



GOVERNMENT OF MAHARASHTRA

STATE CET CELL

INFORMATION BROCHURE

(Technical Education Courses)

ONLINE

CBT (Computer Based Test) Common

Entrance Test FOR

**FIRST YEAR ADMISSION TO TWO YEAR FULL TIME POST
GRADUATE DEGREE COURSE IN MASTER OF COMPUTER
APPLICATIONS (MCA) 2023-24**

STATE COMMON ENTRANCE TEST CELL

STATE COMMON ENTRANCE TEST CELL

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INDEX

Sr. No.	Description	Page No.
1.0	Introduction	2
2.0	Competent Authority	2
3.0	Eligibility Criteria for Appearing to MAH-MCA-CET 2023	2
4.0	MAH-MCA-CET 2023 Schedule	3
5.0	Examination Fee for CET	3
6.0	Procedure for Online Application Form Filing and Registration for MAH-MCA-CET 2023	4
7.0	Download Hall Ticket & Identity Verification	4
8.0	Test Centers for CET	5
9.0	Syllabus and Marking Scheme for MAH-MCA-CET 2023	5
10.0	Guidelines for persons with disabilities using a scribe	7
11.0	Action against candidates found guilty of misconduct/ use of unfair means	9
12.0	Test Information & Sample Questions	10

Sr. No.	Activity	Schedule	
		From	To
1.	Online Registration for MAH-MCA CET 2023 on the website https://mcacet2023.mahacet.org	27/02/2023	09/03/2023

The schedule displayed above is provisional and may change under unavoidable circumstances. The revised schedule, if any, will be notified on website <https://mcacet2023.mahacet.org> (This URL was given for only application)



महाराष्ट्र शासन
 GOVERNMENT OF MAHARASHTRA
 राज्य सामाईक प्रवेश परीक्षा कक्ष
 STATE Common Entrance Test

1.0 Introduction

Government of Maharashtra has established a State Common Entrance Test Cell (CET CELL) under Admission Regulating Authority (ARA) as per the provision in Section 10 of Maharashtra Unaided Private Professional Educational Institutions (Regulation of Admissions and Fees) Act, 2015, (Herein after called the Act).

The Competent Authority shall conduct the Online MAH-MCA-CET 2023 for admission to first year/ direct second year (separate division & lateral entry) of two-year full time post graduate degree course in Master of Computer Applications (MCA), for Academic Year 2023-24.

The admissions to the following institutes will be based on the score of CET, provided they are approved & recognized by Government of Maharashtra and are affiliated to any of the Non- Agricultural University in Maharashtra State.

1. All Government/ Government Aided Institutes offering MCA course
2. All University Departments offering MCA course
3. University Managed Institutes offering MCA course
4. All Un-Aided MCA Institutes covered as per the Act

2.0 Competent Authority

“Commissioner, State CET Cell' is the **Competent Authority** to conduct the MAH-MCA-CET2023 as per the Provisions of 2(e) and Section 10(2) of the Act.

3.0 Eligibility Criteria for Appearing to Online MAH-MCA-CET 2023

The candidate should fulfill the following eligibility criteria:

- (i) The candidate should be an Indian National;
- (ii) The candidate should have Passed B.C.A or B.Sc. (Computer Science) or B.Sc (IT) or B.E. (CSE) or B.Tech (CSE) or B.E. (IT) or B.Tech. (IT) or equivalent Degree and obtained at least 50% marks in aggregate (at least 45% in case of candidates of Backward Class categories, economically weaker section and Persons with Disability category belonging to Maharashtra State); Or
- (ii) The candidate should have any graduation degree (e.g : B.E. or B.Tech or B.Sc or B.Com or B.A. or B.Voc. etc) preferably with Mathematics at 10+2 Level or at Graduation Level (with additional bridge Courses as per the norms of the concerned University) and obtained at least 50% marks in aggregate (at least 45% in case of

candidates of Reserved categories, Economically Weaker Section and Persons with Disability category belonging to Maharashtra State);

(Candidates appearing for final year of qualifying examination are also eligible to appear for CET)

Note:

- Aggregate marks means the grand total of marks obtained by the candidate in subjects on which the class declaration is made in the particular University from which the candidate is passing the qualifying examination.
- In case the candidates are awarded grades/CGPA instead of marks, the conversion of grades/CGPA to percentage of marks would be based on the procedure certified by the University/institution from where they have obtained the bachelor's degree.
- The percentage of marks shall be calculated by rounding off to two places after decimal.
- The candidates belonging to SC, VJ/DT (NT (A)), NT (B), NT(C), NT (D), OBC, SBC categories should produce "Caste Validity Certificate" issued by Scrutiny Committee of Social Welfare Department and the Candidate belonging to ST category should submit "Tribe Validity Certificate" issued by Scrutiny Committee of Tribal Department and valid Non Creamy Layer certificate except SC, ST candidates at the time of verification of documents.

