

Seat No.

Total No. of Pages : 26

P.G. Entrance Examination, 2024**M.Sc. (Computer Science),****Subject Code : 58712**

Day and Date : Friday, 28-Jun-2024**Total Marks : 100****Time : 04.30 pm to 06.00 pm**

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.
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Q1. The theme of World Water Day 2024 is _____

- a) Water for Peace
- b) Accelerating Change
- c) Groundwater: Making the Invisible Visible
- d) Valuing Water

Q2. What is the meaning of G20?

- a) Grand 20 nations
- b) Great 20 countries
- c) Group of 20
- d) None of these

- Q3. World Heritage Week is celebrated from _____
- a) 15th-21st November
 - b) 14th-20th November
 - c) 15th-21st December
 - d) 4th-100th March
- Q4. Who is called as father of Indian statistics?
- a) Prof. Prasanta Chandra Mahalanobis
 - b) Aryabhatta
 - c) Sir Jagadish Chandra Bose
 - d) Dr. William Roxburgh
- Q5. Where is the headquarter of the Securities and Exchange Board of India (SEBI)?
- a) Bangalore.
 - b) Chandigarh.
 - c) New Delhi.
 - d) Mumbai.
- Q6. Who is the author of the book 'Freedom Behind Bars'?
- a) Sheikh Abdullah
 - b) Kiran Bedi
 - c) Rishi Arvind Ghosh
 - d) Nelson Mandela

- Q7. Which country won the 'Women's Asian Champions Hockey Trophy in 2023?
- a) Bangladesh
 - b) Japan
 - c) India
 - d) China
- Q8. Who won the Padma Shri award in 2024?
- a) Shri Uday Vishwanath Deshpande
 - b) Shri Manohar Krishana Dole
 - c) Shri Chandrashekhar Mahadeorao Meshram
 - d) All of these
- Q9. Which state implements the 'Nanaji Deshmukh Krushi Sanjivani Prakalp'?
- a) Assam
 - b) Gujarat
 - c) Maharashtra
 - d) West Bengal
- Q10. ISRO's Flight Test Vehicle Abort Mission-1 (TV-D1) is a crucial test for which mission?
- a) Aditya L-1
 - b) Mangalyaan
 - c) Chandrayaan-3
 - d) Gaganyaan

- Q11. Who had published the first dictionary of Marathi in devanagari script?
- a) William Carey
 - b) James Thomas Molesworth
 - c) Thomas Candy
 - d) Robert Brown
- Q12. During Quit India movement, in which of the following districts a parallel government was formed
- a) Ahmed Nagar
 - b) Satara
 - c) Sangli
 - d) Pune
- Q13. Which of the following rivers in Maharashtra flows through a rift valley
- a) Godavari
 - b) Ghatprabha
 - c) Tapi
 - d) Krishna
- Q14. The Maharashtra in soil is very rich in which of the following said nutrient element?
- a) Nitrogen
 - b) Organic Carbon
 - c) Phosphorus
 - d) Both Nitrogen and Organic Carbon
- Q15. The state tree of Maharashtra is _____
- a) Jammi
 - b) Ashok
 - c) Mango
 - d) Banyan

16. Insect : Disease :: War :?

- a) Army
- b) Defeat
- c) Arsenal
- d) Destruction

Q17. How many times do the hands of a clock coincide in 24 hours?

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

Q18. Which of the following is the middle digit of the second highest number among the five three digit numbers given below?

512 739 428 843 654

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

Q19. If 'dog' is called 'lion', 'lion' is called 'bison', 'bison' is called 'snake', 'snake' is called 'mongoose', 'mongoose' is called crocodile', then which one is reared as pet?

