Diuretics, Anti-hypertensive drugs, Hypoglycemic agents, Antilipedmic agents, Coagulants, Anticoagulants, Antiplatelet agents. Introduction to drug design. Stereochemistry of drug molecules. Diagnostic agents. Preparation, storage and uses of official Radiopharmaceuticals, Vitamins and Hormones. Eicosanoids and their application.
2. Pharmaceutics: Development, manufacturing standards Q.C. limits, labeling, as per the pharmacopoeial requirements. Storage of different dosage forms and new drug delivery systems. Biopharmaceutics and Pharmacokinetics and their importance in formulation.
3. Pharmacology: General pharmacological principles including Toxicology. Drug interaction. Pharmacology of drugs acting on Central nervous system, Cardiovascular system, Autonomic nervous system, Gastro intestinal system and Respiratory system. Pharmacology of Autocoids, Hormones, Hormone antagonists, chemotherapeutic agents including anticancer drugs. Bioassays,Immuno Pharmacology. Drugs acting on the blood & blood forming organs. Drugs acting on the renal system.
4. Natural products: Pharmacognosy & Phytochemistry– Chemistry, tests, isolation, characterization and estimation of phytopharmaceuticals belonging to the group of Alkaloids, Glycosides, Terpenoids, Steroids, Bioflavanoids, Purines, Guggul lipids. Pharmacognosy of

crude drugs that contain the above constituents. Standardization of raw materials and herbal products. Quantitative microscopy including modern techniques used for evaluation. Biotechnological principles and techniques for plant development, Tissue culture.

5. Clinical Pharmacy: Therapeutic Drug Monitoring Dosage regimen in Pregnancy and Lactation, Pediatrics and Geriatrics. Renal and hepatic impairment. Drug – Drug interactions and Drug – food interactions, Adverse Drug reactions. Medication History, interview and Patient counseling.

6. Pharmaceutical analysis: Principles, instrumentation and applications of the following: Absorption spectroscopy (UV, visible & IR). Fluorimetry, Flame photometry, Potentiometry. Conductometry and Polarography. Pharmacopoeial assays. Principles of NMR, ESR, Mass spectroscopy. X-ray diffraction analysis and different chromatographic methods.

7. Biochemistry: Biochemical role of hormones, Vitamins, Enzymes, Nucleic acids, Bioenergetics. General principles of immunology. Immunological. Metabolism of carbohydrate, lipids, proteins. Methods to determine, kidney & liver function. Lipid profiles.

8. Pharmaceutical jurisprudence: Drugs and cosmetics Act and rules with respect to manufacture, sales and storage. Pharmacy Act. Pharmaceutical ethics.

9. Microbiology: Principles and methods of microbiological assays of the Pharmacopoeia. Methods of preparation of official sera and vaccines. Serological and diagnostics tests. Applications of microorganisms in Bio Conversions and in Pharmaceutical industry.

M.Sc. / M.Tech. in Comp. Sc. / Engg.

Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.Sc. (2 years)	Computer Science	Central University of Bihar
M.Sc. (2 years)	Computer Science	Central University of Rajasthan
M.Sc. (2 years)	Computer Science	Central University of Jammu
M.Sc. (2 years)	Computer Science	Central University of Kerala
M.Sc. (2 years)	Information Technology	Central University of Kashmir
M.Tech. (2 years)	Computer Science	Central University of Bihar
M.Tech. (2 years)	Computer Science & Technology	Central University of Punjab
M.Tech. (2 years)	Computer Science (Mobile Computing)	Central University of Jharkhand
M.Tech. (2 years)	Computer Science & Engineering	Central University of Rajasthan

Engineering Mathematics
1. **Theory of Probability:** Axiomatic definition of Probability, Conditional Probability Baye's Theorem,; Random Variables Functions of random variables; Probability distributions: Binomial Poisson, Exponential and Normal distribution and their moment generating functions.
2. **Set Theory & Algebra:** Sets; Relations; Functions; Composition of function and relations, Groups; Partial Orders; Boolean Algebra.
3. **Combinatorics:** Permutations; Permutations with and without repetition; Combinations; generating functions; recurrence relations.
4. **Graph and Trees:** Introduction to graphs, Directed and Undirected graphs, Homomorphic and Isomorphic graphs, Subgraphs, Cut points and Bridges, Multigraph and Weighted graph, Paths and circuits, Shortest path in weighted graphs, Eurelian path and circuits, Hamilton paths and circuits, Planar graphs, Eulers' formula, Trees, Spanning trees.
5. **Linear Algebra:** Algebra of matrices, determinants, systems of linear equations, Eigen values and Eigen vectors.

