

# Common Entrance Examination-2024 (Admission for M.C.A.)

**Time : 2:00 Hrs.**

**Booklet No.**

**Maximum Marks : 400**

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. Do not open the seal of the question booklet until you are asked to do so by the invigilator.
2. OMR answer-sheet will be supplied by the Centre Superintendent for answering the questions.
3. Use blue/black ink ball pen only to darken the appropriate circle/oval in the OMR answer-sheet. No sophisticated pens are allowed.
4. Darken one circle/oval deeply for each question in the OMR answer-sheet, as faintly darkened circle might be rejected by the scanner.  Wrong  Correct
5. This question booklet contains **16** pages including blank pages for rough work. After you are permitted to open the seal, please check all pages and report discrepancies, if any, to the invigilator on duty.
6. There are a total of **100** questions carrying **400** marks. Of these questions are Multiple Choice Questions (MCQs). Each question has only one correct answer.
7. Questions **1 to 25** pertain to **Verbal Ability**, questions **26 to 50** pertain to **Quantitative Ability**, questions **51 to 75** belong to **Data Interpretation and Reasoning**, questions **76 to 100** pertain to **Computer Awareness** and each question carries **4** marks.
8. Rough work can be done on the question paper itself. Blank pages are provided at the end of the question booklet for rough work.
9. **Do not fold the OMR answer-sheet and do not put any mark on it to avoid rejection by the scanner.**
10. Write roll number correctly on the OMR answer-sheet and darken the appropriate circle/oval properly.
11. Before opening the question booklet, fill-up the required information with blue/black ball pen correctly both in the question booklet and the OMR answer-sheet.
12. Mobile phones/electronic devices etc. are not allowed inside the examination hall.
13. The question booklet may be retained by the candidate after the entrance test is over.
14. **Four (+4) marks shall be awarded for each correct answer and one (-1) mark shall be deducted for each wrong answer. Un-answered/ un-marked question will be given no mark (0).**
15. Before the start of the examination, write your name and registration number in the space provided below using a blue/black Ink ball point pen.

|                     |  |  |  |  |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|--|--|--|
| Name                |  |  |  |  |  |  |  |  |  |
| Registration Number |  |  |  |  |  |  |  |  |  |

# MCA

## Section A (Verbal Ability)

### [Question No. 1 to 25]

1. Which of the following is synonym of 'Masticate'?
  - a. Pious
  - b. Gobble
  - c. Chew
  - d. Swallow
2. Give one word for the given sentence:  
'Someone with a compulsive desire to steal'
  - a. Kleptomaniac
  - b. Poacher
  - c. Pirate
  - d. Rustler
3. Choose antonym of word 'Oust'
  - a. Remove
  - b. Initiate
  - c. Accept
  - d. Repair
4. Find the incorrect sentence.
  - a. I found the carpet that I lost yesterday.
  - b. My wife lost the case since three years ago.
  - c. We shall meet on Monday to discuss the issues.
  - d. They run down the centre of the road.

**In Questions No. 5 to 7, there is a certain relation between two given words on one side of: and one word is given on another side of: while another word is to be found from the given alternatives.**

5. Scribble : Write :: Stammer : ?
  - a. Play
  - b. Speak
  - c. Read
  - d. Walk
6. Trumpet : Band :: Knife : ?
  - a. Cutlery
  - b. Metal
  - c. Pork
  - d. Cut
7. Communicable disease : Malaria :: Non-Communicable disease : ?
  - a. Tuberculosis
  - b. Measles
  - c. Pneumonia
  - d. Diabetes



15. Choose the most suitable meaning for the given word

TRAMPLE

- a. To step on someone heavily so as to crush them
- b. To engage without restraint in an activity
- c. To establish the correctness of something
- d. To fasten tightly

16. Four sequentially ordered statements are given. Each statement can be classified as one of the following:

Facts (F), which deal with the pieces of information that one has heard, seen or read, and which are open to discovery or verification.

Inferences (I), which are conclusions drawn about unknown, on the basis of the known.

Judgements (J), which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future.

Find the correct classification of given statements.

- (A) We should not get addicted to the flawed belief that corruption in India is caused by the dishonesty of Indians.
- (B) The fact is that India is surrounded by red tapism. It takes 89 days to start a small business in India, while in Australia it takes only two days.
- (C) This leads to corruption and falsify people's character.
- (D) The red tape procedure thus involves contact with officials, which leads to bribery and corruption.

