CANTONMENT BOARD, ST. THOMAS MOUNT CUM PALLAVARAM

Question paper cum Answer Sheet

Duration : 1 hr 30 minutes   Roll No   :
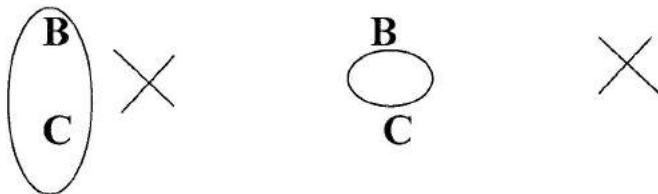
Signature   :

INSTRUCTIONS TO THE CANDIDATE

1. This is Question paper cum Answer Sheet.

2. Do not do rough work on the Question paper cum Answer sheet.

3. Rough sheets will be provided for doing rough work.

4. **Use Black or Blue Ball point pen to circle the right answer.**

   For example. If you think C. is the right answer, then the

   correct way to circle is Ⓒ

   wrong ways

5. This paper contains 100 Questions and all Questions are

   compulsory

6. Each Question carries 2 marks.

7. Each wrong answer carries -0.5 Marks (Negative Marking).

1

1. The _____ clause allows us to select only those rows in the result relation of the _____ clause that satisfy a specified predicate.
   A. Where, from
   B. From, select
   C. Select, from
   D. From, where

2. 'Select ID, name, dept name, salary * 1.1 where instructor;
   The query given below will not give an error. Which one of the following has to be replaced to get the desired output?
   A. Salary*1.1
   B. ID
   C. Where
   D. Instructor

3.
Employee_id	Name	Salary
1001	Annie	6000
1009	Ross	4500
1018	Zeith	7000

   This is Employee table. Select * from employee where employee_id>1009;
   Which of the following employee_id will be displayed?
   A. 1009, 1001, 1018
   B. 1009, 1018
   C. 1001
   D. 1018

4. In SQL, which command is used to remove a stored function from the database?
   A. REMOVE FUNCTION
   B. DELETE FUNCTION
   C. DROP FUNCTION
   D. ERASE FUNCTION

5. Count function in SQL returns the number of
   A. Values
   B. Distinct values
   C. Groups
   D. Columns

6. Composite key is made up of ....
   A. One column
   B. One super key
   C. One foreign key
   D. Two or more columns

7. What operator performs pattern matching?
   A. IS NULL operator
   B. ASSIGNMENT operator
   C. LIKE operator
   D. NOT operator

8. Which command is used to remove all rows from a table?
   A. Delete
   B. Remove
   C. Truncate
   D. Both a and .b

9. The command used to create a database user:
   A. Make user
   B. Create user
   C. Add user to database
   D. All of these

10. Which command is used to add a column to an existing table?
    A. Create
    B. Update
    C. Alter
    D. None of these

11. One of the following steps is not involved in processing a query:
    A. Parsing and tranlation
    B. Optimization
    C. Evaluation
    D. Distribution

12. Transactions are initiated by BEGIN TRANSACTION and terminated by:
    A. COMMIT TRANSACTION
    B. ROLLBACK TRANSACTION
    C. Either A or B
    D. Neither A nor B

13. Which of the following is used to evaluate a query execution strategy?
    A. Query tree
    B. Access plan
    C. Database catalog
    D. None of the above

3

14. Which of these is used to access member of class before object of that class is created?
    A. public
    B. private
    (C) static
    C. protected

15. Which of these is used as default for a member of a class if no access specifier is used for it?
    (A) private
    B. public
    C. public, within its own package
    D. protected

16. What is the process of defining a method in terms of itself, that is a method that calls itself?
    A. Polymorphism
    B. Abstraction
    C. Encapsulation
    (D) Recursion

17. Which of these class is related to all the exceptions that are explicitly thrown?
    A. Error
    B. Exception
    (C) Throwable
    D. Throw

18. Which of these is not a correct statement?
    A. Every class containing abstract method must be declared abstract.
    B. Abstract class defines only the structure of the class not its implementation.
    (C) Abstract class can be initiated by new operator.
    D. Abstract class can be inherited.

