

Seat No.	
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**ENT - 75**

**Total No. of Pages : 24**

**M. Sc. Entrance Examination, 2024**  
**COMPUTER SCIENCE**  
**Sub. Code: 58712**

**Day and Date : Monday, 29-07-2024**

**Total Marks : 100**

**Time : 04.30 p.m. to 06.00 p.m.**

**Instructions :**

- 1) All questions are compulsory.
- 2) Each question carries 1 mark.
- 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
- 4) Follow the instructions given on OMR sheet.
- 5) Rough work shall be done on the sheet provided at the end of question paper.

1. The theme of "World Population Day 2024" is

- a) To Leave No One Behind, Count Everyone
- b) Unleashing the power of gender equality: Uplifting the voices of women  
and girls to unlock our world's infinite possibilities
- c) The impact of the Covid-19 pandemic on fertility
- d) A world of 8 billion: Towards a resilient future for all - Harnessing  
opportunities and ensuring rights and choices for all

2. In which city, India is hosting the UNESCO World Heritage Committee meeting for the first time?
  - a) Mumbai
  - b) Bengaluru
  - c) New Delhi
  - d) Hyderabad
3. Dengue (break-bone fever) is transmitted by which type of mosquitoes?
  - a) Anopheles mosquitoes
  - b) Aedes mosquitoes
  - c) Culex mosquitoes
  - d) Culiseta mosquitoes
4. .... is first temporary venue to have ever been used during an ICC T20 World Cup in 2024.
  - a) Trinidad: Brian Lara Stadium
  - b) Dallas: Grand Prairie Stadium
  - c) Barbados: Kensington Oval
  - d) New York: Nassau County International Cricket Stadium
5. Which state government has recently decided to ban the sale of high-caffeine energy drinks near schools?
  - a) Maharashtra
  - b) Uttar Pradesh
  - c) Rajasthan
  - d) Bihar

6. Which space organization recently developed Computational Fluid Dynamics

(CFD) software named 'PraVaHa'?

- a) ESA
- b) JAXA
- c) ISRO
- d) CNSA

7. What is "Rabbit RI"?

- a) New species of Rabbit
- b) AI Device
- c) Galaxy
- d) Exoplanet

8. .... airport recently became the first in the country to introduce a self-service baggage drop system.

- a) Rajiv Gandhi International Airport, Hyderabad
- b) Sardar Vallabhbhai Patel International Airport, Ahmedabad
- c) Indira Gandhi International Airport, New Delhi
- d) Netaji Subhash Chandra Bose International Airport, Kolkata

9 Shigmo festival is celebrated in which state?

- a) Karnataka
- b) Madhya Pradesh
- c) Odisha
- d) Goa

10. Nhava Sheva Port is located in ..... state.

- a) Maharashtra
- b) Gujarat
- c) Kerala
- d) Tamil Nadu

11. Which Indian has won the 2023 Ramon Magsaysay award?

- a) Ravi Kannan                      b) Gautam Adani
- c) Ghazal Alagh                    d) Kailash Vidyarthi

12. Who wrote the book "Origin of Species"?

- Charles Dickens
- Shakespeare
- Charles Darwin
- Samuel Taylor Coleridge

13. Which of the following rights is a political right?

- a) Right to Live
- b) Right to Education
- c) Right to Freedom of Expression
- d) Right to Vote

14. Purple Revolution is associated with which one of the following?

- a) Lavender                      b) Sunflower
- c) Honey                         d) Cotton

15. The Rapid Action Force (RAF) is a specialized wing of .....

- a) Indian Army                      b) Indian Navy
- c) Central Reserve Police Force    d) Assam Rifles

16. Which word does NOT belong with the others?

- a) Circumference
- b) Area
- c) Variable
- d) Quadrilateral

17. How many times do the hands of a clock coincide in 24 hours?

- a) 22
- b) 24
- c) 26
- d) 28

18. In a maths class Riki divides 60 chalk sticks by half and adds fifteen. What answer does she show the Class?

- a) 129 chalk sticks
- b) 130 chalk sticks
- c) 135 chalk sticks
- d) 145 chalk sticks