6. **Calculus:** Limit, Continuity & differentiability, Mean value Theorems, Theorems of integral calculus, evaluation of definite & improper integrals, Partial derivatives, Total derivatives, maxima & minima.

Computer Science and Technology

7. **Theory of Computation:** Finite Automata and Regular Expressions, Non-determinism and NFA, Properties of Regular Sets, Context free grammar: Chomsky Normal Form (CNF), Griebach Normal Form (GNF), Push-down automata, Moore and mealy Machines, Turing machines,
8. **Digital Logic:** Number representation and computer arithmetic (fixed and floating point), Logic functions, Minimization, Design and synthesis of combinational and sequential circuits, A/D and D/A CONVERTERS.
9. **Computer Organization and Architecture:** Machine instructions and addressing modes, ALU and data-path, CPU control design, Memory interface, I/O interface (Interrupt and DMA mode), Instruction pipelining, Cache and main memory, Secondary storage.
10. **Microprocessors and Interfacing:** instruction set, Addressing modes, Memory interfacing, Interfacing peripheral devices, Interrupts. Microprocessor architecture, Instruction set and Programming (8085), Microprocessor applications, DMA, Interrupt and Timer.
11. **Programming and Data Structures:** Programming in C; Functions, Recursion, Parameter passing, Definition of data structure. Arrays, stacks, queues, linked lists, trees, priority queues and heaps, Binary search trees.
12. **Algorithms:** Algorithm concepts, Analyzing and design, asymptotic notations and their properties, Worst and average case analysis; Design: Greedy approach, Dynamic programming, Divide-and-conquer; Tree and graph traversals, Spanning trees, Shortest paths; Hashing, Sorting, Searching.
13. **Compiler Design:** Assemblers, linkers, loaders, compilers and translators, the structure of a compiler, different states in the construction of a compiler, Lexical analysis, Parsing, Syntax directed translation, Runtime environments, Intermediate and target code generation, Basics of code optimization.
14. **Operating System:** Main functions of operating systems, Processes, Threads, Inter-process communication, Concurrency, Synchronization, Deadlock, CPU scheduling, I/O scheduling, Resource scheduling. Deadlock and scheduling algorithms, Banker's algorithm for deadlock handling. Memory management and virtual memory, File systems, I/O systems, DOS, UNIX and windows.
15. **Databases:** Database Concepts, ER-model, Data Models, Relational model (relational algebra, tuple calculus), RAID, Database design (integrity constraints), Normalization (up to 4th Normal forms), BCNF (Boyce code normal forms), Query languages (SQL), Data mining & data warehousing, Transactions and concurrency control, Database security: Database security issues, Discretionary access control, Mandatory & role based access control, Database audit.
16. **Computer Networks:** OSI model, TCP/IP model, LAN technologies (Ethernet, Token ring), Transmission media - twisted pair, coaxial cables, fibre-optic cables, Flow and error control techniques, Routing algorithms, Congestion control, IP(v4), Application layer protocols (icmp, dns, smtp, pop, ftp, http); sliding window protocols; Internetworking: Switch/Hub, Bridge, Router, Gateways, Concatenated virtual circuits, Firewalls; Network Security: Cryptography - public key, secret key. Domain Name System (DNS) - Electronic Mail and World wide Web (WWW).
17. **Web Technologies:** HTML, XML, basic concepts of client-server computing.

B.Ed. (Teachers Education)

Candidates will have to answer 80 MCQs in Part A and 20 from one of the relevant sections of Part B. **Part –A** carries 80 questions consisting of 1-General English comprehension -10, 2-logical and analytical reasoning -20, 3- General Awareness -25 and 4-teaching learning and the school-25.

Part –B carries 20 questions on subject competencies on science, mathematics, social science and English language

Part A is Compulsory and attempt any one subject from Part B.