19. Which of these types cannot be used to initiate a generic type?
    A. Integer class
    B. Float class
    (C) Primitive Types
    D. Collections

20. Which of these data type cannot be type parameterized?
    (A) Array
    B. List
    C. Map
    D. Set

4

21. Which of these type parameters is used for a generic class to return and accept any type of object?
    A. K
    B. N
    C. T
    D. V

22. Which of these classes encapsulate run-time state of an object?
    A. Class
    B. System
    C. Runtime
    D. Catche

23. What is an event in delegation event model used by Java programming language?
    A. An event is an object that describes a state change in a source.
    B. An event is an object that describes a state change in processing.
    C. An event is an object that describes any change by the user and system.
    D. An event is a class used for defining object, to create events.

24. Which of these class allows us to get real time data about private and protected member of a class?
    A. java.io
    B. GetInformation
    C. ReflectPermission
    D. MembersPermission

25. Which of these is a type of stream in Java?
    A. Integer stream
    B. Short stream
    C. Byte stream
    D. Long stream

26. Which of these method is used to change an element in a LinkedList Object?
    A. change()
    B. set()
    C. redo()
    D. add()

27. Which of these is a process of writing the state of an object to a byte stream?
    A. Serialization
    B. Externalization
    C. File Filtering
    D. All of the mentioned

28. Which of these method of class String is used to compare two String objects for their equality?
    A. equals()
    B. Equals()
    C. isequal()
    D. Isequal()

5

29. Which of these method of class String is used to check weather a given object starts with a particular string literal?
    (A) startsWith()
    B. endsWith()
    C. Starts()
    D. ends()

30. What is the return type of Constructors?
    A. int
    B. float
    C. void
    (D) None of the mentioned

31. Which function is used to perform some action when the object is to be destroyed?
    (A) finalize()
    B. delete()
    C. main()
    D. None of the mentioned

32. With x = 0, which of the following are legal lines of Java code for changing the value of x to 1?
    1. x++;
    2. x = x + 1;
    3. x += 1;
    4. x =+ 1;

    A. 1, 2 & 3
    B. 1 & 4
    C. 1, 2, 3 & 4
    (D) 3 & 2

33. Which of these jump statements can skip processing remainder of code in its body for a particular iteration?
    A. break
    B. return
    C. exit
    (D) continue

34. Which of the following is not true?
    A. PHP can be used to develop web applications.
    B. PHP makes a website dynamic.
    C. PHP applications cannot be compiled.
    (D) PHP cannot be embedded into html.

35. Which of the following variables is not a predefined variable?
    A. $get
    (B) $ask
    C. $request
    D. $post

6

36. Which datatypes are treaded as arrays
    A. Integer
    B. Float
    C. String
    D. Booleans

37. Which of the following method returns current date and time?
    A. time()
    B getdate()
    C. date()
    d) None of the above

38. Select the incorrect statement about PHP programming language:
    A. Classes are case-insensitive
    B. Functions are case-insensitive
    C. Variables are case-insensitive
    D. Constants are case-sensitive

39. Which of the following is not the scope of a variable in PHP?
    A. Local
    B. Global
    C. Static
    D. Extern

40. The practice of separating the user from the true inner workings of an application through well-known interfaces is known as..
    A. Polymorphism
    B. Inheritance
    C. Encapsulation
    D. Abstraction

41. Which of the following advanced OOP features is/are not supported by PHP?
    (i) Method overloading
    (ii) Multiple Inheritance
    (iii) Namespaces
    (iv) Object Cloning

    A. All of the above
    B. None of the above
    C. (i) and (ii)
    D. (iii) and (iv)

42. Which of the functions in PHP is used to sort an array in descending order?
    A. sort()
    B. asort()
    C. rsort()
    D. dsort()

43. In PHP, which one of the following functions can be used to concatenate array elements to form a single delimited string?
    A. explode()
    B. implode()
    C. concat()
    D. concatenate()

