

MCA Common Entrance Test

The candidates seeking admission to the **Master of Computer Applications (MCA)** programme of **YCMOU University** will have to appear for the Common Entrance Test conducted by the university and get the qualifying marks in it.

The Common Entrance Test will be conducted online and will have the duration of 50 minutes. The test consists of 50 multiple choice questions, carrying maximum of 100 marks (each question 2 Marks). Candidate must obtain a minimum of 40 marks for becoming qualified for MCA admission. The candidate will have choice to take Mock test before appearing for CET.

Nature and Composition of CET: Syllabus and Marking Scheme for CET 2025

The Online CET would be comprised of four sections viz Mathematics and Statistics, Logical/ Abstract reasoning, English comprehension and verbal ability and Computer Concepts of total 100 marks with composite time of 50 minutes duration.

- All the questions are ‘multiple choice’ type, having four options.
- The candidate has to ‘select’ most correct option as the correct answer.
- No negative marking for wrong answer

Schedule of Common Entrance Test: Schedule will be declared by separate notification by the University. Students are requested to see YCMOU website for the same.

Syllabus :

Sr. No.	Section Questions Marks	Details
1	Mathematics and Statistics 12 Questions 24 Marks	The questions will cover the following topics of high school mathematics (up to the 12th Standard) <ul style="list-style-type: none">• Algebra: Fundamental operations in Algebra, Expansion, factorization, Quadratic equations, indices, logarithms, arithmetic, geometric and harmonic progressions, binomial theorem, permutations and combinations.• 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.• Differential Equations: Differential equations of first order and their solutions, linear differential equations with constant coefficients, homogenous linear differential equations.

		<ul style="list-style-type: none"> • 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. • Arithmetic: Ratios and proportions, problems on time-work, distance- speed, percentage, etc. • Basic Set Theory and Functions: Set, relations and mappings. • Mensuration: areas, triangles and quadrilaterals, area and circumference of circles, volumes and surface areas of simplesolids such as cubes, spheres, cylinders and cones
2	Logical/ Abstract Reasoning 12 Questions 24 Marks	This shall include the questions to measures how quickly and logically you can think. This section will cover logical situations and questions based on the facts given inthe passage. This test shall check the problem solving capability of the candidate.
3	English comprehension and verbal ability 11 Questions 22 Marks	Questions in this section will be designed to test the candidate's general understanding of the English language. There will be questions on the topics such as Basic English grammar, vocabulary, comprehension, synonyms antonyms, sentence correction, word & phrases, jumbled paragraph.
4	Computer Concepts 15 Questions 30 Marks	<ul style="list-style-type: none"> • 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, signed arithmetic and two'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, Computer Programming in C. • Operating System basics

To prepare effectively for the CET, you can refer to various books and online resources. List of some reference books and digital resources are given below:

Reference Books:

- Maharashtra MCA CET By Chandresh Agrawal
- Mathematics for MCA Entrance Examination by Amit Choudhary and Neelam Choudhary.
- "Quantitative Aptitude for Competitive Examinations" by R.S. Aggarwal
- "A Modern Approach to Verbal & Non-Verbal Reasoning" by R.S. Aggarwal
- "Objective General English" by S.P. Bakshi
- Analytical Reasoning Books by M.K. Pandey

Websites:

- www.indiabix.com
- www.geeksforgeeks.org
- www.tutorialspoint.com
- www.sanfoundry.com

Sample Questions:

Q 1. What is an operating system's most fundamental function?

- (a) Providing a database management system.
- (b) Providing a graphical software development environment.
- (c) Providing backward compatibility with older processors.
- (d) Providing an efficient virtual machine abstraction.

Q 2. Which of the following operation is performed when computer is turned On?

- (a) Processing (b) Booting (c) Saving (d) Editing

Q .3 You've cleared the _____ examination, haven't you?

- (a) Frequent (b) ability (c) conclusion (d) entrance

Q 5. A _____ of small stones is called a mosaic?

- (a) Design (b) structure (c) pattern (d) mound

Q 6. Find the next number in the sequence: 2, 6, 12, 20, ____

- (a) 28 (b) 30 (b) 32 (d) 34

Q 7. Eight friends Ajay, Vikas, Ronak, Amit, Gaurav, Nikhil, Neeraj and Sagar are sitting in a circular table for having their dinner. Amit is sitting between Ajay and Gaurav. Aurav is sitting second to the right of Nikhil. Vikas is sitting between Ronak and Neeraj.4) Nikhil is sitting between Neeraj and Sagar. Who is sitting between Ronak and Amit?

(a) Ajay (b) Vikas (c) Neeraj (d) Sagar

Q 8. Find the odd one out from the given set of numbers.

14, 28, 35, 46, 56, 84

(a) 56 (b) 84 (c) 35 (d) 46