4.0 MAH-MCA-CET 2023 Schedule: - Detailed Examination Scheduled will be shared in due course of time on the home page of respective course.

5.0 Examination Fee for CET

Application form processing fee as stated below is to be paid through online system only by Internet Payment, Credit Card/ Debit Card (RuPay/Visa/MasterCard/Maestro), Internet Banking, IMPS, Cash Cards/ Mobile Wallets for which the service charges, as per rules, shall be applicable in addition to the application form processing fee. No other mode of payment shall be permitted. This fee is non-refundable and non-transferable under any circumstances.

General Category Candidates from Maharashtra State, Outside Maharashtra State (OMS), J & K Migrant candidates	₹. 1000/-
Reserved Category Candidates of Backward Class Categories [SC, ST, VJ/DT-NT(A), NT(B), NT(C), NT(D), OBC, SBC, EWS] and & Persons with Disability Candidates belonging to Maharashtra State only.	₹. 800/-

- **Candidates will be required to submit the Caste Certificate, Caste Validity Certificate and Non Creamy Layer Certificate if applicable at the time of filling CAP Application form to be considered under category.**
- **Candidates will be required to submit Economically Weaker Section Certificate if applicable at the time of filling CAP Application form.**
- **Candidates will be required to submit Persons with Disability (PWD) Certificate if applicable at the time of filling CAP Application form**

6.0 Procedure for Online Application Form Filing and Registration for MAH-MCA-CET2023

Please refer user manual publish on respective course home page .

7.0 Download Hall Ticket: -

As per the schedule, Candidates will have to visit the website www.mahacet.org for downloading Hall Ticket for online test. Intimation for downloading Hall Ticket will also be sent through email/SMS. Once the candidate clicks the relevant link, he/she can access the window for Hall Ticket download. The candidate is required to use (i) Registration Number/Roll Number, (ii) Password/Date of Birth for downloading the Hall Ticket. Candidate needs to affix recent recognizable photograph on the Hall Ticket preferably the same as provided during registration and appear at the examination center with (i) Hall Ticket (ii) Photo Identity Proof as stipulated below and also specified in the Hall Ticket and Photo Identity Proof as brought in original.

Refer Hall Ticket download guidelines available on CET CELL website

7.1 Identity Verification

In the examination hall, the Hall Ticket along with original of the candidate's currently valid photo identity (bearing the same name as it appears on the Hall Ticket) such as PAN Card/ Passport/ Permanent Driving License/ Voter's Card/ Bank Passbook with photograph/ Photo identity proof issued by a Gazetted Officer on official letterhead along with photograph / Photo identity proof issued by a People's Representative on official letterhead along with photograph / valid recent Identity Card issued by a recognized College/ University/ Aadhaar/E-Aadhar card with a photograph/ Employee ID/ Bar Council Identity Card with photograph should be submitted to the invigilator for verification. The candidate's identity will be verified with respect to his/her details on the Hall Ticket, in the Attendance List and requisite documents submitted. If identity of the candidate is in doubt the candidate may not be allowed to appear for the Examination. **Ration Card & Learning Driving License are not valid id proof.**

Candidates Reporting Late i.e. after the reporting time specified on the Hall Ticket for Examination will not be permitted to take the examination. The reporting time mentioned on the Hall Ticket is prior to the Start time of the test. Though the duration of the examination is 1.5 hours (90 minutes), candidates may be required to be at the venue for about 140 minutes including the time required for completion of various formalities such as verification and collection of various requisite documents, logging in, giving of instructions.

Note: Candidates have to produce in original the photo identity proof along with Examination Hall Ticket while attending the examination, without which they will not be allowed to take up the examination. Candidates must note that the name as appearing on the Hall Ticket (provided during the process of registration) should match the name as appearing on the photo identity proof. Female candidates who

have changed first/last/middle name post marriage must take special note of this. If there is any mismatch between the name indicated in the Hall Ticket and Photo Identity Proof the candidate will not be allowed to appear for the examination. In case of candidates who have changed their name, will be allowed only if they produce original Gazette notification / their original marriage certificate / affidavit in original.