44. Which of the following correctly describes the meaning of 'namespace' feature in C++?
    A. Namespaces refer to the memory space allocated for names used in a program
    B. Namespaces refer to space between the names in a program
    C. namespaces provide facilities for organizing the names in a program to avoid name clashes
    D. none of the above

45. Which of the following type of class allows only one object of it to be created?
    A. Virtual class
    B. Abstract class
    C. Singleton class
    D. Static class

46. The following statement where T is true and F is false,
    T&&T||F&&T
    A. is true
    B. is false
    C. is wrong
    D. not applicable in C language

47. The statement int num[2][3]={ {1,2}, {3,4}, {5, 6} };
    A. assigns a value 2 to num[1][2]
    B. assigns a value 4 to num[1][2]
    C. assigns a value 3 to num[1][2]
    D. gives an error message

48. A function that changes the state of the cout object is called a(n) _____
    A. member
    B. adjuster
    C. manipulator
    D. operator

49. The keyword used to transfer control from a function back to the calling function is
    A. switch
    B. goto
    C. go back
    D. return

8

50. You have assigned the address of Value to the pointer P, Which statement will display the value stored in Value?
    A. cout<<<<&P;
    B. cout<<*Value;
    C. cout<<&P;
    D. cout<<*<P;

51. Which of the following language is not supported by C++?
    A. Exception Handling
    B. Reflection
    C. Operator Overloading
    D. Namespaces

52. Which of the following language feature is not an access specifier in C++?
    A. public
    B. private
    C. protected
    D. internal

53. What is the implicit pointer that is passed as the first argument for nonstatic member functions?
    A. 'self' pointer
    B. std::auto_ptr pointer
    C. 'Myself' pointer
    D. 'this' pointer

54. When is std::bad_alloc exception thrown?
    A. When new operator cannot allocate memory
    B. When alloc function fails
    C. When type requested for new operation is considered bad, this exception is thrown
    D. When delete operator cannot delete the allocated (corrupted) object

55. Which of the following is the most preferred way of throwing and handling exceptions?
    A. Throw by value and catch by reference.
    B. Throw by reference and catch by reference.
    C. Throw by value and catch by value
    D. Throw the pointer value and provide catch for the pointer type.

56. Which command is used to list all the files in your current directory(including hidden) in Linux based OS?
    A. ls -l
    B. ls -t
    C. ls -a
    D. ls -i

57. Which command(s) is/are used to get help about a command in Linux?
    A. info
    B. man
    C. Both a and b
    D. None of the above

58. Which command is used to record session in Linux?
    (A) script
    B. session
    C. Both a and b
    D. None of the above

59. Which among the following is used to write small programs to control Unix functionalities?
    A. Shell Commands
    (B) Shell Script
    C. Filters
    D. C Language

60. In linux filesystem, the passwords of different users are stored in
    A. /etc/passwd file
    b. /bin/passwd file
    (C) /etc/shadow file
    D. /bin/shadow file

61. Which command can create environment variable?
    (A) export
    B. set
    C. read
    D. none of the mentioned

62. Which of the following identifiers associated with a process decide its privilege level
    A. uid
    B. suid
    (C) euid
    D. gid

63. User id 0 is
    A. An innvalid user id
    (B) The id of the root user
    C. The id of a user when the user's account is deleted
    D. None of the above

64. _____ computing refers to applications and services that run on a distributed network using virtualized resources.
    A. Distributed
    (B) Cloud
    C. Soft
    D. Parallel

65. Which of the following is a standard protocol for network monitoring and discovery ?
    A. SNMP
    B. CMDB
    C. WMI
    (D) All of the mentioned

10

66. Which of the following allows you to create instances of the MySQL database to support your Web sites ?
   A. Amazon Elastic Compute Cloud
   B. Amazon Simple Queue Service
   C. Amazon Relational Database Service
   D. Amazon Simple Storage System

67. Point out the wrong statement :
   A. Cloud computing applications have the ability to run on virtual systems
   B. Systems (VMs running applications), storage, and network assets cannot be virtualized
   C. Applications that run in datacenters are captive to the operating systems and hardware platforms that they run on
   D. All of the mentioned

68. DNS database contains
   A. name server records
   B. hostname-to-address records
   C. hostname aliases
   D. All of the above