- a) Lion
- b) Bison
- c) Snake
- d) Mongoose

- Q20. X introduces Y saying, He is the husband of the grand daughter of the father of my father. How is Y related to X?
- a) Brother
 - b) Uncle
 - c) Brother-in-law
 - d) Co-brother
- Q21. Pen is to poet as needle is to _____
- a) Tailor
 - b) Thread
 - c) Sewing
 - d) Button
- Q22. A school organized a knockout football competition in which 23 teams played. What was the least number of matches they needed to play to decide the winner?
- a) 11 matches
 - b) 62 matches
 - c) 21 matches
 - d) 22 matches
- Q23. In a Mathematics 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

- Q24. The day before yesterday was Saturday. What day will it be the day after tomorrow?
- a) Tuesday
 - b) Wednesday
 - c) Thursday
 - d) Friday
- Q25. At what angle are the hands of a clock inclined at 15 minutes past 4?
- a) 32°
 - b) 37°
 - c) 32.5°
 - d) 37.5°
- Q26. DEF, DEF_2 , DE_2F_2 , _____, $D_2E_2F_3$
- a) DEF_3
 - b) D_3EF_3
 - c) D_2E_3F
 - d) $D_2E_2F_2$
- Q27. Choose the word which is least like the other words in the group.
- a) Timor
 - b) India
 - c) Rhodes
 - d) Borneo.
- Q28. Which word does NOT belong with the others?
- a) circumference
 - b) area
 - c) variable
 - d) quadrilateral

Q29. Which word is the odd man out?

- a) Hate
- b) Fondness
- c) Liking
- d) attachment.

Q30. Safe: Secure:: Protect:

- a) Lock
- b) Guard
- c) Sure
- d) Conserve

Q31. Look at this series: 36, 34, 30, 28, 24,..... What number should come next?

- a) 22
- b) 26
- c) 23
- d) 20

Q32. Statements: In a class of 30 students, 60% are girls.

Conclusions:

I) There are 18 boys in the class.

II) Girls are the majority in the class.

- a) Only conclusion I follows.
- b) Only conclusion II follows.
- c) Both I and II follows.
- d) None of above

- Q33. E is the son of C. D is the husband of C. B and G is the only brother and daughter of D respectively. F is the maternal aunt of E and G. How is B related to E?
- a) Mother
b) Nephew
c) Son
d) Uncle
- Q34. David prefers Economics to Maths, English to Social science, and Political Science to History. If she prefers Maths to History, and Social science to Maths, which is David's least preferred subject?
- a) History
b) Maths
c) Social science
d) Economics
- Q35. Assertion (A): Birds have feathers.
Reason (R): Feathers help birds to fly.
- a) A Both A and R are true, and R is the correct explanation of A.
b) B-Both A and R are not true, but R is NOT the correct explanation of A.
c) C-A is true, but R is false.
d) D-A is false, but R is true.
- Q36. The average temperature for Wednesday, Thursday and Friday was 40°C . The average for Thursday, Friday and Saturday was 41°C . If temperature on Saturday was 42°C , what was the temperature on Wednesday?
- a) 39°C .
b) 44°C .
c) 38°C .
d) 41°C .

- Q37. Find the principal if the interest compounded at the rate of 10% per annum for two years is Rs. 420/-.
- a) Rs. 2200/-
 - b) Rs. 2000/-
 - c) Rs. 1100/-
 - d) Rs. 1200/-
- Q38. After the division of a number successively by 3, 4 and 7, the remainder obtained is 2, 1 and 4 respectively. What will be remainder if 84 divide the same number?
- a) 80
 - b) 75
 - c) 42
 - d) 53
- Q39. In an examination 80% candidates passed in English and 85% candidates passed in Mathematics. If 73% candidates passed in both these subjects, then what percent of candidates failed in both the subjects?
- a) 8
 - b) 15
 - c) 27
 - d) 35
- Q40. A boy agrees to work at the rate of one rupee on the first day, two rupees on the second day, and four rupees on third day and so on. How much will the boy get if he started working on the 1st of February and finishes on the 20th of February?
- a) 2^{20}
 - b) $2^{20}-1$
 - c) $2^{20}+1$
 - d) 2^{19}