8.0 Test Centre for CET

- i. MAH-MCA-CET 2023 will be conducted in the selected cities in Maharashtra & outside Maharashtra State. The cities in which MAH-MCA-CET 2023 will be conducted are designated as "Centre" for the CET.
- ii. Each center may have many "Venues" depending upon the number of candidates appearing at that center.
- iii. A candidate appearing for CET shall give his/her preference for the centre, however the Competent Authority reserves the right to allocate the center and venue.
- iv. The examination will be conducted online at venues given in the respective Hall Ticket.
- v. No request for change of center/venue/date/session for Examination shall be entertained.
- vi. Competent Authority, however, reserves the right to cancel any of the Examination Centers and/ or add some other Centers, at its discretion, depending upon the response, administrative feasibility, etc.
- vii. Competent Authority also reserves the right to allot the candidate to any center other than the one he/she has opted for.
- viii. Candidate will appear for the examination at an Examination Centre at his/her own risks and expenses and Competent Authority will not be responsible for any injury or losses etc. of any nature.
- ix. Choice of center once exercised by the candidate will be final.
- x. If sufficient number of candidates does not opt for a particular center for "Online" examination, Competent Authority reserves the right to allot any other adjunct center to those candidates OR if the number of candidates is more than the capacity available for online exam for a center, Competent Authority reserves the right to allot any other center to the candidate.

9.0 Syllabus and Marking Scheme for MAH-MCA-CET 2023

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 200 marks with composite time of 90 minutes duration.

Syllabus:

a) Mathematics and Statistics:

The question paper 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, homogenous 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 paragraph.

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: 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

Marking Scheme and duration

Sr. No.	Section	No. of Questions	Marks per Question	Maximum Marks	Total Marks
1.	Mathematics & Statistics	30	2	60	200
2.	Logical/ Abstract Reasoning	30	2	60	
3.	English comprehension and verbal ability	20	2	40	
4.	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					

10.0 Guidelines for persons with disabilities using a scribe

- (i) The visually impaired candidates and candidates whose writing speed is adversely affected permanently for any reason can use their own scribe at their cost during the online examination, subject to limits as in (ii) and (iii) below. In all such cases where a scribe is used, the following rules will apply:
 - a) The candidate will have to arrange his/her own scribe at his/her own cost.
 - b) The scribe arranged by the candidate should not be a candidate for the same examination. If violation of the above is detected at any stage of the process; candidature of both the candidate and the scribe will be cancelled. Candidates eligible for and who wish to use the services of a scribe in the examination should invariably carefully indicate the same in the online application form. Any subsequent request may not be favorably entertained.
 - c) A person acting as a scribe for one candidate cannot be a scribe for another candidate.
 - d) The scribe may be from any academic stream.
 - e) Both the candidate as well as scribe will have to give a suitable undertaking confirming that the scribe fulfils all the stipulated eligibility criteria for a scribe mentioned above. Further in case it later transpires that he/she did not fulfill any laid down eligibility criteria or suppressed material facts the candidature of the applicant will stand cancelled, irrespective of the result of the online examination.
 - f) Those candidates who use a scribe shall be eligible for compensatory time of

20 minutes for every hour of the examination.

- g) Only candidates registered for compensatory time will be allowed such concessions since compensatory time given to candidates shall be system based, it shall not be possible for the Competent Authority to allow such time if he / she is not registered for the same. Candidates not registered for compensatory time shall not be allowed such concessions.
- h) Scribe should not answer on his/her own. Any such behavior observed will result in cancellation of candidature.
- (ii) Guidelines for Candidates with locomotors disability and cerebral palsy

A compensatory time of twenty minutes per hour or otherwise advised shall be permitted for the candidates with locomotors disability and cerebral palsy where dominant (writing) extremity is affected to the extent of slowing the performance of function (minimum of 40% impairment).

(iii) Guidelines for Visually Impaired candidates

- a) Visually Impaired candidates (who suffer from not less than 40% of disability) may opt to view the contents of the test in magnified font and all such candidates will be eligible for compensatory time of 20 minutes for every hour or otherwise advised of examination.
- b) The facility of viewing the contents of the test in magnifying font will not be available to Visually Impaired candidates who use the services of a Scribe for the examination.
- c) The details of applicability of Scribe and/or Extra Time for various types of Disabilities are given in the following table.

