

**Syllabus and Marking Scheme for  
First Year of Bachelor of Engineering and Technology, Planning, Pharmacy Courses and  
First Year of Master of Engineering and Technology(Integrated), Pharm.D PG course**

**MHT- CET 2024**

1. The questions will be based on Syllabus of State Council Of Educational Research And Training, Maharashtra.
2. Approximately 20% weightage will be given to Std. XI curriculum and 80% weightage will be given to Std.XII curriculum while setting the question paper.
3. There will be no Negative Marking, however difficulty level will be at par with the JEE (Main) for Mathematics, Physics, Chemistry and difficulty level for Biology will be at par with NEET. The questions will be mainly application based.
4. MHT-CET will consist of 3 question papers of Multiple Choice Questions (MCQ) and each paper will be of 100 marks. Details are as given below :

Paper	Subject	No. of Multiple Choice Questions (MCQ) based on		Mark(s) Per Question	Total Marks	Duration in Minutes
		Std. XI	Std. XII			
Paper I	Mathematics	10	40	2	100	90
Paper II	Physics	10	40	1	100	90
	Chemistry	10	40			
Paper III	Biology	20	80	1	100	90

5. The questions will be set on
  - a) Whole syllabus of Std XII of 2023-24 of Physics, Chemistry, Biology and Mathematics subjects prescribed by State Council Of Educational Research And Training, Maharashtra  
**and**
  - b) Syllabus of Std XI of 2022-23 prescribed by State Council Of Educational Research And Training, Maharashtra as mentioned below:

Sr.No.	Subject	Chapters/Units of Std XI Syllabus
1.	Physics	Motion in a plane, Laws of Motion, Gravitation, Thermal properties of matter, Sound, Optics, Electrostatics, Semiconductors
2.	Chemistry	Some Basic concepts of chemistry, Structure of atom, Chemical Bonding, Redox reactions, Elements of group 1 and 2, States of Matter(Gaseous and Liquids), Adsorption and colloids (Surface Chemistry), Hydrocarbons, Basic principles of organic chemistry
3.	Mathematics	Trigonometry II, Straight Line, Circle, Measures of Dispersion, Probability, Complex Numbers, Permutations and Combinations, Functions, Limits, Continuity
4.	Biology	Biomolecules, Respiration and Energy Transfer, Human Nutrition, Excretion and Osmoregulation ,

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## Syllabus and Marking Scheme for MAH-MBA/MMS CET 2024

### Contents:-

#### A) Logical / Abstract Reasoning.

This shall include the questions to measure how quickly and accurately you can think. This test may have questions based on figures and diagrams and also questions on verbal reasoning.

#### B) Quantitative Aptitude.

This shall include the questions to know how fast and accurate you can work with numbers, do numerical calculations understand various arithmetic problems involving ratio and proportion, percentage, etc. This test also helps to measure your power of quantitative reasoning, interpretation of tables, common graphs and charts.

#### C) Verbal Ability and Reading Comprehension

This shall include passages with questions based on their contents to test your comprehension. Your English Language ability would be tested through questions on grammar, vocabulary, sentence completion, synonyms, antonyms, comprehension of passages etc. Your English language ability would be tested through questions on (1) understanding of the contents of the passage and (2) choice of appropriate words, phrases, expressions and similar language skills.

Sr.	Topics	No of Questions	Mark per Question	Maximum Marks	Total Marks
1	Logical Reasoning	75	1	75	200
2	Abstract Reasoning	25	1	25	
3	Quantitative Aptitude	50	1	50	
4	Verbal Ability / Reading Comprehension	50	1	50	
The test will comprise of multiple choice objective type questions (Five Options)					
There is no negative marking System for this test.					
Test Duration: <b>150 Minutes</b>					
Medium of CET: English					
Mode of Examination - Online					

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## Syllabus & Marking Scheme for Master of Computer Applications MAH-MCA-CET 2024

The Online CET would comprise 4 sections viz. Mathematics & Statistics, Logical / Abstract Reasoning, English comprehension and verbal ability and Computer Concepts of total 200 marks , with composite time of 90 minutes duration.

