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# BCACAC 314

Credit Based Fifth Semester B.C.A. Degree Examination, Oct./Nov. 2016
(New Syllabus) (2014 – 15 Batch Onwards)
JAVA PROGRAMMING

Time: 3 Hours

Max. Marks: 100

Note: Answer any ten questions from Part – A and answer one full question from each Unit in Part – B.

#### PART-A

1. a) What is Byte code?

 $(10 \times 2 = 20)$ 

- b) What is the size of character data type in Java? Why?
- c) Define Stream. Name any two predefined stream variables.
- d) Define array. Write the syntax for declaring one dimensional array with an example.
- e) What is constructor? Give example.
- f) Differentiate method overloading and method overriding.
- g) What is Package? Write any two benefits of using package.
- h) What is Exception? List any two built-in exceptions in Java.
- i) How to set priority to a thread? Give example.
- j) What is an Applet ? Name two types of applets.
- k) Write the limitations of AWT controls with respect to SWING controls.
- Differentiate components and Containers.



### PART-B Unit-I

- 2. a) Explain any six features of Java.
  - b) Write a note on scope and lifetime of variable.
  - c) Explain different variation of for loop with syntax and example. (6+6+8)
- a) List and explain primitive data types available in Java.
  - b) Differentiate character stream and byte stream. With an example explain the process of reading a string from the keyboard.
  - c) With the syntax and example explain:
    - i) Type conversion in expression
    - ii) Use of break and continue
    - iii) Increment and decrement operators.

(6+5+9)

#### Unit - II

- a) With the syntax and example explain the declaration and initialization of one dimensional array with suitable example.
  - b) With an example explain recursion.
  - c) Explain any six string methods with syntax and example.
  - d) With an example explain the use of super with example.

(5+4+6+5)

- 5. a) With an example explain command line argument.
  - b) Explain single level inheritance with example.
  - c) Explain method overriding with example.
  - d) Explain abstract class with example.

(6+6+4+4)

## Unit - III

- a) Explain the different access modifier keywords.
  - Define Exception handling. With an example explain the exception handling mechanism.
  - Define Synchronization. With an example explain how the threads are synchronized in multithreading environment using synchronized method.

(6+8+6)



- 7. a) With an example explain how to create a package in Java.
  - b) What is the purpose of finally block? With an example explain the usage of finally block in exception handling.
  - Define Thread. With an example explain how to create a thread by using Runnable interface and by using Thread class. (5+6+9)

#### Unit - IV

- 8. a) With an example explain how the parameters are passed to an Applet.
  - b) Explain the components of Delegation Event Model.
  - c) Define Layout Manager. With an example explain the usage of Border Layout.
  - d) List and explain any 4 event classes in java. awt. event. (6+6+4+4)
- a) What is the purpose of MouseListener interface? With the syntax and example.
   Explain any five methods of MouseListener interface.
  - b) With an example explain the usage of ShowStatus method.
  - c) With the syntax and example explain any three methods of JButton control.
  - d) With an example explain the creation of swing applet. (6+5+4+5)