



# CBCS SCHEME

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16/17MCA32

## Third Semester MCA Degree Examination, Dec.2019/Jan.2020 Java Programming

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Explain briefly the Object Oriented principles of Java. (08 Marks)  
b. Discuss the various primitive data types used in Java. (08 Marks)

OR

- 2 a. Explain the working of enhanced for loop with suitable example. (08 Marks)  
b. What is StringBuffer? What is its usage? Write suitable example. (08 Marks)

### Module-2

- 3 a. Explain parameterized constructor with suitable example. (08 Marks)  
b. What is the difference between methods overloading and method overriding? Explain with proper example. (08 Marks)

OR

- 4 a. What are constructors? Explain constructor overloading with examples. (08 Marks)  
b. Explain the following with suitable example: i) Super ii) Final. (08 Marks)

### Module-3

- 5 a. Explain different access specifiers used in Java with suitable example. (08 Marks)  
b. Write a Java program for the implementation of multiple inheritance using interfaces to calculate the area of a rectangle and triangle. (08 Marks)

OR

- 6 a. What is an exception? How exception can be handled in Java with example. (08 Marks)  
b. What are packages in Java? Why is it required to package Java program? Give example. (08 Marks)

### Module-4

- 7 a. What is multi threading? Write a Java program to create multiple threads in Java by implementing Runnable interface. (08 Marks)  
b. What is enumeration? Explain values() and valuesOf() methods. (08 Marks)

OR

- 8 a. What is autoboxing? Illustrate with a programming example. (08 Marks)  
b. What is thread? Explain how to create threads in Java with an example. (08 Marks)

### Module-5

- 9 a. What is an applet? Write a Java applet program which handles keyboard event. (08 Marks)  
b. Write a note on Swing Button. (08 Marks)

OR

- 10 a. With an example, explain the LinkedList collection classes. (08 Marks)  
b. Explain about URL connection class. (08 Marks)

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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.