### Syllabus :-

- a) Mathematics & Statistics:** The questions will cover the following topics of high school mathematics (up to the 12th standard)
- 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, homogeneous linear differential equations.
  - 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 simple solids such as cubes, spheres, cylinders and cones.
- b) Logical / Abstract Reasoning:** This shall include the questions to measure how quickly and logically you can think. This section will cover logical situations and questions based on the facts given in the passage. This test shall check the problem solving capability of the candidate.
- c) English comprehension and verbal ability:** 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 paragraphs.
- d) Computer Concepts**
- 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: Basics of Digital Logic ,Block structure of computers, communication between processor and I / O devices, interrupts.
  - Computer Language: Fundamentals of Data & File Structures and high level language, Computer Programming in C, advanced concepts in programming.
  - Operating System basics

### Marking Scheme and duration

Section	No of Questions	Marks per Question	Maximum Marks	Total Marks
Mathematics & Statistics	30	2	60	200
Logical / Abstract Reasoning	30	2	60	
English comprehension and verbal ability	20	2	40	
Computer Concepts	20	2	40	
The test will comprise of multiple choice objective type questions (Four Options)				
There is no negative marking System for this test.				
Test Duration: 90 minutes				
Medium of CET: English				
Mode of Examination - Online				

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## Syllabus and Marking Scheme for Master of Architecture MAH-M. Arch CET 2024

### Contents:-

Sr.	Topics	No of Questions	Mark/s per Question	Maximum Marks	Total Marks
1	<b>Building Technology</b> Building systems, Building Science and services, concept of green building, construction materials.	10	2 marks	20 Marks	100
2	<b>Environment</b> Concept and Ecology and landscape design, Environment laws and regulations, Environment design strategies w.r.t site.	10	2 marks	20 Marks	
3	<b>Architecture History and humanities</b> Awareness of Art and culture and architectural theory, major architecture movements in the world and in India.	10	2 marks	20 Marks	
4	<b>Settlement, design and planning</b> Urbanization, Urbanism, Urban and rural system, Infrastructure planning theory and history.	10	2 marks	20 Marks	
5	<b>Current Architecture Practice</b> Awareness of National building code. Town planning laws and development control regulation, knowledge of Regulatory and professional bodies on architecture.	10	2 marks	20 Marks	
The test will comprise of multiple choice objective type questions(Four Options)					
There is no negative marking System for this test.					
Test Duration: <b>60</b> minutes					
Medium of CET: English					
Mode of Examination - Online or Offline as the case may be					

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**Syllabus and Marking Scheme for Master of Hotel Management and Catering Technology**  
**MAH-M.HMCT CET 2024**

**Contents:-**

<b>Sr.</b>	<b>Topics</b>	<b>No of Questions</b>	<b>Mark per Question</b>	<b>Maximum Marks</b>	<b>Total Marks</b>
1	<b>Food and Beverage Operation</b> Food and Beverage Service Operations, related terminology, Inventory control, Food & Beverage equipment and infrastructure & Food and Beverage Operation Management.	10	02	20	100
2	<b>Food Production</b> Food Production operations, Indian & International cuisines and related terminology, Bakery and Confectionary, Hygiene and Safety standards, Kitchen equipment and Infrastructure & Food Production Management.	10	02	20	
3	<b>Rooms division</b> Housekeeping and front office operations and related terminology, Planning & designing of hospitality organisations, Laundry operations and procedures & Rooms division Management.	10	02	20	
4	<b>English</b> Word meaning, comprehension, antonyms and synonyms, idioms and phrases, word spellings	10	02	20	
5	<b>Hospitality &amp; Tourism Industry</b> Types of tourism, hotel and restaurant brands and segments, Airlines, hospitality terms, hospitality related organizations and regulatory bodies, Global trends & Hospitality & Tourism Management. Use of Technology in hotels.	10	02	20	
The test will comprise of multiple choice objective type questions (Four Options)					
There is no negative marking System for this test.					
Test Duration: <b>60</b> minutes					
Medium of CET: English					
Mode of Examination - Online or Offline as the case may be					