Types of Specified Disability	Sub Type	Whether scribe is allowed	Whether Extra time is allowed
1) Physical Disability	A) Locomotor Disability	1) Leprosy Cured Person	If opted by candidate
		2) Cerebral Palsy a) Dominant Arm/Both Arms affected b) Stiff Back & Hips	YES
		3) Dwarfism	NO
		4) Muscular Dystrophy	If opted by candidate
	B) Visual Impairment	5) Acid Attack Victims	NO
		6) Blindness	YES
	C) Hearing Impairment	7) Low Vision	YES
		8) Deaf	NO
	D) Speech & Language Disability	9) Hard of Hearing	NO
		10) Speech & Language Disability a) Laryngectomy/Aphasia	No
		11) Dyslexia	If opted by candidate
	2) Intellectual Disability	a) Specific learning	12) Dysgraphia

disabilities		candidate	
b) Autism Spectrum Disorder	13)Dyscalculia	If opted by candidate	If opted by candidate
	14)Dyspraxia	If opted by candidate	If opted by candidate
	15)Developmental aphasia	If opted by candidate	If opted by candidate
	16)Autism Spectrum disorder	If opted by candidate	If opted by candidate
3)Mental Behaviour	17)Mental Illness	If opted by candidate	If opted by candidate
4)Disability Caused due to: - a) Chronic Neurological Conditions b)Blood Disorder	18)Multiple Sclerosis	YES	YES
	19)Parkinson's Disease	YES	YES
	20)Haemophilia	NO	NO
	21)Thalassemia	NO	NO
	22) Sickle cell disease	NO	NO

These guidelines are subject to change in terms of GOI guidelines/ clarifications, if any, from time to time.

11.0 Action against candidates found guilty of misconduct/ use of unfair means

Candidates are advised in their own interest that they should not furnish any particulars that are false, tampered with or fabricated and should not suppress any material information while submitting online application. At the time of examination or in a subsequent admission procedure, if a candidate is (or has been) found guilty of —

- i. Using unfair means or
- ii. Impersonating or procuring impersonation by any person or
- iii. Misbehaving in the examination hall or disclosing, publishing, reproducing, transmitting, storing or facilitating transmission and storage of contents of the test(s) or any information therein in whole or part thereof in any form or by any means, verbal or written, electronically or mechanically for any purpose, or resorting to any irregular or improper means in connection with his/ her candidature, or
- iv. Obtaining support for his/ her candidature by unfair means, or
- v. Carrying mobile phones or similar electronic devices of communication in the examination hall, such a candidate may, in addition to rendering himself/ herself liable to criminal prosecution, **be liable to be disqualified from the examination** for which he/ she is a candidate

12.0 Test Information & Sample Questions

All tests will be provided in English. You can attempt any question at any point of time within these 1.5 hours (90 minutes). All the questions will have multiple choices. Out of the four answers to a question only one will be the correct answer. You have to select the most appropriate answer and 'mouse click' that alternative which you feel is appropriate/correct. The alternative/ option that you have clicked on will be treated as your answer to that question. There is no negative marking System for this test. Unanswered questions will carry zero marks. you are advised, not to mark answers by random guessing.

The Scores of Online Examination will be obtained by adopting the following procedure:

**Please refer Normalization document published on official website
www.mahacet.org**

General Instructions

1. The possibility of occurrence of some problem in the administration of the examination cannot be ruled out completely which may impact test delivery and/or result from being generated. In that event, every effort will be made to rectify such problem, which may include movement of candidates, delay in test. Conduct of a re-exam is at the absolute discretion of test conducting body. Candidates will not have any claim for a re-test. Candidates not willing to move or not willing to participate in the delayed process of test delivery shall be summarily rejected from the process.
2. Decision of State CET Cell in all matters relating to conduction of CET will be final and binding on the candidate. No correspondence or personal enquiries shall be entertained by the State CET Cell in this behalf.
3. If the examination is held in more than one session, the scores across various sessions will be equated to adjust for slight differences in difficulty level of different test batteries used across sessions. More than one session are required if the nodes capacity is less or some technical disruption takes place at any center or for any candidate.
4. State CET Cell would be analyzing the responses (answers) of individual candidates with those of other candidates to detect patterns of similarity of right and wrong answers. If in the analytical procedure adopted by State CET Cell in this regard, it is inferred/ concluded that the responses have been shared and scores obtained are not genuine/ valid, State CET Cell reserves right to disqualify the candidature of the concerned candidates and the result of such candidates (disqualified) will be null & void.
5. Instances for providing incorrect information and/or process violation by a candidate detected at any stage of the admission process will lead to disqualification of the candidate from the entire admission process.

