

GANPAT UNIVERSITY
B. Tech. Semester VI EC Engineering
Regular/Remedial Examination April-June 2016
2EC606 Elective Object Oriented Programming

TIME: 3 HOURS]

[TOTAL MARKS: 70

INSTRUCTIONS:

1. Attempt all questions.
2. Answers to the two sections must be written in separate answer books.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.

SECTION-I

- Que. 1** (A) Explain three OOP principles with suitable example. 4
 (B) How does Java interact with web? Discuss interaction steps with necessary sketch. 4
 (C) Write short note on Scope of variables. 4

OR

- Que. 1** (A) Enlist and explain in brief six Java features. 6
 (B) What is the role of Interpreter and Compiler in JVM? Discuss. 3
 (C) Give classification of Integer and Floating point data types and also show the size of each type. 3

- Que. 2** (A) Write a java program to find smallest number from the given three numbers. 3
 (B) Write short note on the following: 6
 1. Arithmetic operators 2. Logical operators
 (C) Write java assignment statements to evaluate the following equation. 2
 $\text{Area} = \pi r^2 + 2\pi rh.$

OR

- Que. 2** (A) Evaluate the following: 3
 1. $9-12/(3+3)*(2-1)$
 2. $9-(12/(3+3)*2)-1$
 3. $9-((12/3)+3*2)-1$
 (B) Write short note on the following: 6
 1. Relational operators 2. Assignment operators
 (C) Write java assignment statements to evaluate the following equation. 2

$$\text{Side} = x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

- Que. 3** (A) Enlist applications of OOP. 2
 (B) What is type casting? Why is it required in programming? 3
 (C) Write short note on Jumps in Loops for Java. 3
 (D) Write a java program to print multiplication table with 3 rows and columns. 4

SECTION-II

- Que. 4 (A) How the class members can be initialized using constructor? What is the significance of static members? 4
 (B) Explain auto boxing and unboxing with suitable example program. 4
 (C) What is the use of super and this keyword? Discuss with an example. 4

OR

- Que. 4 (A) Compare and contrast overloading and overriding methods. 4
 (B) How an array is different than Vector in Java? Briefly discuss. 4
 (C) When do we declare method or class as final? 4

- Que. 5 (A) How can we convert primitive numbers to object numbers and numbers to string? 4
 (B) Write a Java program for creating threads using the thread class. 4
 (C) Give the differences between class and Interface. Discuss what is the need of Interface in Java? 3

OR

- Que. 5 (A) Give differences between String and StringBuffer class. 4
 (B) Write short note on life cycle of a thread. 4
 (C) Explain in brief various forms of Interface implementation. 3
- Que. 6 (A) How can we create, access and use a package in Java? Explain with example. 4
 (B) Write short note on types of errors in Java. 3
 (C) Write applets to draw the following shape. 5
 1. Circle inside a square
 2. Square inside a circle

END OF PAPER