G 1537 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Fourth Semester

Branch : Computer Science and Engineering

CS 010 402—OBJECT ORIENTED PROGRAMMING (CS)

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 *marks.*

1. Define the term 'object oriented programming'. Give example of an object oriented Language.
2. What do you mean by friend function ?
3. Explain the term polymorphism in software programming languages.
4. What are the blocks used in exception handling ?
5. What are the object oriented features in Java ?

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 *marks.*

6. Explain constructors and destructors with proper examples.
7. Differentiate private and protected inheritance in OOPs.
8. Explain overloading of functions with proper examples.
9. Describe with example on how object are allocated dynamically during runtime.
10. Compare the various features of C++ and Java programming.

(5 × 5 = 25 marks)

Part C

Answer **all** *questions.*
Each question carries 12 *marks.*

11. Differentiate classes and objects in OOPs. Give examples to show how they are used for developing programs.

Or

Turn over

12. (a) Explain the evolution of object oriented language. (6 marks)

    (b) Explain nested classes with examples. (6 marks)

13. Explain the various classification of inheritance with examples.

Or

14. Explain hybrid inheritance with suitable OOP program.

15. What is meant by Abstractclass ? Give its syntax. Explain its application.

Or

16. Explain operator overloading ? Explain how a friend member function be used for operator overloading.

17. Describe the exception throwing and catching mechanism with examples.

Or

18. Write a program to show the implementation of arguments in Function template.

19. Explain how data is added or read from files. Write a program to demonstrate it.

Or

20. How can we open a binary file and write to it ? Give example.

(5 × 12 = 60 marks)