69. When collection of various computers seems a single coherent system to its client, then it is called
   A. computer network
   B. distributed system
   C. both (a) and (b)
   D. none of the above

70. The number of objects in a Web page which consists of 4 jpeg images and HTML text is _____
   A. 4
   B. 1
   C. 5
   D. None of the mentioned

71. A web cookie is a small piece of data
   A. sent from a website and stored in user's web browser while a user is browsing a website
   B. sent from user and stored in the server while a user is browsing a website
   C. sent from root server to all servers
   D. none of the mentioned

72. ODBC stands for:
   A. Object Database Connectivity
   B. Oral Database Connectivity
   C. Oracle database Connectivity
   D. Open Database Connectivity

73. Key to represent relationship between tables is called:
   A. Primary Key
   B. Secondary key
   C. Foreign Key
   D. Unique Key

11

74. Which built-in command performs integer arithmetic in bash shell ?
   (A) let
   B. get
   C. set
   D. none of the mentioned

75. The 4 byte IP address consists of
   A. Network address
   B. Host address
   (C) Both (a) and (b)
   D. None of the mentioned

Directions (Q 76-82); Read the following passage and answer the questions that follows

"Did you see that?" Joe said to his friend Bill. "You're a great shooter!" Bill caught the basketball and bounced it before throwing it again. The ball flew into the net.
"Bill, you never miss!" Joe said admiringly. "Unless I'm in a real game," Bill complained. "Then I miss all the time." Joe knew that Bill was right. Bill <u>performed</u> much better when he was having fun with Joe in the school yard than he did when he was playing for the school team in front of a large crowd. "Maybe you just need to practice more," Joe suggested. "But I practice all the time with you!" Bill objected. He shook his head. "I just can't play well when people are watching me." "You play well when I'm watching," Joe pointed out. "That's because I've known you since we were five years old," Bill said with a smile. "I'm just not comfortable playing when other people are around." Joe nodded and understood, but he also had an idea. The next day Joe and Bill met in the school yard again to practice. After a few minutes, Joe excused himself. "Practice without me," Joe said to his friend. "I'll be back in a minute." Joe hurried through the school building, gathering together whomever he could find—two students, a math teacher, two secretaries, and a janitor. When Joe explained why he needed them, everyone was happy to help. Joe reminded the group to stay quiet as they all went toward the school's basketball court. As Joe had hoped, Bill was still practicing basketball. He made five baskets in a row without noticing the silent people standing behind him. "Hey, Bill!" Joe called out finally. Bill turned. A look of surprise came over his < face. "I just wanted to show you that you could play well with people watching you," Joe said. "Now you'll have nothing to worry about for the next game!".

76. What would be the best title for the story?
   A. Joe Joins the Team
   B. Practice Makes Perfect
   C. Bill Wins the Big Game
   (D) Bill's Basketball Problem

77. In line 4, the word <u>performed</u> is closest in meaning to _____.
   A. acted
   (B) played
   C. moved
   D. changed

78. Why is Bill upset?
   (A) He plays better in practice than he does during games.
   B. The school yard is not a good place to practice.
   C. Joe watches him too closely when he plays.
   D. His team loses too many games.

12

79. Why does Bill play well when Joe is watching him?
    (A) He is comfortable with Joe.
    B. Joe tells him how to play better.
    C. He does not know that Joe is there.
    D. He wants to prove to Joe that he is a good player.

80. Why does Joe decide to gather a group of people?
    A. Because he wants more players for his team
    (B) Because he wants to help Bill feel less nervous
    C. Because he wants to show them his talent
    D. Because he wants more people to see the next game

81. At the end of the story, all of the following people watch Bill practice EXCEPT _____.
    A. Joe
    B. a janitor
    C. a math teacher
    (D) the basketball coach

82. Why does the group have to be quiet when they go to the basketball court?
    A. Because Joe is telling Bill what to do
    (B) Because they do not want Bill to know they were there
    C. Because Bill likes to practice alone
    D. Because the group needs to listen to Joe's instructions