- a. JFIF
- b. JIJF
- c. JFJJ
- d. JFJI

17. Fill in the blanks with correct word

Catching the train will give us the ..... to do some shopping

- a. instance
- b. chance
- c. possibility
- d. event

18. Choose a word that is most opposite in meaning to the given word.

QUIESCENT

- a. Indifferent
- b. Inactive
- c. Active
- d. Sympathy

19. Choose the correct spellings
- |               |              |
|---------------|--------------|
| a. Milenium   | b. Millenium |
| c. Millennium | d. Mulennium |
20. Rearrange the following parts to produce the correct sentence
- (A) to ensure good learning is  
(B) at stake then best way  
(C) when the pride of a school is  
(D) to create awareness among students
- |         |         |
|---------|---------|
| a. DABC | b. BCAD |
| c. CBAD | d. DBAC |

**[Questions no. 21 and 22] Choose the correct part for the underlined phrase from the given options**

21. I am tired as I am walking since 5 AM
- |                       |                        |
|-----------------------|------------------------|
| a. I was walking      | b. I have been walking |
| c. I had been walking | d. I has been walking  |
22. Had I realised how close I was to the edge, I would not have carried him there,
- |                         |                           |
|-------------------------|---------------------------|
| a. Had I been realised  | b. When I realised        |
| c. Have I been realised | d. No correction required |
23. Identify the type of sentence 'The sun rises in the east'.
- |                           |                         |
|---------------------------|-------------------------|
| a. Interrogative sentence | b. Exclamatory sentence |
| c. Imperative sentence    | d. Declarative sentence |
24. Fill in the blank with appropriate word  
They were grateful for ..... cake we gave them.
- |       |                  |
|-------|------------------|
| a. a  | b. the           |
| c. an | d. none of these |
25. Dr. Pathak became ..... president of the company.
- |        |                  |
|--------|------------------|
| a. the | b. a             |
| c. an  | d. none of these |



35. If the 17th term of an arithmetic progression is 7 more than its 10th term, then the common difference of the arithmetic progression is .....
- a. 1                      b. 2                      c. 3                      d. -1
36. If sum of first three terms of a GP is 26 and their product is 216. Find the common ratio.
- a. 2                      b. 3                      c. 1                      d. 5
37. What is the Harmonic Mean of two numbers whose geometric mean and arithmetic mean is 8 and 5 respectively?
- a. 12.8                      b. 12                      c. 13.5                      d. 14.6
38. Find the average of all prime numbers between 30 and 50.
- a. 35.5                      b. 37                      c. 38.9                      d. 39.8
39. If the diagonal of a rectangle is 13 cm and perimeter is 34 cm, then its area will be .....
- a. 440 cm<sup>2</sup>                      b. 60 cm<sup>2</sup>                      c. 250 cm<sup>2</sup>                      d. 20 cm<sup>2</sup>
40. If  $\sqrt{5 + \sqrt[3]{x}} = 3$ , then find the value of x.
- a. 8                      b. 64                      c. 4                      d. 16
41. Three persons A, B and C aim at a target. Their respective probabilities of hitting the target are  $\frac{2}{3}$ ,  $\frac{5}{7}$  and  $\frac{3}{8}$ . What is the probability that none of them hits the target?
- a.  $\frac{7}{92}$                       b.  $\frac{5}{28}$                       c.  $\frac{5}{84}$                       d.  $\frac{10}{198}$
42. A man has 12 friends whom he wants to invite for lunch. In how many ways can he invite at least 10 of them?
- a. 66                      b. 140                      c. 79                      d. 153
43. In a colony, there are 55 members. Every member posts a greeting card to all the members. How many greeting cards were posted by them?
- a. 2970                      b. 3025                      c. 1980                      d. 990
44. If the value of  $\Theta + \Phi = \frac{\pi}{2}$  and  $\sin \Theta = \frac{1}{2}$ , what will be the value of  $\sin \Phi$  ?
- a. 1                      b.  $\sqrt{2}$                       c.  $\frac{\sqrt{3}}{2}$                       d.  $\frac{2}{\sqrt{3}}$
45. What is the slope of the line perpendicular to the line passing through the points (-5,1) and (-2,0)
- a. -3                      b.  $\frac{1}{3}$                       c.  $-\frac{1}{3}$                       d. 3
46. If  $z = x + yi$ ,  $x, y \in \mathbb{R}$  and  $3x + (3x-y)i = 4 - 6i$ , then z is equal to .....
- a.  $\frac{4}{3} + 10i$                       b.  $\frac{4}{3} - 10i$                       c.  $-\frac{4}{3} + 10i$                       d.  $-\frac{4}{3} - 10i$
47. It was Sunday on January 1, 2006. What was the day of the week on January 1, 2010?
- a. Saturday                      b. Sunday                      c. Friday                      d. Monday

