

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 showInputDialog 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.
