

2020

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) USB stands for _____.
 - i) Uniform System Bus ii) Universal System Bus
 - iii) Universal Serial Bus iv) Uniform Serial Bus

- (b) Which of the following is a valid variable name in java?
 - i) _name ii) roll#
 - iii) MySalary iv) 10th

- (c) Which of the following is not an operating system?
 - i) Windows 7 ii) Unix
 - iii) Solaris iv) Chrome

- (d) The symbol of an entity is denoted by _____.
 - i) Diamond ii) Eclipse
 - iii) Rectangle iv) Oval

- (e) Which of the following is a benefit of e-Governance?
 - i) Cost saving ii) Easy access
 - iii) Better work iv) All of these

2. What is the use of SMPS? **1**

3. What is a utility software? **1**

4. What is JVM? **1**

5. Define entity. **1**

6. Mention the name of MySql operators used to retrieve the unique records. **1**

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|-----|---------------------------------------------------------------------------------------------|---|
| 7. | What is MySql workbench? | 1 |
| 8. | What is meant by e-Auction? | 1 |
| 9. | Mention the benefits of e-learning. | 1 |
| 10. | Define system software. How does it differ from application software? | 2 |
| 11. | Mention any two features of java. | 2 |
| 12. | Differentiate between while loop and do-while loop. | 2 |
| 13. | What is an event? | 2 |
| 14. | Describe in brief JButton and JComboBox in Java. | 2 |
| 15. | What is the use of Group Button Control? | 2 |
| 16. | What is flat file database? | 2 |
| 17. | Differentiate between network model and hierarchical model. | 2 |
| 18. | Differentiate between primary key and unique key. | 2 |
| 19. | Why is sequential model also called as waterfall model? | 2 |
| 20. | Compare between tradition learning and e-learning. | 2 |
| 21. | a. Explain any four application areas of computer. | 4 |
| | Or | |
| | b. Write short notes on the following. | |
| | i) spyware ii) cookies
iii)snooping iv)hacking | |
| 22. | a. Explain in brief any four features of Java programming language. | 4 |
| | Or | |
| | b. Describe the naming conventions of a variable in java. | |
| 23. | a. Explain any four methods of JFrame class. | 4 |
| | Or | |
| | b. Explain any four event handling methods in java. | |
| 24. | a. Write down any two advantages and two disadvantages of DBMS. | 4 |
| | Or | |
| | b. Explain any four rules of Codd in context of MySql. | |

25. a. What will be the output of the statements given below?

- i) SELECT LOWER('RAM');
- ii) SELECT POWER(2,10);
- iii) SELECT MID('SRI GANESH',13);
- iv) SELECT LPAD(120, '0', 5);

Or

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b. Explain the following terms:

- i) DDL ii) DML iii) DLL iv) TCL

26. a. Define array. Differentiate between single dimensional array and multi-dimensional array.

Or

5

b. Explain any four methods of JCombo Box class.

27. a. Explain in brief any five characteristics of database management system.

Or

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b. Consider the structure given below and write the SQL statements to create a table name Author.

Column Name	Type	Size	Validations
AID	INT	5	Primary key
ANAME	VARCHAR	50	NOT NULL
ACITY	VARCHAR	50	NOT NULL
APHONE	VARCHAR	150	NULL
ACOUNTRY	VARCHAR	40	NULL

- i) Write DDL statement to add one more column Email VARCHAR(255) in the table Author.
- ii) Write DML statements to insert one row in the table Author.
- iii) Write DML statement to delete only two records from the table Author.
- iv) Write DML statement to delete the details of Author whose AID is 2.
- v) Write DDL statement to delete the table Author.

28. a. Explain the purpose of the following SQL functions.

- i) ROUND() ii) FLOOR() iii) TRUNCATE()
- iv) CEILING() v) ABS()

Or

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b. Consider the table with data given below and write the query for the following questions.

PID	FNAME	LNAME	GAME	GENDER	DOB	AGE
101	AASTIK	DAS GUPTA	CRICKET	M	12/12/2003	10
102	HANSIKA	MONDAL	BASKETBALL	F	29/11/2001	5
103	ANUMITA	DAS GUPTA	KHOKHO	F	31/12/1998	15
104	MAHUA	MONDAL	HOCKEY	M	23/05/2000	13
105	MOHAN	GHOSE	CRICKET	M	24/06/2001	12
106	SUBHAM	MOHANTA	BASKETBALL	M	23/08/2000	13

- i) Write the query to display the records of all students.
- ii) Write a query to display records of students who play cricket.
- iii) Write a query to display the record of students in the order of their age.
- iv) Write query to display the record of students whose name starts with 'A'.
- v) Write a query to list the record of students who play CRICKET or BASKETBALL.
