

MCA MODEL TEST PAPER

1. Which of the following is an input device?

- a) Printer
- b) Monitor
- c) Keyboard
- d) Speaker

2. What is the primary function of an output device?

- a) To accept user input
- b) To process data
- c) To display or present information
- d) To store data

3. What does RAM stand for?

- a) Read Access Memory
- b) Random Access Memory
- c) Ready Application Memory
- d) Run Access Module

4. Which memory is non-volatile?

- a) RAM
- b) ROM
- c) Cache
- d) Registers

5. What type of memory is used to store frequently accessed data for quick retrieval?

- a) RAM
- b) Cache
- c) ROM
- d) Hard Disk

6. What is the binary equivalent of decimal number 10?

- a) 1100
- b) 1010
- c) 1110
- d) 1001

7. How many bits are in a byte?

- a) 4
- b) 8
- c) 16
- d) 32

8. Which of the following is not an operating system?

- a) Windows
- b) Linux
- c) MS Office
- d) macOS

9. What does multitasking mean in an operating system?

- a) Running multiple programs simultaneously
- b) Storing multiple files
- c) Downloading files from the internet
- d) Printing multiple documents at once

10. Which file system is used by Windows operating systems?

- a) NTFS
- b) ext4
- c) FAT32
- d) Both a and c

11. What does LAN stand for?

- a) Local Access Network
- b) Local Area Network
- c) Large Area Network
- d) Long Access Network

12. Which type of network connects computers over long distances?

- a) LAN
- b) WAN
- c) PAN
- d) MAN

13. Which protocol is used for browsing websites?

- a) FTP
- b) HTTP
- c) SMTP
- d) SSH

14. What does TCP/IP stand for?

- a) Transfer Control Protocol/Internet Protocol
- b) Transmission Control Protocol/Internet Protocol
- c) Transmit Connection Protocol/Internet Protocol
- d) Transmission Connection Protocol/Internet Protocol

15. Which symbol is used to terminate a statement in C programming?

- a) ,
- b) :
- c) ;
- d) .

16. Which of the following is not a valid data type in C?

- a) int
- b) char
- c) float
- d) real

17. What is the purpose of a flowchart?

- a) To design a database
- b) To represent the flow of a program visually
- c) To write pseudocode
- d) To test a program

18. What is the first step in writing an algorithm?

- a) Write pseudocode
- b) Define the problem
- c) Test the program
- d) Create a flowchart

19. Which device is used to connect a computer to a network?

- a) Router
- b) Mouse
- c) Printer
- d) Scanner

20. What is the main function of an operating system?

- a) Manage hardware and software resources
- b) Perform calculations
- c) Store data
- d) Edit text

21. Choose the correct sentence:

- a) She don't know the way.
- b) She doesn't knows the way.
- c) She doesn't know the way.
- d) She not knows the way.

22. Fill in the blank with the correct preposition:

He has been working _____ this project for weeks.

- a) in
- b) at
- c) on
- d) of

23. Choose the word that best matches the meaning of the following:

"Luminous"

- a) Dull
- b) Bright
- c) Heavy
- d) Weak

24. Select the correct word to complete the sentence:

The student was _____ to learn new skills.

- a) eager
- b) reluctance
- c) hesitating
- d) ignorant

25. Read the passage and answer:

"The early bird catches the worm."

What does this phrase mean?

- a) Waking up early is bad.
- b) Being early or prepared leads to success.
- c) Birds eat worms in the morning.
- d) Procrastination is helpful.

26. What is the main idea of the following sentence?

"Global warming is a pressing issue that affects all living beings on Earth."

- a) Earth is warm.
- b) Global warming impacts everyone.
- c) Living beings can fix global warming.
- d) Global warming has no impact.

27. Choose the synonym for the word:

"Abundant"

- a) Scarce
- b) Plentiful
- c) Rare
- d) Insufficient

28. Choose the antonym for "optimistic":

- a) Hopeful
- b) Joyful
- c) Pessimistic
- d) Grateful

29. Arrange the sentences in a logical order:

1. They became best friends.
2. Sarah met John at a park.
3. They found they had similar interests.
4. They talked for hours.

