

Roll No.

97692

BCA 6th Semester

Examination – April, 2018

**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 : Question No. 1 will be *compulsory*. Candidate will have to attempt *four* questions selecting at least *one* question from each Unit. Each questions carrying 16 marks.

1. (a) What is final Keyword ? 8 × 2 = 16
(b) What is finally Keyword ?
(c) What is JVM ?
(d) What is Static method ?
(e) What is Extends ?
(f) What is Method overloading ?

- (g) What is Private keyword ?
- (h) What is Returning objects ?

UNIT - I

- 2. What do you mean by Paradigms of Programming Languages ? What are applications of OOPs ? Explain various steps in evolution of OO Methodology. 16
- 3. Explain the following with a suitable example : $4 \times 4 = 16$
 - (a) Classes
 - (b) Objects
 - (c) Encapsulation
 - (d) Polymorphism

UNIT - II

- 4. (a) What are various types of data using in JAVA ? Explain using example. 8
- (b) What are various types of operators using in JAVA ? Illustrate with an example. 8
- 5. What is inheritance ? What are their types ? How to achieve multiple inheritance in JAVA ? Explain with example. 16

UNIT - III

- 6. Explain the following : 5 + 6 + 5
 - (a) Writing exception subclasses
 - (b) Multiple Catch Statements
 - (c) Abstract Classes

- 7. (a) What do you mean by Packages ? Explain different methods of importing packages with example. 8
- (b) Discuss the various levels of access protection available for packages. 8

UNIT - IV

- 8. (a) How and why Multi-threading using in JAVA ? Explain life cycle of a Thread with java code example. <http://www.HaryanaPapers.com> 8
- (b) What is inter thread communication ? Explain synchronization in JAVA. 8
- 9. Explain the following : 5 + 5 + 6
 - (a) String Buffer Class and Methods
 - (b) Data conversion using value of () methods
 - (c) Transient and Volatile modifiers