19. Pen is to poet as needle is to .....

- a) Tailor
- b) Thread
- c) Sewing
- d) Button

20. The day before yesterday was Saturday. What day will it be the day after tomorrow?

- a) Tuesday
- b) Wednesday
- c) Thursday
- d) Friday

21. If in a certain language, NOIDA is coded as OPJEB, how is DELHI coded in that language?

- a) CDKGH                      b) EFMIJ  
c) FGNIJK                  d) IHLEED

22. Statements: A school has 500 students. 50% of them are boys.

## Conclusions:

- I) The school has 250 girls.
- II) Boys are the majority in the school.

- Only conclusion I follows.
- Only conclusion II follows.
- Both I and II follows.
- None of above

23. CUP : LIP :: BIRD : ?

- a) GRASS                      b) FOREST
- c) BEAK                      d) BUSH

24. Pointing to a man, Rohan said, "His only brother is the father of my daughter's father." How is the Rohan related to the man?

- a) Father                      b) Grandson  
c) Uncle                     d) Nephew

25. In a certain code language 'RISE' is written as '8419', and 'MEAL' is written as 5927". How is 'RAIL' written in that code?

- a) 8429                      b) 8124
- c) 8247                      d) 2948

**For questions Q.26 and Q.27:** Refer to the alphanumeric series given below and answer the following questions:

**A\*591N & E@ #U1&**

26. How many vowels in the above arrangement are preceded by a symbol?

- a) One                                      b) Two
- c) Three                                    d) None

27. Which is the second element to the left of the sixth element from the right?

- a) &                                      b) @  
c) N                                        d) E

28. Pointing to a photograph of a boy Mr.Ram said, "He is the son of the only son of my mother." How is Mr Ram related to that boy?

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

**29. Statements:**

1. All boys are honest.                      II. Sachin is a boy.

**Conclusions:**

1. Sachin is a boy.                      II. All honest persons are boys.

- a) If only conclusion I follows
- b) If only conclusion II follows
- c) If either I or II follows
- d) If neither I nor II follows

30. While sitting in a park, you observe that a smart young man comes to the place on a scooter, leaves it there and goes away with someone else on a motorbike. You would:

- a) Inform the police at the nearby booth.
- b) Chase the person.
- c) Remain engaged in your enjoyment.
- d) Call back the person.

31. War : Death :: Smoke : ?

- a) Cigarette                                      b) Fire
- c) Burning                                        d) Pollution



32. In each of the following questions, the two expressions on either side of the sign (-) will have the same value if two terms on either side or on the same side are interchanged.

$$8 \div 2 \times 5 - 11 + 9 = 6 \times 2 - 5 + 4 \div 2$$

- a) 5, 9
- b) 8, 5
- c) 9, 6
- d) 11, 5

33. Arrange the given words in alphabetical order and tick the one that comes at the second place.

- a) Interfere
- b) Interlude
- c) Intestine
- d) Invent

34. A river always has .....

- a) Boats
- b) Banks
- c) Tributaries
- d) Fishes

35. A hospital always has .....

- a) Bed
- b) Doctor
- c) Room
- d) Nurse

36 The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is:

- a) 200 m
- b) 225 m
- c) 245 m
- d) 250 m

37. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same in 2 days, the time taken by 15 men and 20 boys in doing the same type of work will be:
- a) 4 days                                  b) 5 days
- c) 6 days                                  d) 7 days
38. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?
- a) 3    b) 4
- c) 5    d) 6
39. A man buys a cycle for Rs. 1400 and sells it at a loss of 15%. What is the selling price of the cycle?
- a) Rs. 1090                              b) Rs. 1160
- c) Rs. 1190                              d) Rs. 1202
40. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, the how old is B?
- a) 7    b) 8
- c) 9    d) 10
41. Six years ago, the ratio of the ages of Kunal and Sagar was 6: 5. Four years hence, the ratio of their ages will be 11: 10. What is Sagar's age at present?
- a) 16 years                              b) 18 years
- c) 20 years                              d) cannot be determined.