- a) 1, 2, 3, 4
- b) 2, 4, 3, 1
- c) 4, 3, 2, 1
- d) 3, 1, 4, 2

30. Arrange the sentences:

1. The rain poured down heavily.
2. The sky was dark and cloudy.
3. Everyone rushed to take cover.
4. Lightning struck a tree.

- a) 1, 2, 3, 4
- b) 2, 1, 4, 3
- c) 3, 2, 4, 1
- d) 2, 4, 1, 3

31. Arrange the jumbled words to form a meaningful sentence:

"quick / brown / the / fox / jumped / over / the / lazy / dog"

- a) The brown quick dog jumped over the lazy fox.
- b) The lazy dog jumped over the quick brown fox.
- c) The quick brown fox jumped over the lazy dog.
- d) The fox lazy dog jumped over the quick brown.

**32. Arrange the jumbled words:
"incredible / she / is / talent / an"**

- a) She is an incredible talent.
- b) Incredible talent she is an.
- c) Is she incredible talent an.
- d) Talent an incredible is she.

33. Spot the error:

He dont know the answer to this question.

- a) He don't
- b) the answer
- c) to this
- d) question

34. Spot the error:

Each of the students are responsible for their own assignments.

- a) Each of
- b) the students
- c) are responsible
- d) their own assignments

35. What does the idiom "break the ice" mean?

- a) To shatter ice
- b) To end a conflict
- c) To initiate conversation in a social setting
- d) To overcome fear

36. What does "raining cats and dogs" mean?

- a) Light rain
- b) No rain
- c) Heavy rain
- d) Rain with animals

37. Choose the correct phrase to complete the sentence:

He was fired because he was caught _____ red-handed.

- a) to steal
- b) stealing
- c) stole
- d) steal

38. Fill in the blank:

He is well-known for his ability to think on his _____.

- a) toes
- b) heels
- c) fingers
- d) knees

39. Choose the correct word to replace the underlined portion:

He works hardly to complete his tasks.

- a) hardly works
- b) works hard
- c) is hardly working
- d) hard works

40. Complete the idiom:

Don't count your chickens _____ they hatch.

- a) after
- b) unless
- c) until
- d) when

41. If in a certain code, "MANGO" is written as "ODQIS," how is "APPLE" written?

- a) CRRNH
- b) DRRON
- c) CQRMH
- d) BRRNF

42. In a code language, "ROSE" is written as "QPTR." How will "LILY" be written?

- a) KHMx
- b) JHKX
- c) MKNZ
- d) KHKX

43. A person walks 10 meters north, then turns east and walks 5 meters, then turns south and walks 10 meters. How far is he from the starting point?

- a) 5 meters
- b) 10 meters
- c) 15 meters
- d) 0 meters

44. If you are facing east and turn 90 degrees clockwise, which direction will you be facing?

- a) North
- b) South
- c) West
- d) East

45. Pointing to a photograph, Ram said, "This person is my mother's only son's daughter." How is the person in the photograph related to Ram?

- a) Niece
- b) Daughter
- c) Sister
- d) Cousin

46. If A is the brother of B, B is the daughter of C, and C is the husband of D, how is A related to D?

- a) Son
- b) Brother
- c) Father
- d) Uncle

47. Statement: All apples are fruits. All fruits are healthy.

Conclusion 1: All apples are healthy.

Conclusion 2: Some healthy things are fruits.

- a) Only Conclusion 1 follows
- b) Only Conclusion 2 follows
- c) Both follow
- d) Neither follows

48. Statement: No pencils are pens. Some pens are erasers.

Conclusions:

1.No pencils are erasers.

2. Some erasers are pens.

3. Which of the conclusions logically follows the given statement?

- a) Only conclusion 1 follows
- b) Only conclusion 2 follows
- c) Both conclusions follow
- d) Neither conclusion follows

49. If 3 pencils cost ₹15, how much will 7 pencils cost?

- a) ₹30
- b) ₹35
- c) ₹40
- d) ₹25

50. A number is doubled and then 10 is subtracted from it. If the result is 26, what is the original number?

- a) 13
- b) 18
- c) 36
- d) 22

51.If a pie chart shows 20% of a population prefers coffee, and the total population is 500, how many people prefer coffee?