Questions (83-86) a list of three words translated from an artificial language and their English word meanings are given. The question(s) that follow will ask you to reverse the process and translate an English word into the artificial language.
83. *gorblflur* means fan belt
pixngorbl means ceiling fan
arthtusl means tile roof

Which word could mean "ceiling tile"?
A. Gorbltusl
B. Flurgorbl
C. Arthflur
(D) Pixnarth

84. *hapllesh* means cloudburst
srenchoch means pinball
resbosrench means ninepin
Which word could mean "cloud nine"?
A. Leshsrench
B. Ochhapl
C. Haploch
(D) Haplresbo

85. *godabim* means kidney stones
romzbim means kidney beans
romzbako means wax beans

13

Which word could mean "wax statue"?
A. Godaromz
B. Lazbim
C. Wasibako
D. Romzpeo

86. granamelke means big tree
pinimelke means little tree
melkehoon means tree house
Which word could mean "big house"?
A. Granahoon
B. Pinishur
C. Pinihoon
D. Melkegrana

Questions (87-90) In each question below is given a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

87.Statements: In a one day cricket match, the total runs made by a team were 200. Out of these 160 runs were made by spinners.
Conclusions:
1. 80% of the team consists of spinners.
2. The opening batsmen were spinners.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either I or II follows
D. Neither I nor II follows

88.Statements: The old order changed yielding place to new.
Conclusions:
1. Change is the law of nature.
2. Discard old ideas because they are old.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either I or II follows
D. Neither I nor II follows

89.Statements: Population increase coupled with depleting resources is going to be the scenario of many developing countries in days to come.
Conclusions:
1. The population of developing countries will not continue to increase in future.
2. It will be very difficult for the governments of developing countries to provide its people decent quality of life.
A. Only conclusion I follows
B. Only conclusion II follows
C. Either I or II follows
D. Neither I nor II follows

14

90.Statements: Prime age school-going children in urban India have now become avid as well as more regular viewers of television, even in households without a TV. As a result there has been an alarming decline in the extent of readership of newspapers.

Conclusions:
1. Method of increasing the readership of newspapers should be devised.
2. A team of experts should be sent to other countries to study the impact of TV. on the readership of newspapers.

A. Only conclusion I follows
B. Only conclusion II follows
C. Either I or II follows
D. Neither I nor II follows

91. A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?
A. 120 metres
B. 180 metres
C. 324 metres
D. 150 metres

92. A train travelling at a speed of 75 mph enters a tunnel $3\frac{1}{2}$ miles long. The train is $\frac{1}{4}$ mile long. How long does it take for the train to pass through the tunnel from the moment the front enters to the moment the rear emerges?
A. 2.5 min
B. 3 min
C. 3.2 min
D. 3.5 min

93. If one-third of one-fourth of a number is 15, then three-tenth of that number is:
A. 35
B. 36
C. 45
D. 54

94. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?
A. 3
B. 4
C. 9
D. Cannot be determined

95. The sum of the digits of a two-digit number is 15 and the difference between the digits is 3. What is the two-digit number?
A. 69
B. 78
C. 96
D. Cannot be determined

96. It is being given that $(2^{32} + 1)$ is completely divisible by a whole number. Which of the following numbers is completely divisible by this number?
A. $(2^{16} + 1)$
B. $(2^{16} - 1)$
C. (7×2^{23})
D. $(2^{96} + 1)$

Questions (97-100) A good way to figure out the relationship in a given question is to make up a sentence that describes the relationship between the first two words. Then, try to use the same sentence to find out which of the answer choices completes the same relationship with the third word.

97. Odometer is to mileage as compass is to
A. Speed
B. Hiking
C. Needle
D. Direction

98. Marathon is to race as hibernation is to
A. Winter
B. Bear
C. Dream
D. Sleep

99. Cup is to coffee as bowl is to
A. Dish
B. Soup
C. Spoon
D. Food

100. Elated is to despondent as enlightened is to
A. Aware
B. Ignorant
C. Miserable
D. Tolerant

&&&&&&&&&&&&&&&&&&&&&&&&   END   &&&&&&&&&&&&&&&&&&&&&&&&&&&&&&