## Fourth Semester B.C.A. Degree Examinations October / November 2019 (New Scheme)

## **BCD 410: JAVA PROGRAMMING**

Time: 3 Hours Max. Marks: 80 I. **Answer ALL questions:** 1x5=51. What is JVM? 2. What is an Abstraction? 3. Expand JDB. 4 Define error? 5. tag is used to pass parameter to Applet? Answer any **FIVE** of the following: II. 15x5=75 6. a) Explain the features of Java. Explain Java program structure. b) Explain the various data types available in Java. c) (5+5+5)7. How arrays are initialized and declared in Java. Explain? Give example. a) What is a vector? Explain any five vector methods in java. b) Write a note on Wrapper classes. (5+5+5)c) 8. a) Explain final variable, abstract methods and abstract class in Java. Explain method overloading with an example. b) Explain how do we Access interface variable with an example. (5+5+5)c) Write a note on visibilites mode. 9. a) Explain Java API packages. b) Mention the steps involved in creating a package. Explain with an example. c) (5+5+5)

- 10. a) Discuss thread life cycle with neat diagram.
  - b) Explain thread creation in two ways.
  - c) What is Synchonization explain with an example. (5+5+5)
- 11. a) Discuss the classification of exceptions. Write the syntax of exception handling.
  - b) Explain:
    - i) Multiple Catch Statement
    - ii) Finally Clause
  - c) Explain Assertion in Java with suitable example. (5+6+4)
- 12. a) Explain the life cycle of an Applet.
  - b) Distinguish Applet and Application program.
  - c) Write an Applet code to draw human face. (5+5+5)

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