- a) 100
- b) 80
- c) 50
- d) 20

52. A bar graph shows that a shop sells 40 apples, 50 bananas, and 30 oranges daily. What is the total number of fruits sold in two days?

- a) 240
- b) 180
- c) 120
- d) 160

53. If two trains are running at the same speed in opposite directions on parallel tracks and each train is 150 meters long, how much time will they take to cross each other if their speed is 60 km/h?

- a) 10 seconds
- b) 15 seconds
- c) 12 seconds
- d) 18 seconds

54. A man has 5 coins in his pocket, each with a different value. How many different sums can he make using one or more of these coins?

- a) 5
- b) 10
- c) 31
- d) 25

55. What is the next step in a flowchart after "Start" if the condition is "Input is greater than 10"?

- a) Print "Valid"
- b) Print "Invalid"
- c) End
- d) None of these

56. Which symbol is used to represent a decision in a flowchart?

- a) Oval
- b) Rectangle
- c) Diamond
- d) Circle

57. Which number comes next in the sequence: 2, 6, 12, 20, 30, ...?

- a) 40
- b) 42
- c) 44
- d) 46

58. Identify the word that does not belong in the group:

Pen, Pencil, Eraser, Notebook, Chair

- a) Pen
- b) Pencil
- c) Eraser
- d) Chair

59. What is the missing number in this series: 4, 9, 16, 25, ?

- a) 30
- b) 35
- c) 36
- d) 39

60. Solve the puzzle: What comes next in the series: A, C, F, J, O, ...?

- a) U
- b) V
- c) T
- d) W

61. Solve for x: $3x+5=14$

- a) 3
- b) 4
- c) 5
- d) 6

62. If $x^2-5x+6=0$, find the roots.

- a) 2 and 3
- b) -2 and -3
- c) 5 and 6
- d) None of these

63. Simplify: $(x+3)^2-(x-3)^2$

- a) $12x$
- b) $6x$
- c) $4x$
- d) $8x$

64. Solve for y: $2y+7=3y-5$

- a) -12
- b) 12
- c) 6
- d) -6

65. Find the value of x if $2x^2=18$.

- a) 3
- b) -3
- c) ± 3
- d) 6

66. Find the distance between points (2,3) and (5,7).

- a) 5
- b) 6
- c) 7
- d) 8

67. What is the slope of the line joining points (2,3) and (4,7)?

- a) 2
- b) 4
- c) 1
- d) -2

68. If the equation of a line is $2x+3y=6$, what is its y -intercept?

- a) 3
- b) 2
- c) 6
- d) None of these

69. Find the midpoint of the line segment joining (2,4) and (6,8).

- a) (4,6)
- b) (3,5)
- c) (5,7)
- d) (2,2)