48. AB and CD are two parallel chords of a circle of radius 13 cm such that AB = 10 cm and CD = 24 cm. Find the distance between them. Note that both the chords are on the same side.
- a. 7 cm                      b. 8 cm                      c. 9 cm                      d. 11 cm
49. What is the value of b for which the given equation  $2x^2 + 4x + b = 0$  has two equal roots?
- a. 4                              b. 2                              c. 6                              d. 1
50. If  $\log_{27} x = 1/6$ , then x is equal to .....
- a. 9                              b. 27                              c.  $\sqrt{3}$                               d. 6

### Section-C (Data Interpretation and Reasoning)

#### [Question No. 51 to 75]

51. In a certain code, MUNICIPALITY is coded as INMUAPCIYTLI, how is JUDICIAL written in that code?
- a. UJDILACI                      b. IDUJLACI  
c. IDJULAIC                      d. IDJULACI
52. If SAND is called AIR, AIR is called PLATEAU, PLATEAU is called WELL, WELL is called ISLAND and ISLAND is called SKY, then from where will a woman draw water?
- a. WELL                      b. SKY                      c. AIR                      d. ISLAND
53. A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's .....
- a. Brother                      b. Son  
c. Son-in-law                      d. Nephew
54. If P + Q means P is the brother of Q; P X Q means P is the mother of Q; and P / Q means P is the sister of Q, which of the following would mean R is the uncle of S?
- a. R X P + S                      b. R X S + P  
c. R + P X S                      d. R / P + S
55. For the Assertion (A) and Reason (R), choose the correct alternative.  
Assertion (A): Carbohydrates provide energy to the body.  
Reason (R): Obesity is caused by excessive intake of carbohydrates.
- a. Both A and R are true and R is the correct explanation of A.  
b. Both A and R are true but R is not the correct explanation of A.  
c. A is true but R is false.  
d. A is false but R is true.



56. For the Assertion (A) and Reason (R), choose the correct alternative.

Assertion (A): Eskimos reside in igloos.

Reason (R): No other material except snow is available.

- a. Both A and R are true and R is the correct explanation of A.
- b. Both A and R are true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true.

57. The question given below is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.

Statement : Should military service be made compulsory in our country?

Arguments : I. No. It is against the policy of non-violence.

II. Yes. Every citizen should protect his country.

- a. Only argument I is strong.
- b. Only argument II is strong
- c. Either I or II is strong
- d. Neither I nor II is strong

58. The question given below is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.

Statement : Should loyalty be the only criterion for promotion in any organisation?

Arguments : I. Yes. Without loyal men, no organisation can function.

II. No. It leads to hypocrisy and partiality,

- a. Only argument I is strong.
- b. Only argument II is strong
- c. Either I or II is strong
- d. Neither I nor II is strong

59. A statement is given followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. Consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Statement : A's advice to B – "Go to Jammu via Amritsar - the shortest route."

Assumptions : I. B wishes to go to Jammu.