M.A Social Sciences Syllabus

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.A. (2 years)	Social Work	CU Rajasthan
M.A. (2 years)	Social Work in Mental Health (Programmes are provisonally proposed from the year 2013-14)	CU Tamil Nadu
M.A. (2 years)	Social Work (M.S.W.)	CU Kerala
M.A. (2 years)	Social Sciences	CU Gujarat
M.A. (2 years)	Sociology	CU Bihar
M.A. (2 years)	Sociology	CU Orissa

A candidate appearing for the entrance test for admission to the above programmes is expected to have foundational knowledge of the following:

- General Awareness of society and social sciences
- Current National and International Affairs
- Classical Sociological Theory
- Basic Concepts in Sociology
- Indian Sociology
- Basic Social Work
- Indian History, Economics and Geography
- Basic Political Science
- Basic Sociology
- Social Development

M.Sc. / M.A. in Statistics

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.Sc. (2 years)	Statistics	CU Bihar
M.Sc./ M. A. Statistics	M.Sc./ M. A. Statistics (Specialization in Actuarial Science)	CU Rajasthan

Elementary Calculus : Convergence of sequences of real numbers, Comparison, root and ratio tests for convergence of series of real numbers. Limits, continuity and differentiability of functions of one and two variables. Rolle's theorem, mean value theorems, Taylor's theorem, maxima and minima of functions of one and two variables. Fundamental theorems of integral calculus. Double and triple integrals, applications of definite integrals, arc lengths, areas and volumes. First order differential equations – exact equation, integrating factors and initial value problems. Second order differential equations with constant coefficients.

Linear Algebra: Matrices, vector spaces, linear dependence and linear independence of vectors, bases, properties and uses of a basis, rank of a matrix, inverse of a matrix, generalized inverse, characteristic roots and characteristic vectors, algebraic and geometric multiplicities, spectral decomposition theorem, quadratic forms, definiteness of a real quadratic forms, solution of systems of linear equations.

Elementary Probability Theory: Random experiment, outcomes, sample space, event, probability of an event, axiomatic definition of probability, conditional probability of an event, independence of two events, pair-wise independence and mutual independence for three events, Bayes' theorem.

Probability Distributions: Univariate distributions – discrete and continuous, Specific distributions – Bernoulli, Poisson, Geometric, Negative Binomial, Uniform, Normal, Exponential, Gamma, Expected values, variance and other moments, mgf and pgf. Joint distributions – bivariate – discrete and continuous, conditional distributions, moments. Transformations of random variables and simple applications. Chi-square, t and F as sampling distributions.

Statistical Inference: Methods of estimation – method of moments, maximum likelihood, unbiased estimation, CRLB, large sample properties of estimators – consistency and asymptotic normality. Concept of interval estimation, confidence level, large sample confidence intervals. Elements of testing statistical hypotheses, significance tests for mean, variance and proportions. Most Powerful tests, monotone likelihood ratio property and application to normal distributions.

M.Sc. in Life Sciences and Related Subjects

Indicative Syllabus for entrance test for admission to the following programmes

Degree	Subject	Offered By
M.Sc. (2 years)	Animal Science	CU Kerala
M.Sc. (2 years)	Biodiversity & Conservation of Natural Resources	CU Orissa
M.Sc. (2 years)	Biosciences	CU Punjab
M.Sc. (2 years)	Life Science	CU Bihar
M.Sc. (2 years)	Life Sciences	CU Gujarat
M.Sc. (2 years)	Life Sciences (Lateral Entry)	CU Jharkhand
M.Sc. (2 years)	Microbiology	CU Rajasthan
M.Sc. (2 years)	Plant Science	CU Kerala

A candidate appearing for the entrance test for admission to the above programmes is expected to have foundational knowledge of the following:

Botany, Zoology, Cell biology, Biochemistry, Immunology, Classical and Human Genetics, Molecular Biology, and Recombinant DNA Technology, Animal Physiology, Plant Physiology, Evolutionary Biology, Ecology, Developmental Biology, Microbial Genetics, Basic Microbiology, and Plant Biotechnology.

Greater emphasis will be for the topics from Biochemistry, Molecular Biology, Cell biology, Biotechnology and related areas, Genetics and Microbiology and related areas, Plant physiology and related areas. A candidate is also expected to know the basics of Animal Physiology, Ecology, Evolution and related areas, and immunology.

M.Sc. Bioinformatics

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.Sc. (2 years)	Bioinformatics	CU Bihar

Basic questions related to molecular biology, biochemistry, genetics, cell biology, classification of animal and plant kingdom, ecology, animal and plant physiology, evolutionary biology, physics, chemistry, history of computer languages, programming and databases, data communication, network protocols, web services, open source services, basic mathematics like trigonometric and algebraic functions, calculus, probability, basic statistical problems related to mean, median, mode and tests for significance etc.

Sample Questions

1) Which of the following is NOT a component of the histone octamer in the nucleosome?

