

2018
INFORMATICS PRACTICES

Total marks : 70

Time : 3 hours

General instructions:

i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*

ii) *The question paper consists of 28 questions. All questions are compulsory.*

iii) *Marks are indicated against each question.*

iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives : 5x1=5

- (a) _____ is basically a bigger version of a LAN and is typically owned and operated by a single entity such as government body or large organisation.
- | | |
|-----------|-----------|
| (i) PAN | (ii) WLAN |
| (iii) WAN | (iv) MAN |
- (b) These operators are used to combine one or more than one relational expressions.
- | | |
|-----------------------------|---------------------------|
| (i) logical operators | (ii) relational operators |
| (iii) conditional operators | (iv) unary operators |
- (c) When a class is defined in normal class declaration, it is called a ____.
- | | |
|-------------------|----------------|
| (i) derived class | (ii) sub class |
| (iii) base class | (iv) class |
- (d) The _____ operator is used to check if field values match a specified pattern and searches for less-than-exact but similar values.
- | | |
|--------------------|----------------------|
| (i) BETWEEN clause | (ii) LIKE clause |
| (iii) IN clause | (iv) DISTINCT clause |
- (e) Select ROUND(1.298,1) will display ____.
- | | |
|-----------|----------|
| (i) 1.3 | (ii) 1.2 |
| (iii) 1.1 | (iv) 1 |

2. What is a bridge?

1

3. What is Boolean variable? **1**
4. What is a class? **1**
5. What is the purpose of DISTINCT clause? **1**
6. What is non-equi-join? **1**
7. Which statement is used for dropping a column from a table? **1**
8. What is a DBMS? **1**
9. Mention two negative effects of ICT over society. **1**
10. How does ICT impact on our daily life? **2**
11. What is a digital society? **2**
12. What is meant by 'privacy of data'? **2**
13. What is Apache Tomcat? **2**
14. What is the use of showInput dialog method? **2**
15. Explain about conditional operator with its syntax. **2**
16. How can one decide the life of a variable in an application? **2**
17. Which method of a ResultSet show the status of a ResultSet object? How? **2**
18. What is the use of AS keyword with SELECT statement? **2**
19. What are group functions? **2**
20. What are the methods to choose a primary key for your database table? **2**
21. **a.** Write two each advantages and disadvantages of Ring topology.

Or

4

b. Is open-source software secure? Explain.

22. a. Explain JList control and JComboBox control.

Or

4

- b. What is a form tag? Explain with example.

23. a. Describe how to open a database connection using JDBC.

Or

4

- b. When should one use the interfaces and abstract classes? Explain.

24. a. What is the significance of DELETE statement? How does WHERE clause restrict on MySQL query?

Or

4

- b. Differentiate between char() and varchar() data types.

25. a. What are the four states of transaction?

Or

4

- b. Write SQL commands for the following statements from (i) to (iv).

TABLE : EMPNEW

NO	Name	Salary	Area	Age	Grade	Dept
1	KESHAR STORE	40000	WEST	45	C	CIVIL
2	KIRTI ARTS	35000	SOUTH	38	A	ELEC
3	KRIPPLE	60000	NORTH	52	B	CIVIL
4	ARYAN STALL	38000	NORTH	29	B	CIVIL
5	SAMSONS	42000	EAST	35	A	COMP
6	BISWAL	29000	SOUTH	34	A	MECH

- i) Display the departmentwise maximum salary.
- ii) Display the average age of employee.
- iii) Display the gradewise maximum salary.
- iv) Display the maximum annual salary.

26. a. What does the following line mean- “Public class HelloForm extends javax.swing.JFrame”?

Or

5

- b. Explain the important classes, interfaces and exceptions in the java.sql package

27. a. Define the following functions:

i) INSTR()

ii) LENGTH()

iii) TRIM()

iv) SUBSTR()

v) ROUND()

Or

5

- b. What happens when a client program start a new connection in MySQL server?

28. a. Explain any five points on advantages of the DBMS.

Or

5

- b. Write any five methods to end the current transaction.
