

Coaching Classes for Competitive Exams

In this era of cut throat competitions it has become mandatory to acquaint the students with the knowledge of every sphere. By keeping this in mind, the college started the coaching classes for youngsters to crack these tough competitions.

OBJECTIVES

- To encourage the students compete at all levels.
- To ignite the spirit of competition
- To acquaint students about the pattern of these exams
- To inculcate the strategies and ideas to be used in these exams.
- Use of mind storming ideas while saving time.
- To boost the confidence of the students
- Enhancing the personality of students.
- Widening the spheres of knowledge of the students.

SCHEME

- Preparation for competitive examination is done twice in a year usually in vacations ie around December and June.
- Students are guided for various entrance/competitive exams such as UGC, MCA, NID, NIFT, IELTS etc.
- The coordinator of Competitive exams schedules various classes.
- Guest Faculty is also hired occasionally for the benefit of students.
- Teachers of various subjects teach these classes.

ANNUAL FOLLOW-UP

- Students were provided coaching according to their syllabi
- Separate classes were scheduled in the vacations (in June and December)
- Updated techniques and methods were used to teach the students
- Solving previous years' question papers
- Time management and short cut techniques were taught

Syllabus followed for these entrance exams:

Topics covered for NID, NIFT entrance exam are as follows:-

- 1. Basic Fundamentals of Drawing:** To improve drawing skills, basic drawing, perspective, composition, shading and rendering techniques, light and shadow.
- 2. Design Development & Concept (Creative Ability) :**
Elements of Design: Line, shape, form, colour, pattern, texture, principles of design

(Balance, Rhythm, Proportion, Unity, Contrast), Optical illusion, Doodling as a creative process, Visual communication (Typography/ lettering, poster design, logo design, Symbols and pictograms), Designing patterns and motifs, Designing Apparel and Accessories, Design process and concepts, Creative thinking, Object Analysis & Enlargement.

3. Colour concept:

Colour Theory – Colour Introduction, Colour Vocabulary, Colour Wheel, Warm Colours, Cool Colours, Colour Schemes, Colour Psychology

4. Memory Drawing

5. Sample test questions according to last year's papers.

6. Quantitative Ability

7. General Knowledge and current affair

8. Verbal and Non-verbal reasoning

9. English comprehension & Communication Ability

10. How to complete the paper within the time limit

Improving your speed and completing the paper with in time limit.

11. Expert Support & Guidance by sharing your work and getting feedback as additional benefits

Syllabus for UGC NET (Paper-1)

General Paper on Teaching and Research Aptitude

The syllabus for **paper I** is divided into the following topics. 5 questions are asked from each topic in the paper.

Teaching Aptitude

- Teaching: Nature, Objectives, Characteristics and Basic Requirements
- Learner's Characteristics
- Factors affecting Teaching
- Methods of Teaching
- Teaching Aids
- Evaluation Systems

Research Aptitude

- Research: Meaning, Characteristics and Types
- Steps of Research
- Methods of Research
- Research Ethics
- Paper, Articles, Workshop, Seminar, Conference, and Symposium
- Thesis Writing: Its characteristics and format

Reading Comprehension

- A passage which the candidates are required to read and answer the set of questions

Communication

- Communication: Nature, Characteristics, Types, Barriers and Effective Classroom Communication

Reasoning (including Mathematical)

- Number Series; Letter Series; Codes
- Relationships; Classification

Logical Reasoning

- Understanding the Structure of Argument.
- Evaluating and distinguishing Deductive and Inductive Reasoning.
- Verbal Analogies; Word Analogy – Applied Analogy
- Verbal Classification
- Reasoning Logical Diagrams: Simple Diagrammatic Relationship, Multi-Diagrammatic Relationship
- Venn diagram; Analytical Reasoning

Data Interpretation

- Sources, Acquisition and Interpretation of Data
- Quantitative and Qualitative Data
- Graphical Representation and Mapping of Data

Information and Communication Technology (ICT)

- ICT: Meaning, Advantages, Disadvantages and Uses
- General Abbreviation and Terminology
- Basics of Internet and E-mailing

People and Environment

- People and Environment Interaction
- Sources of Pollution

- Pollutants and their impact on Human Life, Exploitation of Natural and Energy Resources
- Natural hazards and mitigation

Higher Education System: Governance, Polity and Administration

- Structure of the Institutions for Higher Learning and Research in India; Formal and Distance Education; Professional/Technical and General Education.
- Value Education: Governance, Polity and Administration; Concept, Institutions and their Interactions.