42. The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?
- a) 0                                      b) 1
- c) 10                                      d) 19
43. A car owner buys petrol at Rs.7.50, Rs. 8 and Rs. 8.50 per litre for three successive years. What approximately is the average cost per litre of petrol if he spends Rs. 4000 each year?
- a) Rs. 7.98                                  b) Rs. 8
- c) Rs. 8.50                                  d) Rs. 9.
44. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?
- a) 810                                      b) 1440
- c) 2880                                      d) 50400
45. In how many ways can the letters of the word 'LEADER' be arranged?
- a) 72                                        b) 144
- c) 360                                        d) 720
46. 39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work?
- a) 10                                        b) 13
- c) 14                                        d) 15

47. If a quarter kg of potato costs 60 paise, how many paise will 200 gm cost?
- a) 48 paise                                      b) 54 paise
- c) 56 paise                                      d) 72 paise
48. A man invests some money partly in 9% stock at 96 and partly in 12% stock at 120. To obtain equal dividends from both, he must invest the money in the ratio:
- a) 3:4    b) 3:5
- c) 4:5    d) 16: 15
49. By investing Rs. 1620 in 8% stock, Michael earns Rs. 135. The stock is then quoted at:
- a) Rs. 80    b) Rs. 96
- c) Rs. 106    d) Rs. 108
50. Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?
- a) 9    b) 10
- c) 12    d) 20
51. A man completes a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.
- a) 220 km    b) 224 km
- c) 230 km    d) 234 km

52 An automobile financier claims to be lending money at simple interest, but he includes the interest every six months for calculating the principal. If he is charging an interest of 10%, the effective rate of interest becomes:

- a) 10%                      b) 10.25%
- c) 10.5%                  d) None of these

53. A starts business with Rs. 3500 and after 5 months, B joins with A as his partner. After a year, the profit is divided in the ratio 2: 3. What is B's contribution in the capital?

- a) Rs. 7500                      b) Rs. 8000
- c) Rs. 8500                      d) Rs. 9000

54. A and B started a partnership business investing some amount in the ratio of 3: 5. C joined then after six months with an amount equal to that of B. In what proportion should the profit at the end of one year be distributed among A, B and C?

- a) 3:5:2                                      b) 3:5:5
- c) 6:10:5                                      d) None of these

55. Today is Monday. After 61 days, it will be:

- a) Wednesday                      b) Saturday  
c) Tuesday                          d) Thursday

56. I think he took the criticism heart"?

- a) to
- b) in
- c) about
- d) of

57. The Chairman is ill and we'll have to the meeting for a few days.

- a) Put on
- b) Put of
- c) Put away
- d) Put off

58. My first lesson. forgiveness came from my mother.

- a) upon
- b) about
- c) in
- d) on

59. I'm sure of it as you are.

- a) quite
- b) as
- c) perfectly
- d) very

60. The teacher made the naughty boy

- a) Tiptoe
- b) Tiptoes
- c) To Tiptoe
- d) None of these

61. The police for the robber for long but they have failed to find him so far.

- a) Have looked
- b) Have been looking
- c) Has looked
- d) Has been looking

62. I'll come to meet you at the station in my car you do not have to walk to my house.

- a) So that                                      b) In order  
c) That    d) Because

63. Rubi talks a lot, doesn't she? Yes, although there no reason for .....

- a) So much have talking.
- b) Her so much talking
- c) Iler talking so much
- d) Talking her so much

64. I would like to thank you behalf of all of us?

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

65. He is jealous her success?

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

66. As me; I will be happy to lend a hand?

- a) of                                      b) in  
c) about                                  d) for