A. H1

B. H2A

C. H2B

D. H3

2) Which of the following is NOT an input device?

A. Keyboard

B. Mouse

C. Joystick

D. Printer

3) 80 g of Oxygen contains as many atoms as in

A. 80 g of Hydrogen

B. 1 g of Hydrogen

C. 10 g of Hydrogen

D. 5 g of Hydrogen

4) Which of the following can have more than one value?

A. Mean

B. Mode

C. Standard Deviation

D. Median

M.A. Development Studies

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.A.. (2 years)	Development Studies	CU Bihar

The students in Development Studies in CUB are supposed to be both thinker and practitioners. The questions will be from Economics, Issues on Development, Sociology, Political Science, and Population Studies.

- Basic Concepts of Economics,
- Basic Concepts of Sociology,
- Development Economics,
- Environmental Economics,
- Contemporary Issues on Indian Economic Development,
- Public Economics,
- Indian Political Thought,
- Indian Constitution,

- International Relations,
- Social Theory, Social Philosophy,
- Basics of Demography, Statistics and Basic Mathematics
- Logical Reasoning
- General Knowledge

Sample Questions

Q 1. The state is...
   a) the ruling party at any given time
   b) the bureaucratic machine
   c) a range of institutions which includes among other things the bureaucracy, judges, the police and the security services
   d) an all-powerful network of individuals from similar social backgrounds, all of whom conspire to deprive ordinary people of their rights

Q 2. Non-conformity to social norms is called
   a) Social change
   b) Deviance
   c) Social conflict
   d) Struggle

Q 3. A car owner buys petrol at Rs7.50, Rs 8 and Rs 8.50 per litre for three successive years. What approximately is the average cost per litre of petrol if he spends Rs 4,000 each year?
   a) Rs 7.98
   b) Rs 8
   c) Rs 8.50
   d) Rs 9

M.Sc. Environmental Science / Environmental Science &Technology

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.Sc. (2 years)	Environmental Science	CU Bihar
M.Sc. (2 years)	Environmental Science	CU Rajasthan
M.Sc. (2 years)	Environmental Sciences	CU Jammu
M.Sc. (2 years)	Environmental Science	CU Kerala
M.Sc. (2 years)	Environmental Science & Technology	CU Punjab

Physics : Scope of Physics, Technology and society; Fundamental forces in nature; Nature of physical laws; Motion; Heat and thermodynamics; Electricity and electrostatic potential; sound; Radiation,

Chemistry : Matter in our surroundings; Atoms and molecule; Metals and non-metals; Cabron and its compound; Classification of elements and periodicity; States of Matter; Acirds, Bases and Salts; Biomolecules and polymers; Chemicals in Food; Cleansing Agents;

Earth Science : General geology, Structural geology, mineralogy, petrology, solar system, Geomorphology,

Geography : The Origin and Evolution of the Earth; Distribution of Oceans and Continents; Movements of Ocean Water; Composition and Structure of Atmosphere; Atmospheric Circulation and Weather Systems; Water in the Atmosphere; World Climate and Climate Change; The World Population; Distribution, Density and Growth of human population; Population Composition and Human Development

Mathematics : Sets and their Representations; Trigonometric Functions; Binomial Theorem; Sequences and Series; Integrals; Differential Equations

Environmental Science : Components of environment; Concept of biomes and biosphere; Air, water and soil pollution; Environmental hazards and human health; Biodiversity and evolution; Biodiversity species interaction and population control; Global and Indian status of biodiversity; Major threats to biodiversity; Spasm of extinction; protected areas and biodiversity conservation; Biogeochemical cycle; Natural resources; Environmental toxicology; Global and Indian environmental issues;

Biological Sciences : Life on the Earth; Levels of biological organization; Domains of life forms; Phylogeny and tree of life; bacteria and archaea; Protists; Colonization of plants on land; the evolution of seed plants; Fungi; Animal diversity; Origin and evolution of eucoelomate and vertebrates; **Plant** forms and function; animal forms and function; Dispersal and distribution of organisms; Population density, distribution and demographics; Community interactions; Metabolism and cell communication;

Agriculture : Soil Sciences; agricultural and environmental biotechnology; Agroforestry; wild life

Sample Questions

Q 1. Lyophilic Sols are
    [A] Irreversible sols
    [B] Prepared from inorganic compounds
    [C] Coagulated by adding electrolyte
    [D] Self-stabilizing

