B.Tech. (Computer Science & Engineering) Third Semester (C.B.C.S.)

Object Oriented Programming with Java

P. Pages : 2

Time : Three Hours

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2756

PSM/KW/23/2570

Max. Marks : 70

Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Due credit will be given to neatness and adequate dimensions.
8. Assume suitable data whenever necessary.

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1. a) Write a menu driven program to execute the following options. 9

   i) Test whether the entered number is even or odd.

   ii) To check whether the entered no is palindrome or not.

   b) Explain object oriented programming? How it is differed from procedure- oriented programming? 5

OR

2. a) What is a constructor? What are the rules of define a constructor? Explain the usage of multiple constructors using a suitable example. 7

   b) State and justify the statement "JAVA is Platform Independent Language". 7

3. a) What is Command line arguments? Explain with example. 7

   b) Write a program to calculate sum of array element using 1D Array. 7

OR

4. Explain arrays and vector class in Java. What is the difference between an array and a vector? Explain with example. 14

5. a) What is Inheritance? Explain the types of Inheritance? 7

   b) What is multilevel inheritance? Explain with simple example and relate it with Java implementation. 7

OR

6. a) What is an exception in Java? Explain how is it handled in Java. 7

   b) What is the difference between an interface and class. With the help of suitable java program explain the purpose of interfaces in java. 7

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7. a) What do you mean by multitasking and multithreading? Draw neatly the life cycle of a thread, explain with suitable java program. 7

b) How are thread priorities decided? Explain ways of creating thread with suitable example. 7

OR

8. Explain following thread methods with example. 14

i) getName ( )

ii) sleep ( )

iii) setName ( )

iv) currentThread ( )

v) isAlive ( )

vi) suspend ( )

9. a) What is Collection Framework Explain with Diagram.

7

b) Differentiate between Array And Collection.

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OR

10. a) Explain :

7

i) Iterator Interface.

ii) Collection Interface.

iii) List Interface.

b) Explain The Set interface and its Classes.

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