- Q46. An amount of Rs. 680 was invested at 6% rate of interest and another sum of money was invested at 10% interest. If the average interest on the total at the end of the year was 7.5%, how much was invested at 10%?
- a) Rs. 408
b) Rs. 412.6
c) Rs. 267.5
d) None of these
- Q47. In triangle PQR length of the side QR is less than twice the length of the side PQ is 2 cm. Length of the PR exceed the length of the side PQ by 10 cm. The perimeter is 40 cm. The length of the smallest side of the triangle PQR is _____
- a) 6 cm
b) 8 cm
c) 7 cm
d) 10 cm
- Q48. Smita started a business investing Rs. 9000. After five months, Sheetal joined with a capital of Rs. 8000. If at the end of the year, they earn a profit of Rs. 6970, then what will be the share of Sheetal in the profit?
- a) Rs. 2380
b) Rs. 2300
c) Rs. 2280
d) Rs. 2260
- Q49. Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is _____
- a) 1:3
b) 3:2
c) 3:4
d) None of these

ENT-36

Q50. The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is _____

- a) 2.3 m b) 4.6 m
- c) 7.8 m d) 9.2 m

Q51. The compound interest on Rs. 30000 at 7% per annum is Rs. 4347. The period (in years) is _____

- a) 2 b) 2.5
c) 3 d) 4

Q52. The sum of ages of children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- a) 4 years
- b) 8 years
- c) 10 years
- d) None of these.

Q53. An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

- a) 144°
c) 168°
- b) 150°
d) 180°

Q54. If one-third of one-fourth of a number is 15, then three-tenth of that number is _____

- [illegible]

Q60. The departmental store is open _____ eight to seven.

- a) by
- b) from
- c) between
- d) during

Q61. Before designing a public park, the architect must _____ the public.

- a) consider
- b) considers
- c) recognize
- d) recognizes

Q62. The students in our college are _____ in other colleges.

- a) smarter
- b) smarter than
- c) smarter than those
- d) more smarter than

Q63. The market is nearer to them than _____

- a) we
- b) our self
- c) us
- d) ourselves

- Q64. If I had had money, I _____ it yesterday.
- a) would purchase
 - b) would purchased
 - c) would have purchase
 - d) would have purchased
- Q65. He paid the dining bill _____ a credit card.
- a) with
 - b) by
 - c) in
 - d) for
- Q66. _____ the bad weather, the outdoor party was rescheduled.
- a) Because of
 - b) In order to
 - c) Despite
 - d) In spite of
- Q67. Nitrogen gas is in abundance _____ the Earth.
- a) in
 - b) on
 - c) above
 - d) along
- Q68. I was watching a TV program, when he _____ in.
- a) walk
 - b) walks
 - c) walked
 - d) was walking

- Q69. If you have time, you _____ the nature museum.
- a) should visit
 - b) should visited
 - c) have to visit
 - d) would visit
- Q70. She _____ the driving test to get a license.
- a) should pass
 - b) should has passed
 - c) has to pass
 - d) have to pass
- Q71. It was raining yesterday, so we _____ out.
- a) did not go
 - b) did not went
 - c) would not go
 - d) would not gone
- Q72. Avik _____ for Bangalore early and he must _____ by this time.
- a) Leave, have been reaching
 - b) Left, have reached
 - c) Had left, be reaching
 - d) Left, have been reached

- Q73. Vivin _____ what you meant. Please explain it to him again.
- a) Don't understand
 - b) Didn't understand
 - c) Doesn't understand
 - d) Hadn't understand
- Q74. Mother _____ me to watch time and return soon, I replied, Please don't worry, if _____ late tonight.
- a) Is asking, I will be
 - b) Asked, I am
 - c) Had been asking, be
 - d) Had asked, I will be
- Q75. They _____ out for an evening walk after they _____ dinner.
- a) Went, had taken
 - b) go, had taken
 - c) Have gone, took
 - d) Are going, took
- Q76. What is API?
- a) Application Programming Interchange
 - b) Application Programming Interaction
 - c) Application Programming Interface
 - d) None of these

Q77. Which of the following package is used for Graphical User Interface?

