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) The technique for transferring plain text into cipher text is called:
        i) Encryption   ii) Cryptography
        iii) Decryption   iv) None of these

   (b) Where can one see the list of bugs found in the program?
        i) Output Window   ii) Source Window
        iii) Error Window   iv) None of these

   (c) _____ class can be instanciated to create a list box.
        i) JComboBox   ii) Jlist
        iii) JDropDown   iv) JListBox

   (d) Which statement is used to create a database in MySQL?
        i) Create   ii) Alter
        iii) Make   iv) Drop

   (e) The sequential model of software engineering is also called _____
        i) Water Fall Model   ii) Agile
        iii) Prototyping Model   iv) Spiral

2. What is E-Commerce?   **1**

3. What is an Operating System?   **1**

4. Java programs need to be interpreted before execution. Why?   **1**

5. What is Java?   **1**

6. What is a domain?   **1**

7.   Write a short note on DDL.   **1**

8.   What is LIMIT keyword?   **1**

9.   What is the use of comments in programming?   **1**

10.   What is meant by virtual learning environments?   **2**

11.   What is E-Governance?   **2**

12.   Write short notes on Control Bus and Serial Port.   **2**

13.   What is the use of registers available on CPU?   **2**

14.   Explain in brief ActionListener and KeyListener.   **2**

15.   Define the significance of add() and setMaximumRowCount() method of
        JComboBox class.   **2**

16.   What is NetBean?   **2**

17.   In which phase of SDLC, feasibility study is done and why?   **2**

18.   Write short note on Manipulating arrays.   **2**

19.   What is Cartesian product?   **2**

20.   Explain two rules of Boyce Codd.   **2**

21.   **a.** What is a spreadsheet application? Discuss in brief any three features of it.
                                    Or   **4**
        b. Explain the hardware and software requirement in order to access Internet.

22.   **a.** What is the use of JOptionPane class? Discuss its three methods.
                                    Or   **4**
        b. Discuss any four methods of JFrame class.

23.   **a.** Differentiate between JRadioButton and JCheckBox.
                                    Or   **4**
        b. Discuss any four features of Java programming language.

24.   **a.** What is ER Model? Explain the different types of relationship.
                                    Or   **4**
        b. Briefly explain : (i) Data Type   (ii) Constraints
                                  (iii) Auto Increment   (iv) Default.

25. **a.** Discuss the various grouping function available in MySQL.
<div align="center">**Or**</div> **4**
  b. Discuss the various Products of MySQL.
26. **a.** Discuss any five data types available in Java.
<div align="center">**Or**</div> **5**
  b. Compare and contrast between CUI and GUI.

27. **a.** Describe any five features of a good program.
<div align="center">**Or**</div> **5**
  b. Discuss in brief the various characteristics of DBMS.

28. **a.** Discuss in brief any five general programming guidelines followed in the industry.
<div align="center">**Or**</div> **5**
  b. Define Database. Explain two advantages and two disadvantages of database.

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