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**Syllabus and Marking Scheme for Bachelor of Design**  
**MAH-B Design CET 2024**

**Contents:**

MAH - B Design CET is the test devised to check the inclination and aptitude of the students for their keen observations, analytical ability, creative thinking ability, visualization & hand skills. Designers being interested in various aspect of life should be aware of the things happening around them in various spheres like nature-humanity-technology development. Looking at the things without biases, questioning the status quo, enables designers to think in a different way and bring new perspective towards the solution.

Entrance examination paper will have questions broadly but not limited to the topics mentioned in the two tables below.

The test is divided into 2 main parts with total duration of 3 hours.

1. PART A is MCQ based questions, for duration of 90 minutes.
2. PART B is sketching skill based & problem-solving ability, for duration of 90 minutes.

	<b>PART A ( Duration: 90 mins )</b>	Question types	No. of Questions	Marks/ Question	Marks
1	<b>General knowledge/awareness:</b> General knowledge and current affairs	MCQs	20	1	20
2	<b>Art &amp; Design fundamentals:</b> Elements and principles of design, aesthetic sensitivity, colour theory, Basic art history. Indian culture, other prominent cultures. Important crafts.	MCQs	20	1	20
3	<b>Science - technology related knowledge:</b> Basics of physics, geometry, Mathematics. Knowledge of practical and everyday mechanical and scientific concepts. knowledge of materials.	MCQs	15	2	30
4	<b>Analytical and logical reasoning:</b> Ability to look at information, recognize patterns and analyse given data. Sequences or relationships between shapes and imageries.	MCQs	15	2	30
	<b>TOTAL</b>		<b>70</b>		<b>100</b>

	<b>PART B ( Duration: 90 mins )</b>	Question types	No of Questions	Marks/ Question	Marks
1	<b>Visualization and illustration ability (30 mins):</b> Sketching/illustrating situation, context, event, people with attention to details. With right proportions, good line quality, composition, perspective, and shading.	Sketching	1	40	40
2	<b>Design thinking and problem solving (60 mins):</b> Understanding complex situations, going to root cause, and identifying problems, generate alternative ideas/solutions, evaluating options and developing final solutions.	Sketching	1	60	60
	<b>TOTAL</b>		<b>2</b>		<b>100</b>

- The PART A - Duration: 90 minutes - test will comprise of multiple-choice objective type questions, Numerical answer type questions.

- The PART B - Duration: 90 minutes - test will comprise of sketching, illustration, Product/idea using pencils, colour pencils, markers, sketch pens, pens, & any other suitable colouring mediums.

- There is no negative marking System for this test.

- Medium of CET: English

- Mode of Examination – offline (at selected centers)

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**Syllabus and Marking Scheme for Bachelor of Hotel Management and Catering Technology**

**MAH-B.HMCT CET 2024**

**Contents :-**

The OnLine test will have 100 Questions based on Reasoning (Verbal as well as Arithmetic), English Language & General Awareness including questions on culture, current national, international affairs, trade & commerce, sports, scientific inventions and discoveries, travel/tourism etc.

<b>Topics</b>	<b>No of Questions</b>	<b>Mark/s per Question</b>	<b>Maximum Marks</b>	<b>Total Marks</b>
English Language	40	1	40	100
Reasoning (Verbal and Arithmetic)	30	1	30	
General Knowledge & Awareness including questions on current national, international affairs, culture, trade & commerce, sports, scientific inventions and discoveries, travel/ tourism etc.	30	1	30	
The test will comprise of multiple choice objective type questions (Four Options)				
There is no negative marking System for this test.				
Test Duration: <b>90</b> minutes				
Medium of CET: English				
Mode of Examination - Online				

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