

2021

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) Ogg Vorbis is a/an _____
 - i) Open source audio compression tool
 - ii) Proprietary audio compression tool
 - iii) Documentation Software
 - iv) None of the above

- (b) Which of the following is not a method of JLabel control?
 - i) setText()
 - ii) setMaxLength()
 - iii) setToolTipText()
 - iv) getText()

- (c) Class itself is a _____ data type.
 - i) System defined
 - ii) Primitive
 - iii) User defined
 - iv) None of these

- (d) Which of the following is a SET operator supported in MySQL?
 - i) INTERSECTION
 - ii) UNION
 - iii) MINUS
 - iv) EXCEPT

- (e) The column of a table is referred to as the
 - i) Tuple
 - ii) Degree
 - iii) Entity
 - iv) Attribute

- 2. Write two advantages of Star Topology. **1**

- 3. Define GUI. **1**

- 4. What is the difference between the use of JTextField and JPasswordField in a program? **1**

- 5. What is Object Oriented Programming? **1**

6. Write short notes on ORDER BY clause. 1
7. Give two characteristics of Primary Key. 1
8. Define BCNF. 1
9. What is the use of EXISTS keyword in subquery? 1
10. Define Candidate key. 2
11. What is a normalization? 2
12. When can a table said to be in 3rd Normal Form? 2
13. Define UNION operator. 2
14. Define Intersection Operator. 2
15. What is a Subquery? 2
16. What is the purpose of switch in a network? 2
17. What is meant by open document format? 2
18. Discuss any two methods of JFrame class. 2
19. What is meant by Encapsulation? 2
20. Distinguish between ALTER and UPDATE command in MySQL. 2
21.
 - a. Discuss any four forms of transmission media.

Or

 - b. Explain any four threats of computer network.4
22.
 - a. What is NetBeans? Discuss any three screen segments of NetBeans window.

Or

 - b. What is an Event? Explain any three methods of event handling method in Java.4
23.
 - a. What is Inheritance? Discuss the different types of Inheritance.

Or

4

b. What are the advantages of OOPs? Discuss them briefly.

24. a. Briefly discuss the different Properties of Transaction.

Or

4

b. What are Constraints? Explain any three types of key constraints.

25. a. With the help of the table STUDENTS_DEVICE in the given figure, Explain the Insert and Update anomalies associated with it in INF.

SID	SNAME	SCITY	SSTATE	DID	DNAME	DCOST	DPROFIT	QTY	PURDATE
S10	ARPITA	BENGALURU	KARNATAKA	D10	RAM	850	20	5	26-Jan-20
S20	TUSHAR	AURANGABAD	MAHARASTRA	D30	PENDRIVE	400	20	1	05-Sep-20
S30	AASTIK	DURGAPUR	WEST BENGAL	D20	DVD	30	12	10	26-Jan-20
S40	HANSIKA	COCHIN	KERALA	D30	PENDRIVE	400	20	3	02-Oct-20

Or

4

b. Define : (i) Division Operator (ii) Transitive Dependency
(iii) Functional Dependency (iv) De-Normalization.

26. a. Explain the various open source software tools available.

Or

5

b. Discuss in brief the disadvantages of open source concept.

27. a. Discuss the built in functions available in MySQL.

Or

5

b. Discuss the various grouping functions available in MySQL.

28. a. Define Data Integrity. Discuss the different types of data integrity.

Or

5

b. Describe the various Joins available in MySQL query.