Q 2. A naturally occurring collection of plant and animal populations living within the same area is called
    [A] Biome
    [B] Biosphere
    [C] Community
    [D] Ecosystem

Q 3. What is the relationship between Kp and Kc for the following reaction?
    $CH_3OH_{(g)} \rightleftharpoons CO_{(g)} + 2H_{2(g)}$
    [A] Kp = Kc
    [B] Kp = Kc(RT)
    [C] Kp = Kc(RT)-1
    [D] Kp = Kc(RT)2
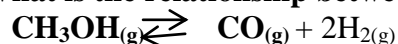
M.A. Hindi

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.A. (2 years)	Hindi	CU Bihar
M.A. (2 years)	Hindi	CU Rajasthan

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,e-,- fganh esa ukekadu ds fy, vk;ksftr izos'k ijh{kk dqy 100 vadksa dh gksxhA iz'u i= nks Hkkxksa esa c¡Vk gksxkA igys Hkkx ds fy, 40 ¼pkyhl½ feuV dk le; vkSj nwljs Hkkx ds fy, 80 ¼vLlh½ feuV dk le; fu/kkZfjr gSA igys Hkkx esa 35 ¼iSarhl½ oLrqfu"B iz'u gksaxsA Hkkjrh; bfrgkl] lkekU; v/;;u] rdZ'kfDr] lkekU; Kku&foKku ls lac) bu 35 ¼iSarhl½ iz'uksa ds pkj fodYi fn, jgsaxsA buesa ls lgh mŸkj dk pquko djuk gksxkA bl Hkkx esa dqy vad 35 gksaxsA

nwljs Hkkx esa fganh Hkk"kk vkSj lkfgR; ls lacaf/kr iz'u gksaxsA buesa ,d iz'u dk mÙkj 200 'kCnksa esa fy[kuk gksxk ;g iz'u fganh lkfgR; ds bfrgkl ls lacaf/kr gksxkA vU; iz'u O;kdj.k n{krk] izeq[k jpukdkjksa dh d`fr;ksa vkSj lkekU; lkfgfR;d tkudkjh ls tqM+s gksaxsA bl Hkkx esa dqy vad 65 gksaxsA Hkk"kk ;k O;kdj.k n{krk ls tqM+s iz'u igys Hkkx esa Hkh iwNs tk ldrs gSaA

[kaM d % lkekU; Kku] rdZ'kfDr ,oa Hkk"kk n{krk

1- Hkkjrh; bfrgkl
2- Hkkjr esa fy[kh izfl) iqLrdsa vkSj muds jpukdkj
3- lkekU; Kku&foKku
4- lkekU; v/;;u % orZeku ifjizs{;
5- rdZ'kfDr ijh{k.k

[kaM [k % fganh Hkk"kk vkSj lkfgR;

1- fganh O;kdj.k % okD;&'kqf)] foijhrkFkZd 'kCn] laf/k& foPNsn

2- fganh lkfgR; % lkfgR; dk bfrgkl] dky foHkktu] izeq[k —fr;k¡ ¼mi&;kl] dgkuh] dfork] ukVd] vkykspuk½ fofHkUu dky[kaM dh izo`fÙk;k¡ ¼vkfndky] HkfDrdky] jhfrdky] vk/kqfuddky½

M.A. Political Science and International Relations

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.A. (2 years)	Human Rights & Conflict Management	CU Jharkhand
M.A. (2 years)	International Studies	CU Punjab
M.A. (2 years)	International Relations & Political science	CU Kerala
M.A. (2 years)	Politics (International Relations)	CU Kashmir
M.A. (2 years)	Politics and International Relations	CU Gujarat
M.A. (2 years)	Political Science & International Relations	CU Bihar
M.A. (2 years)	Public Policy, Law & Governance	CU Rajasthan

➢ History of Indian national movement- 1857-1947
➢ Constitutional development of India and Indian Constitution
➢ Politics in India- Union Government, State Government, Federalism, Local Self-government, Secularism, Fundamentalism, Caste, Class and Economic development of India
➢ Basic Principles of Political Science- State, Sovereignty, Liberty, Equality, Justice, Rights, Property and Democracy.
➢ Liberalism, Marxism, Socialism, Maoism and Gandhism
➢ Evolution of Public Administration as a discipline
➢ International Relations and Foreign Policy
➢ Challenges of Indian democracy- Terrorism, Naxalism, Corruption and Criminalization of Politics

Sample Question:-

1. In which year Central Vigilance Commission was set up?
   A. 1962   B. 1964

   C. 1968   D. 1960

2. Who is the Author of the Book *'Republic?'*

A. Aristotle   B. Socrates

C. Plato   D. Locke

3. Who has said that "Sovereignty is the supreme power over citizens and subject

unrestrained by law" ?