MCA Entrance Exam

Section A: Mathematics (60 questions – objective type)

- Algebra: Fundamental operations in Algebra, expansion, factorization, quadratic equations, indices, logarithms, arithmetic, geometric and harmonic progressions, binomial theorem, permutations and combinations, surds
- Set Theory: Sets and subsets, operations on sets, sequences, properties of integers, relations and functions
- Matrix Algebra: Elementary transformations, inverse of a matrix, rank, solution of simultaneous linear equations, eigenvalues and eigenvectors, quadratic forms
- Co-ordinate Geometry: Rectangular Cartesian co-ordinates, equations of a line, mid point, intersections etc., equations of a circle, distance formulae, pair of straight lines, parabola, ellipse and hyperbola, simple geometric transformations such as translation, rotation, scaling.
- Calculus: Limit of functions, continuous functions, differentiation of function(s), tangents and normals, simple examples of maxima and minima, integration of function by parts, by substitution and by partial fraction, definite integral application to volumes and surfaces of frustums of a sphere, cone, cylinder, Taylor Series.
- Differential Equations: Differential equations of first order and their solutions, linear differential equations with constant coefficients, homogenous linear differential equations.
- Vectors: Position vector, addition and subtraction of vectors, scalar and vector products and their applications to simple geometrical problems and mechanics.
- Trigonometry: Simple identities, trigonometric equations, properties of triangles, solution of triangles, height and distance, inverse function
- Probability and Statistics: Basic concepts of probability theory, averages, dependent and independent events, frequency distributions, and measures of dispersions, skewness and kurtosis, random variable and distribution functions, mathematical expectations, binomial, Poisson, normal distributions, curve fitting, and principle of least squares, correlation and regression
- Linear Programming: Formulation of simple linear programming problems, basic concepts of graphical and simplex methods, revised simplex method, transportation and assignment problems, duality and integer programming

Section B: Analytical Ability and Logical Reasoning: (20 questions – objective type)

- Questions in this section will test logical reasoning, quantitative reasoning, and visio-spatial reasoning.

Section C: Computer Awareness: (20 questions – objective type)

- Computer Basics: Organization of a computer, Central Processing Unit (CPU), Structure of instructions in CPU, input / output devices, computer memory, memory organization, back-up devices
- Data Representation: Representation of characters, integers, and fractions, binary and hexadecimal representations, Binary Arithmetic: Addition, subtraction, division, multiplication, 1's and 2's complement arithmetic, floating point representation of numbers, normalized floating point representation, Boolean algebra, truth tables, Venn diagrams
- Computer Architecture: Block structure of computers, communication between processor and I / O devices, interrupts
- Computer Language: Assembly language and high-level language, Multiprogramming and time-sharing operating systems, Computer Programming in C.
- Flow chart and Algorithms
- Operating Systems: Evolution of operating systems, types of operating systems, functions of an operating system, modern operating systems
- Section D: English: (20 questions – objective type)
- Use of articles and prepositions (fill in the blanks or correct use)
- Idioms and phrases
- Synonyms
- Reading comprehension
- Expansion of an idea
- Sentence sequence (jumbled sentences)
- Completion of a sentence (with choices)
- Choice of appropriate word to fill in the blanks (with options)
- Abridging sentences / paragraphs.

IELTS Syllabus

Listening and Reading

- IELTS Listening and Reading papers have 40 items, each carrying one mark. Band scores (ranging from Band 1 to Band 9) are awarded depending on their raw scores.

Writing and Speaking

- The four criteria on which the examiners award a band score in the Writing Section are:
 - Task Achievement (for Task 1)
 - Task Response (for Task 2)
 - Coherence and Cohesion
 - Lexical Resource and Grammatical Range and Accuracy
- Similarly, the four criteria on which the examiners award a band score in the Speaking section are:
 - Fluency and Coherence
 - Lexical Resource

- Grammatical Range and Accuracy
- Pronunciation