- a) java.applet
- b) java.awt
- c) java.awt.image
- d) java.io

Q78. _____ is used to find and fix bugs in the Java programs.

- a) JVM
- b) JRE
- c) JDK
- d) JDB

Q79. An interface with no fields or methods is known as a_____

- a) Runnable Interface
- b) Marker Interface
- c) Abstract Interface
- d) CharSequence Interface

Q80. What is the use of the intern() method?

- a) It returns the existing string from memory
- b) It creates a new string in the database
- c) It modifies the existing string in the database
- d) None of the above

- Q81. Java was originally developed by _____
- a) Brendan Eich
 - b) James Gosling
 - c) Tim Berners-Lee
 - d) Guido van Rossum
- Q82. Which keyword is not allowed in Java for exception handling?
- a) except
 - b) try
 - c) catch
 - d) throw
- Q83. Which is a superclass of all exception classes?
- a) Throwable
 - b) Exception
 - c) Runtime Exception
 - d) 10 Exception
- Q84. Which is a mechanism where one object acquires all the properties and behaviors of the parent object?
- a) Inheritance
 - b) Encapsulation
 - c) Polymorphism
 - d) none of these

- Q85. Which keyword is used for the block to handle the exceptions generated by try block?
- a) Catch
 - b) Final
 - c) throw
 - d) try
- Q86. Which method is called to free the resources of an object manually in C#?
- a) Delete()
 - b) Free()
 - c) Remove()
 - d) Dispose()
- Q87. Which of the following keyword is used to raise an exception manually?
- a) raise
 - b) return
 - c) throw
 - d) error
- Q88. Which of the following collection stores key-value pairs?
- a) SortedList
 - b) HashTable
 - c) Dictionary
 - d) All of these

- Q89. How to pass a function as a parameter in C#?
- a) Cannot pass a function as a parameter in C#.
 - b) Using pointer
 - c) Using dynamic parameter type
 - d) Using delegate
- Q90. In C#, SOAP stands for _____
- a) Simple Object Access Protocol
 - b) Simple Object Access Program
 - c) Standard Object Access Protocol
 - d) Standard Object Access Program
- Q91. Who does the man command do in LINUX?
- a) manages directories
 - b) provides documentation or manual pages
 - c) manages users
 - d) monitors system performance
- Q92. Identify the one which is not a communication command:
- a) mail
 - b) mesg
 - c) grep
 - d) write

Q93. Linux kernel was founded by?

- a) Richard Stallman
- b) Linus Torvalds
- c) Bill Gates
- d) Ben Thomas

Q94. In Linux, the types of users are

- a) super users, system users and regular users
- b) super users, system users and supreme users
- c) admin, system users and normal users
- d) none of these

Q95. In Linux, applications communicate with kernel by using _____

- a) system calls
- b) c programs
- c) shell script
- d) shell

Q96. Which keyword is used for function in Python language?

- a) Function
- b) def
- c) Fun
- d) Define

Q97. Who developed the Python language?

- a) Zim Den
- b) Niene Stom
- c) Wick van Rossum
- d) none of these

Q98. Which character is used in Python to make a single line comment?

- a) /
- b) //
- c) #
- d) !

Q99. Which of the following option is not a core data type in the python language?

- a) Dictionary
- b) Lists
- c) Class
- d) all of these

Q100. In the Python programming language, syntax error is detected by _____

- a) Interpreter at Compile time
- b) Run time at Interpreter
- c) Interpreter at Run time
- d) Compile time at Run time

ROUGH WORK

