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7. What do you understand by Interface ? How is it different from a 'regular class' and 'abstract class' ? Discuss the use of interface in inheritance using suitable example. 16

#### UNIT - IV

8. (a) What is Multithreading ? How synchronization is achieved in case of using threads in a program ? 8  
(b) Explain setCharAt() methods used in Java. 8
9. Explain the significance of String class in Java ? How is it different from String Buffer class ? Also explain any *two* methods of the String class. 16

Roll No. ....

**97692**

### BCA 6th Semester Examination – April, 2019

**OBJECT TECHNOLOGIES & PROGRAMMING USING JAVA**

Paper : BCA-307

*Time : Three Hours ]*

*[ Maximum Marks : 80*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all. Question Number 1 is *compulsory*. In addition to *compulsory* question, attempt *four* more questions by selecting *one* question from each Unit. All questions carry equal marks.

1. Answer the following in brief :  $2 \times 8 = 16$

(a) What do you understand by Polymorphism ?

- (b) Define Object-oriented Language.
- (c) What is a JVM ?
- (d) Explain *this* keyword ?
- (e) Define CLASSPATH. Why is it used in Java ?
- (f) What is Exception ?
- (g) What is an I/O Stream ?
- (h) What is an instance ?

#### UNIT - I

- 2. What are basic concepts of Object-oriented programming approach ? Explain its benefits over traditional programming approach. 16
- 3. (a) What is a class ? What kind of variables a class can consist of ? 6

97692-5,100-(P-4)(Q-9)(19) (2)

- (b) What do you understand by an object of a class ? Explain the three steps of creating an object of a class. 10

#### UNIT - II

- 4. Explain about various types of operators available in Java along with their precedence taking suitable examples. 16
- 5. (a) What are static methods ? Why main() method is a static method in Java ? 6
- (b) What do you understand by inheritance? Explain different types of inheritance that can be implemented in Java using suitable example. 10

#### UNIT - III

- 6. (a) What is an Exception ? How is Exception handling done in Java ? Also explain advantages of exception handling. 10
- (b) Differentiate between Extends and Implements. 6

97692-5,100-(P-4)(Q-9)(19) (3)

P. T. O.