CBCS SCHEME

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17CS42

# Fourth Semester B.E. Degree Examination, June/July 2019
## Object Oriented Concepts

Time: 3 hrs. Max. Marks: 100

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

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.

### Module-1

1 a. Explain the various features of OOC. **(08 Marks)**

b. What is a constructor? Mention its types. Explain the parameterized constructor with a suitable code. **(08 Marks)**

c. Give the difference between procedure oriented programming and object oriented programming. **(04 Marks)**

**OR**

2 a. What is an inline function? Write a C++ function to find the maximum of 2 numbers using inline. **(08 Marks)**

b. Why friend function is required? Write a program to add two numbers using friend function. **(08 Marks)**

c. Write short note son function overloading. **(04 Marks)**

### Module-2

3 a. List and explain the Java Buzzwords. **(08 Marks)**

b. Describe the concept of bytecode. **(04 Marks)**

c. Develop the program to calculate the average among the elements {4, 8, 10, 12} using foreach in java. How foreach is different from for? **(08 Marks)**

**OR**

4 a. List the different types of operators. Explain any three. **(08 Marks)**

b. What is an array? List the types and explain any one with a suitable code. **(06 Marks)**

c. Explain switch case with an example. **(06 Marks)**

### Module-3

5 a. Explain the packages in Java with an example. **(08 Marks)**

b. Explain the interfaces in java using suitable code. **(08 Marks)**

c. Write short notes on "this" keyword with an example. **(04 Marks)**

**OR**

6 a. Explain exception handling with a suitable code. **(08 Marks)**

b. Explain the java garbage collector. **(08 Marks)**

c. Write short notes on "super" keyword, with an example. **(04 Marks)**

### Module-4

7 a. Explain the concepts of multithreading in Java. Explain the two ways of making class threadable with examples. **(10 Marks)**

b. With a syntax, explain isAlive( ) and join( ) with suitable program. **(10 Marks)**

**OR**

8 a. Write short notes on Event Listener interface and explain any two interfaces with syntax. **(08 Marks)**

b. Write short notes on Event class and explain any two with syntax. **(08 Marks)**

c. How inner classes are used in Java? Explain. **(04 Marks)**

**Module-5**

9 a. What is an applet? Explain the life cycle of an applet. **(10 Marks)**

b. Explain passing parameters in Applets. **(10 Marks)**

**OR**

10 Explain the following with a suitable code:

i) JLabel
ii) JTextField
iii) JList
iv) JTable. **(20 Marks)**

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