II. A gives advice to everybody.

- a. Only assumption I is implicit
- b. Only assumption II is implicit
- c. Either I or II is implicit
- d. Neither I nor II is implicit







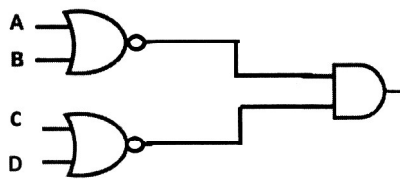
72. How much percent passed in 1st division in 2002?
- a. 20%      b. 34%      c.  $14\frac{2}{7}\%$       d.  $11\frac{13}{17}\%$
73. What was the pass percentage in 2002?
- a. 65%      b. 70%      c. 82.3%      d. 77.5%
74. In which year the college had the best result for B.Sc.?
- a. 2002      b. 2003      c. 2004      d. Both 2002 and 2003
75. What is the number of third divisioners in 2004?
- a. 165      b. 70      c. 75      d. 65

## Section D - Computer Awareness

### [Questions No. 76 to 100]

76. With reference to Space science, what is Orion?
- a. Dwarf planet      b. Constellation  
c. Satellite      d. Star
77. What is the new name of Google's AI chatbot Bard?
- a. LIBRA      b. GEMINI      c. LEO      d. ARIES
78. When is National Science Day celebrated?
- a. 5th February      b. 28th February  
c. 5th September      d. 14th September
79. .... is the weak zone of earth's crust.
- a. Cosmic      b. Mimic      c. Seismic      d. Anaemic
80. The speaker of the Lok Sabha can ask a member of the house to stop speaking and let another member speak. This phenomenon is known as .....
- a. Yielding the floor      b. Calling attention motion  
c. Crossing the floor      d. Point of order
81. The smallest unit of data in a computer is .....
- a. byte      b. bit      c. nibble      d. word
82. What is the extension of the file created and saved in notepad?
- a. .doc      b. .txt      c. .exe      d. .bmp

83. Which of the following is not a type of computer code?
- American Standard Code for Information Interchange.
  - Binary Coded Decimal.
  - Open Systems Interconnection Code.
  - Extended Binary Coded Decimal Interchange Code.
84. Which of the following is a non-positional number system?
- Decimal
  - Octal
  - Roman
  - Hexadecimal
85. Which of the following is an example of a binary number?
- 6AB
  - 2120
  - 1011
  - AB11
86. Conversion of  $(43)_8$  to binary is .....
- 110011
  - 100011
  - 110001
  - 100001
87. .... gate acts as an inverter.
- OR
  - AND
  - NOT
  - None of the above
88. Which Boolean expression correctly represents the logic circuit diagram?



- $(A + B) \cdot (C + D)$
  - $(A \cdot B)' + (C \cdot D)'$
  - $A \cdot B + C \cdot D$
  - $(A + B)' \cdot (C + D)'$
89. What is the value of  $F'$  where  $F = AB + C'D' + B'D$ ?
- $A'B' + CD + BD'$
  - $(A+B)(C'+D')(B+D')$
  - $(A'+B')(C+D)(B+D')$
  - $(A+B)(C'+D')(B'+D)$
90.  $(A+B)(A'B') = \dots\dots\dots$
- 1
  - 0
  - AB
  - $A'B'$
91. How is J-K flip-flop made to toggle?
- $J = 0, K = 0$
  - $J = 1, K = 0$
  - $J = 0, K = 1$
  - $J = 1, K = 1$
92. D flip-flop can be made from a J-K flip-flop by making .....
- $J = K$
  - $J = K = 1$
  - $J = 0, K = 1$
  - $J = K'$

93. To copy a process from memory to disk to allow space for other processes is called .....
- a. Deadlock    b. Swapping    c. Paging    d. Page Fault
94. Which of the following is not an Operating System?
- a. DOS    b. Windows    c. UNIX    d. MS Office
95. Which type of software does the job of merging the records from two files into one?
- a. Compiler    b. Utility Software  
c. Operating System    d. Networking System
96. Which of the following cannot be a variable name in C?
- a. friend    b. class  
c. volatile    d. export
97. What is the final value of x in the following code?
- ```
#include <stdio.h>
void main()
{
    int x;
    x = 2 * 17 / 4 + 9;
    printf("%d",x);
}
```
- a. 17.5    b. 17  
c. 18.5    d. 18
98. What is the range for integer values in a 16-bit compiler?
- a. -32767 to 32768    b. -32768 to 32767  
c. -30000 to 30000    d. -32678 to 32678
99. Which of the following is not a library function in C?
- a. printf()    b. scanf()  
c. fprintf()    d. print()
100. What happens when you try to access an array variable outside its size?
- a. 0 value is returned    b. Garbage value is returned  
c. 1 value is returned    d. Compiler error is thrown

**Rough Work**

SAMPLE