67. He was accused theft?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) on |

68. What did you make the lecture?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) on |

69. Unfortunately, we had to cancel it owing the bad weather?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) to |

70. It was kind you to help?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) on |

71. She cares the environment?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) on |

72. He was embarrassed because everybody was laughing him?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) at |

73. Green pepper is very rich vitamin C?

- |          |       |
|----------|-------|
| a) of    | b) in |
| c) about | d) on |



74. Please wait for me. I will be finished five or ten minutes.

- a) at
- b) in
- c) by
- d) from

75. The railway track runs the river.

- a) over
- b) across
- c) by
- d) on

76. Which feature of Java makes it possible to run a Java program on different platforms?

- a) Platform-Independent
- b) Object-Oriented
- c) Syntax
- d) Memory Management

77. Which keyword is used for inheritance in Java?

- a) Implements
- b) extends
- c) super
- d) inherit

78. Which driver is called as thin-driver in JDBC?

- a) Type-3 driver
- b) Type-2 driver
- c) Type-1 driver
- d) Type-4 driver

79. What is used to execute parameterized query?

- a) Statement interface
- b) PreparedStatement interface
- c) ResultSet interface
- d) None of these

80. What is a servlet in Java?

- a) A programming language
- b) A scripting language
- c) A server-side technology for Java web applications
- d) A database management system

81. What is the purpose of the PATH environment variable in Java?

- a) To locate the Java compiler
- b) To locate Java libraries
- c) To store Java bytecode
- d) To Optimize Java Code

82. What is the extension of compiled java classes?

- a) .txt
- b) .js
- c) class
- d) java

83. Which one of the following is not an access modifier?

- a) void
- b) Protected
- c) Public
- d) Private

84. Which of the following is the correct way of importing an entire package

"pkg"?.

- a) import pkg.
- b) Import pkg.
- c) import pkg.\*
- d) Import pkg.\*

85. Which of this method is used to implement Runnable interface?

- a) stop()
- b) run()
- c) runThread()
- d) stop Thread()

86. .... is a responsible for execution of all .NET programs.

- a) CLS
- b) CLR
- c) GC
- d) all of these

87. In ASP.NET web application configuration settings are defined in .....

- a) App.config
- b) Machine.config
- c) Web.config
- d) System.config

88. When does Garbage collection run?

- a) When application is running low of memory
- b) It runs random
- c) When application is running for more than 15 minutes
- d) None of these

89. Which of the following server control shows data in tabular format and allows sorting, paging, edit, delete each record?

- a) ListBox
- b) GridView
- c) Repeater
- d) None of these

90. To accept input value by the user in console application ..... is used

- a) Console.Read();
- b) Console.ReadKey();
- c) Console.ReadLine();
- d) Console.ReadInput();

91. option of is command is used to view hidden files from Linux operating system.

- a) ls -l
- b) ls -h
- c) ls -a
- d) ls -k

92. The user password is stored in directory of Linux operating system.

- a) /etc/passwd
- b) /root/password
- c) /etc/password
- d) /root-passwd

93. In Linux, command is used to print the file.

- a) print
- b) lp
- c) wc
- d) pg

94. Working directory can be changed by using Linux command.

- a) cmd
- b) chdr
- c) cdr
- d) ed

95. In Linux, TCP/IP Protocol is used for remote terminal connection service.

- a) FTP
- b) UDP
- c) TELNET
- d) RARP

96. The Python files containing python definitions and statements are called as

- a) Sequence
- b) Modules
- c) Synonymy
- d) Cluster

97. command is used to execute Python program from command prompt.

- a) execute
- b) run
- c) py
- d) compile

98. is used to indicate a code block in Python.

- a) Indentation
- b) Brackets
- c) Key
- d) Dollar

99. From the following type of looping structure is not supported in Python.

- a) while
- b) do-while
- c) for
- d) none of these

100. character is used to give single-line comments in Python.

- a)//
- b)#
- c)\$
- d)/\*

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**- Rough Work -**

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