

7. (a) Differentiate between with example of each : 8

- (i) throw and throws
- (ii) final and finally.
- (b) With a suitable example, discuss the types of Exceptions. 8

Section IV

8. (a) Describe interthread communication. How is delay caused for synchronization ? 8
- (b) Explain Java Thread Model and Priorities assigned to threads for execution. 8

9. Write short notes on the following : $4 \times 4 = 16$

- (i) Predefined Streams
- (ii) Reading and writing text files
- (iii) Transient and volatile modifiers
- (iv) Binary files.

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Roll No.13...

Exam Code : D-23

Subject Code—60482

B. Sc. EXAMINATION

(Main/Reappear) (Batch 2019 Onwards)

(Fifth Semester)

COMPUTER APPLICATIONS

CCAL-503, Paper-I

Object Oriented Programming Using Java

Time : 3 Hours

Maximum Marks : 80

Note : Attempt Five questions in all, selecting one question from each Section. Q. No. 1 is compulsory. All questions carry equal marks.

1. (a) Java is a procedure oriented language. (T/F)

(b) Hiding of data members in a class is called.....in Java.

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- (c) Return type of Mathematics pow() method is.....
- (d) Java supports.....in heritage.
- (e) A package is created. How do you access package members ?
- (f) Extends and implements cannot be used together in a class. (T/F)
- (g) Thread execution begins from the..... thread.
- (h) The object passed to scanner constructor is.....
8×2=16

Section I

- 2. (a) Discuss some pros and cons of object oriented programming. 8
- (b) Explain the evolution stages of object oriented programming languages. 8
- 3. (a) How is method overriding different from method overloading ? Quote a suitable example of each. 8

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- (b) Discuss achievement of Encapsulation in Java with a suitable model. 8

Section II

- 4. (a) Write a program in Java to implement stack operations using arrays. 8
- (b) Illustrate with a program Garbage Collection using finalize() method. 8
- 5. (a) Explain object creation and assignment of object reference variables with an example. 8
- (b) What can be the substitute of multiple inheritance in Java ? Give an example. 8

Section III

- 6. (a) How would you define your package ? Also discuss using of package members. 8
- (b) Write an interface and then define a class that uses the interface. 8

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