SAMPLE QUESTIONS**MATHEMATICS**

Q. 1. The upper part of a tree broken by the wind makes an angle of 60° with the ground and the horizontal distance from the root of the tree to the point where the top of the tree meets the ground is 10 meters. What was the height of the tree before it was broken?

- (1) 43.20 m (2) 20 m
(3) 37.30 m (4) 39.70 m

Q. 2. Find the length of the major axis of the ellipse $16x^2 + 5y^2 = 400$.

- (1) 5 (2) $8\sqrt{5}$
(3) 10 (4) $10\sqrt{5}$

Q. 3. A, B & C are three mutually exclusive & exhaustive events associated with a random experiment. If $P(C) = \frac{3}{4} P(A)$, $P(A) = \frac{2}{3} P(B)$, then $P(B)$ is

- (1) $\frac{3}{2}$ (2) $\frac{4}{13}$
(3) $\frac{6}{13}$ (4) $\frac{3}{13}$

Q. 4. The average salary of male employees in the firm is Rs.5,000/- and that of female employees is Rs. 4,000/-. The mean salary of all the employees is Rs.4,500/- and if there are 10 male employees, then how many female employees are there in that firm?

- (1) 12 (2) 10
(3) 08 (4) 11

LOGICAL/ABSTRACT REASONING

Q.1. In a row of girls, if Seeta who is 10th from the left and Lina who is 9th from the right interchange their seats, Seeta becomes 15th from the left. How many girls are there in the row ?

- (1) 16 (2) 18 (3) 19 (4) Other than those given as options

Q.2-4. Read the information given below and answer the questions.

Six plays A, B, C, D, E and F of a famous play wright are to be staged one on each day from Monday to Saturday. The schedule of the plays is to be in accordance with the following.

- (1) A must be on the immediately previous day of the on which E is staged.
(2) C must not be staged on Tuesday.
(3) B must be on a day which immediately follows the day on which F is staged.
(4) D must be staged on Friday only and should not be immediately preceded by B.

(5) E must not be staged on the last day of the schedule.

Which of the following is the schedule of plays, with the order of their staging from Monday ?

- (1) E A B F D C (2) A F B E D C
 (3) A F B C D E (4) Other than those given as options

Play C cannot definitely be staged on which of the following days in addition to Tuesday?

- (1) Monday (2) Wednesday (3) Thursday (4) Other than those given as options

Which of the following plays immediately follows B ?

- (1) F (2) E (3) D (4) Other than those given as options

ENGLISH LANGUAGE

Q. 1-3 In the given passage there are blanks, each of which has been numbered. Against each blank, five words are suggested, one of which fits the blank appropriately. Choose the appropriate word in each case.

The true (1) of rights is duty. If we all (2) our duties, rights will not be (3) to seek. If leaving duties unperformed we run after rights, they will escape us like an elusive person.

(1) end	(2) Source	(3) Joy	(4) purpose
(1) fulfill	(2) devote	(3) discharge	(4) imagine
(1) far	(2) close	(3) easy	(4) against

Q.4-5 Directions : In the given sentences, two words are bold & underlined. For each bold & underlined part, four words are listed below. Choose the words nearest in meaning to the italicized & underlined part.

The prisoner made an **abortive** attempt to **escape** from the jail.

- (1) Courageous, Gateway (2) Futile, Run Away
 (3) Illegal, Flee (4) Furtive, Break Out

The new volume provides **substantial** critical **excerpts** and biographical information on eight to ten major poets from all eras.

- (1) Sizeable, Sources (2) Ample, Explanation
 (3) Extensive, Extracts (4) Large, Substances

COMPUTER CONCEPTS

Q.1. What is the decimal value of the binary number
111110?

- (1) 31 (2) 62
(3) 64 (4) 126

Q.2. Which symbols represent a block of code in C?

- (1) { ... code here } (2) (... code here)
(3) [... code here] (4) < ... code here >

(1) **Please note:**

- (a) **Candidates will not be allowed to “finally submit” unless they have exhausted the actual test time.**
- (b) **Under no circumstances should a candidate click on any of the ‘keyboard keys’ once the exam starts as this will lock the exam.**

Wish You Best Luck !