

# CBCS Scheme



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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)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.



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**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 : (08 Marks)  
i) JLabel  
ii) JTextField  
iii) JButton  
iv) JCheckBox

**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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