70. The equation of a circle is $x^2+y^2=25$. What is its radius?

- a) 5
- b) 10
- c) 25
- d) 15

71. Find the derivative of $f(x)=x^2+3x$.

- a) $2x+3$
- b) $3x^2+2$
- c) x^2-3
- d) None of these

72. What is the integral of $f(x)=2x$?

- a) x^2+C
- b) $2x+C$
- c) $x+C$
- d) None of these

73. If $f(x)=x^2$, find $f(3)$.

- a) 6
- b) 3
- c) 9
- d) 1

74. Evaluate: $\int 3x^2 dx$.

- a) x^3+C
- b) x^3-C
- c) $3x+C$
- d) x^3

75. Find the slope of the tangent to the curve $y=x^2$ at $x=2$.

- a) 2
- b) 4
- c) 8
- d) 6

76. A bag contains 3 red and 5 blue balls. What is the probability of picking a red ball?

- a) $\frac{3}{8}$
- b) $\frac{5}{8}$
- c) $\frac{1}{2}$
- d) $\frac{3}{5}$

77. A coin is tossed. What is the probability of getting heads?

- a) $\frac{1}{2}$
- b) $\frac{1}{4}$
- c) $\frac{3}{4}$
- d) 1

78. If $A=\{1,2,3\}$ and $B=\{3,4,5\}$, what is $A \cap B$?

- a) $\{3\}$
- b) $\{1,2,3\}$
- c) $\{4,5\}$
- d) None of these

79. What is the union of $A=\{1,2\}$ and $B=\{2,3\}$?

- a) $\{1,2,3\}$
- b) $\{1\}$
- c) $\{2\}$
- d) $\{1,3\}$

80. If $p:2+2=4$, which of the following is the negation of p ?

- a) $2+2\neq 4$
- b) $2+2=4$
- c) $2+2=5$
- d) None of these

81. Which is the largest river in the world by volume?

- a) Nile
- b) Amazon
- c) Yangtze
- d) Mississippi

82. In which continent is the Sahara Desert located?

- a) Asia
- b) Africa
- c) Australia
- d) North America

83. What is the capital of Canada?

- a) Toronto
- b) Ottawa
- c) Vancouver
- d) Montreal

84. Who was the first Mughal emperor of India?

- a) Babur
- b) Akbar
- c) Humayun
- d) Jahangir

85. When did India gain independence from British rule?

- a) 1945
- b) 1947
- c) 1950
- d) 1952

86. Who wrote the book Discovery of India?

- a) Mahatma Gandhi
- b) Jawaharlal Nehru
- c) Rabindranath Tagore
- d) Subhas Chandra Bose

87. Which part of the Indian Constitution deals with Fundamental Rights?

- a) Part II
- b) Part III
- c) Part IV
- d) Part V

88. How many schedules are there in the Indian Constitution?

- a) 10
- b) 11
- c) 12
- d) 13

89. Who is known as the father of the Indian space program?

- a) Vikram Sarabhai
- b) Homi Bhabha
- c) APJ Abdul Kalam
- d) Satish Dhawan

90. Which planet is known as the "Red Planet"?

- a) Mercury
- b) Venus
- c) Mars
- d) Jupiter

91. Which country hosted the G20 Summit in 2024?

- a) United States
- b) Brazil
- c) Japan
- d) United Kingdom

92. Who is the current Secretary-General of the United Nations?

- a) António Guterres
- b) Ban Ki-moon
- c) Kofi Annan
- d) Javier Pérez de Cuéllar

93. Who won the 2024 Nobel Prize in Physics?

- a) John Hopfield and Geoffrey Hinton
- b) Albert Einstein and Richard Feynman
- c) James Peebles and Michel Mayor
- d) Andre Geim and Konstantin Novoselov

94. Which film won the Best Picture award at the 2023 Oscars?

- a) The Banshees of Inisherin
- b) Everything Everywhere All at Once
- c) Top Gun: Maverick
- d) Avatar: The Way of Water

95. Which team won the 2024 ICC Men's Cricket World Cup?

- a) India
- b) England
- c) Australia
- d) Pakistan

96. Who won the 2024 Wimbledon Men's Singles title?

- a) Novak Djokovic
- b) Carlos Alcaraz
- c) Daniil Medvedev
- d) Roger Federer

97. Who is the current captain of the Indian women's cricket team?

- a) Mithali Raj
- b) Smriti Mandhana
- c) Harmanpreet Kaur
- d) Jhulan Goswami

98. What is the theme of World Environment Day 2024?

- a) "Beat Plastic Pollution"
- b) "Land Restoration, Desertification, and Drought Resilience"
- c) "Biodiversity Conservation for the Future"
- d) "Climate Action Now"

99. Which Indian state recently became the first to implement a Digital Personal Data Protection Act ?

- a) Karnataka
- b) Tamil Nadu
- c) Maharashtra
- d) Telangana

100. Who is the first Indian to win the Booker Prize?

- a) Salman Rushdie
- b) Arundhati Roy
- c) Kiran Desai
- d) Jhumpa Lahiri