USN | | | | | | | | | | | **15CS45**

Fourth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Object Oriented Concepts

Time: 3 hrs.   Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

1 a. List out the difference between procedure oriented program and object oriented program. **(05 Marks)**

    b. Explain function overloading with example. **(05 Marks)**

    c. What is constructor? List the different type of constructors and explain default constructor with example. **(06 Marks)**

OR

2 a. Explain the concept of object oriented program
      i)   Encapsulation
      ii)   Polymorphism
      iii) Inheritance
      iv) Data initialization. **(08 Marks)**

    b. Explain function prototyping with example. **(05 Marks)**

    c. How do namespace help in preventing pollution of the global name space? **(03 Marks)**

Module-2

3 a. Explain how java is robust and interactive. **(05 Marks)**

    b. Write java program to sum only first five elements of the array using for each looping. **(05 Marks)**

    c. Explain the operation of the following operators with example.
      i) %   ii) > > >   iii) && **(06 Marks)**

OR

4 a. Write java program to initialize and display different types of integer and floating point variables. **(06 Marks)**

    b. What is type casting? Illustrate with an example. What is meant by automatic type promotion? **(06 Marks)**

    c. How to declare two dimensional arrays in java? Explain with simple example. **(04 Marks)**

Module-3

5 a. Describe the various levels of access protections available for packages and their implications. **(08 Marks)**

    b. Give the basic form of an exception handling block. **(04 Marks)**

    c. What is the importance of the clause finally? **(04 Marks)**

OR

6 a. Define inheritance. List the different types of inheritance. **(05 Marks)**

    b. Illustrate with example a super class variable can reference a subclass object. **(06 Marks)**

    c. Compare and contrast method overloading and overriding. **(05 Marks)**

Module-4

7 a. What is Thread? Explain two ways of creation of thread. **(05 Marks)**
   b. What is synchronization? When do we use it? **(05 Marks)**
   c. Explain keyEvents and mouseEvent class. **(06 Marks)**

OR

8 a. Explain Delegation event model used to handle events in java. **(08 Marks)**
   b. Explain the role of synchronization with producer and consumer problem. **(08 Marks)**

Module-5

9 a. What is an applet? Explain five main methods of applet. **(08 Marks)**
   b. Explain with syntax the following :
      i)   JLabel
      ii) JTextField
      iii) JButton
      iv) JCheckBox **(08 Marks)**

OR

10 a. Create swing applet that has two buttons named beta and gamma. When either of the buttons pressed, it should display "beta pressed" and "gamma was pressed" respectively. **(08 Marks)**
   b. Explain getDocumentbase and getCodebase in applet class. **(08 Marks)**

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