DOB : DAY Month Years

Gender : Male Female

Identity: Driving Licence AADHAR Voter ID

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UG/PG ODD SEMESTER EXAMINATION, 2022

COMPUTER SCIENCE

5th Semester

Course No. : MCSC-504

(Programming in Java)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer any five questions, taking one from each unit)

UNIT-I

1. (a) Define the following : 2x3=6

   (i) Inheritance

   (ii) Polymorphism

   (iii) Encapsulation

   (b) What are the features of Java programming? Explain. 8

2. (a) Java is a platform independent language. Why? Give your comments. 3

   (b) What do you mean by garbage collection? 2

   (c) Explain the following syntax : 2½+2½=5

   (i) Public Static Void Main (String asgs [ ])

(ii) System out printin ("Hello Java"

(d) Write a Java program to implement? 2D-Matrix Multiplication. 4

UNIT-II

3. (a) Write a program to show that inheritance, polymorphism and encapsulation can work together and also explain the flow of execuation of program. 9

(b) Explain the following statements : 5

Box b_1 = new Box ( );

Box b_2 = b_1;

4. (a) What do you mean by type casting? Explain with a suitable code. 2+2=4

(b) Explain the following forms of a constructor with a suitable code. 8

(i) Default constructor

(ii) Clone constructor

(iii) Parameterized Constructor

(c) Write a Java program to implement constructor overloading. 4

UNIT-III

5. (a) What do you mean by exeception handling? How does the Java exception handling differ from C++ ? 4

(b) Write a Java program to create multiple threads using runnable interface and also explain the flow of execution of program. 7

(c) Give the differences between throw and throws. 3

6. Explain the following exception handling methods with a suitable program. 5+5+4=14

(i) Try and catch

(ii) Throw

(iii) Throws

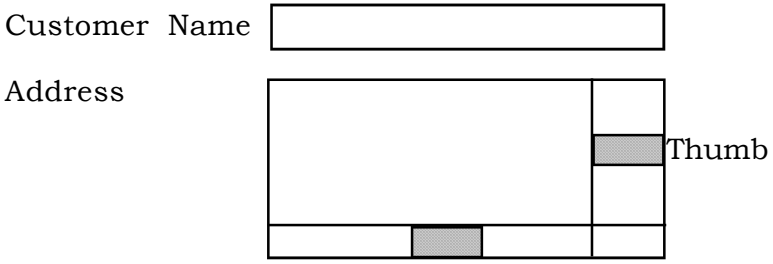
UNIT-IV

7. Write a Java Program to implement event handling on check box, button, and radio button. 5+5+4=14

8. Write a Java Program to implement event handling on list, choice and text field. 5+5+4=14

UNIT-V

9. (a) What do you mean by applet? Explain various method that have been used to create terminate, restruct, destroy and Run and applet. 2+5=7

(b) Write a Java program to implement event handling on keyboard events. 7

10. Write a program to create a Graphical User Interface (GUI) for SIM card registration. 14