B.E. Third Semester (Information Technology) (CGS)
10711 : Programming Methodology : 3 IT 02

P. Pages : 2

Time : Three Hours

AU - 2530

Max. Marks : 80

0532

Notes :
1. Due credit will be given to neatness and adequate dimensions.
2. Assume suitable data wherever necessary.
3. Use HB pencil for diagrams.
4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Explain principles of OOP. Differentiate between OOP & procedural programming. 7

   b) Explain : 6
      i) Inheritance
      ii) Polymorphism
      iii) Abstraction

OR

2. a) Explain Software Engineering & SDLC. 7

   b) Differentiate between Applet & Application. 6

3. a) Explain various relational operators in java. 7

   b) Write a java application to sort an array of n integers in ascending order. 6

OR

4. a) Explain how to pass an array to a method with the help of example. 7

   b) Write a java application to add two 3 x 3 matrix and print the resultant matrix on screen. 6

5. a) What is class data & instance data ? Explain with example & differentiate between class Data & instance Data. 8

   b) Explain how to declare, create & initialize an instance of a class. 6

OR

6. a) What is constructor overloading ? Differentiate between constructor overloading & overriding. 8

   b) Explain following methods of string class - 6
      i) equals   ii) length
      iii) substring

7. a) Explain delegation event handling mechanism of java with example. 8

b) Explain following AWT controls -
i) TextField   ii) Button
iii) Label

6

OR

8. a) Write a java application that accepts two integers as input from TextField and dislays their sum in third Text Field.

b) Explain following methods of graphics class.
i) paint ( )
ii) drawline ( )
iii) drawRect ( )

6

9. a) What is an applet ? Differentiate between an Applet & Application.

7

b) What are adapter classes ? Explain their use with example.

6

OR

10. a) Write a java applet to draw a filled oval inside a rectangle.

6

b) Explain java thread model & its life cycle.

7

11. a) What is an exception in java ? Explain various types of exception.

7

b) Explain following :
i) Try & catch
ii) Throw & throws
iii) Finally

6

OR

12. a) Write a java application to copy contents of one file into another file.

7

b) Explain I/O streams in java.

6

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