A. Aristotle   B. Bentham

C. Mill   D. Bodin

M A Psychology

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.A.. (2 years)	Psychology	CU Bihar

   i.   Psychology as Science, Concept and Definitions; History of Psychology/Schools of Psychology, Methods of Enquiry in Psychology.
  ii.   Biological bases of Behaviour.
 iii.   Sensation, Attention and Perceptual processes.
  iv.   Learning; Memory; Thinking & Language.
   v.   Problem Solving, Decision Making; Intelligence.
  vi.   Motivation and Emotion/Affect.
 vii.   The Psychology of Personality.
viii.   Social Psychology.
  ix.   Developmental Psychology/Life-span Development/Human Development.
   x.   Mental Disorders; Therapies/Therapeutic Approaches.
  xi.   Clinical Psychology; Counselling Psychology and Guidance.
 xii.   Research Methods & Experimental Design; Basic Statistics in Psychology.
xiii.   Emerging trends in Psychology, Applications of Psychology.
 xiv.   Brief Introduction of Anthropology, Sociology, Political Science, Human Engineering, Life Sciences.

Sample Questions:

1. In Pavlov's Classic experiment, the meat powder was the _____
   A. Unconditioned stimulus
   B. Unconditioned response
   C. Conditioned stimulus
   D. Conditioned response
2. The brain and the spinal cord comprise which of the following nervous system?
   A. Central nervous system
   B. Peripheral nervous system
   C. Autonomic nervous system

      D. Sympathetic nervous system
3. Who will be interested to study how cognitions are acquired and used in various groups and institutional settings?
      A. Anthropologists
      B. Computer scientists
      C. Sociologists
      D. Biologists

4. A representative sample is used so that the results of a study are _____
      A. Reliable
      B. Generalizable
      C. Convenient
      D. Limited

<u>Master of Library and Information Science (M.L.I.Sc.)</u>

Indicative Syllabus for entrance test for admission to the following programmes:

Degree	Subject	Offered By
M.L.I.Sc. (2 years)	Library and Information Science	CU Gujarat

This is an academic programme that will produce trained professionals for multiple fields such as libraries in educational and administrative fields, information technology and any field where knowledge management has to be done scientifically. It has vast potential in our country.

Library and Information Science programme in CUG is being conducted with assistance from the experts of INFLIBNET which is the apex body providing infrastructural support to Universities in the context of digital resources.

The Master of Library and Information Science course also has the objective of democratizing access to information by training graduates from different backgrounds to become proactive knowledge workers in the process of collecting, organizing, consolidating

and disseminating the knowledge for social transformation, scientific and technological growth and economic prosperity.

Objectives of the programme:

After the completion of Master of Library and Information Science (MLISc) program, students are expected:

- To be an integral part of the University's effort to build up an informed society and the citizenry working well in tune with the mission and vision of CUG
- To create an awareness of the evolution of knowledge society & its role in the social transformation & economic prosperity of the nation
- To analyse the complex issues of the access and use of knowledge and its productive utility in the social development.
- To educate & trains the learners to enable to empower the users community with different types of knowledge & information to function smoothly is the respective activities.
- To create understanding about the methods, techniques, skills as well as approaches in the information processing & management.
- To prepare the proactive LIS professionals to serve the cause of social justice, equity and to work as the partners in the progress of the nation by monitoring the ever growing information.
- To train the manpower to create a development oriented, people friendly learning support system and serve the cause of social justice by rendering the information requirements of the disadvantaged group of users.

Sample questions:

a)General Knowledge

Q.1. Who among the following has not been awarded Bharat Ratna?
      a. Mother Terressa
      b. Khan Abdul Gaffar Khan
      c. Martin Luther King
      d. Nelson Mandela

b)General Science

Q.2. Dr.Venktaraman Ramakrishnan has won the Nobel Prize for 2009 for his contributions in the area of,
      a. Medicine
      b. Chemistry
      c. Physics
      d. Literature

c)General Mathematics

Q.3 The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is:
      a. 200 m
      b. 225 m

c. 245 m
d. 250 m

d) Social Science

Q. 4 When you are asked to prepare a small write up on topic, which of the following reference sources you will use
a. Encyclopedia
b. Manual
c. Thesaurus
d. Directory