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B.TECH DEGREE EXAMINATION, MAY 2012

Fourth Semester

Branch: Computer Science and Engineering

CS 010 402 - OBJECT ORIENTED PROGRAMMING (CS)

(Regular – 2010 Admissions)

Time: Three Hours Maximum: 100 Marks

Answer all questions.

Part A

Each question carries 3 marks.

- 1. Differentiate Procedure Oriented Programming (POP) and Object Oriented Programming (OOP).
- 2. What is meant by Friend classes?
- 3. What is meant by Polymorphism?
- 4. What are the blocks used in the Exception handling?
- 5. Java is platform independent language. Justify.

 $(5 \times 3 = 15 \text{ marks})$

Part B

Each question carries 5 marks.

- 6. Describe the advantages of OOPS.
- 7. Explain about Hybrid inheritance with suitable OOP program.
- 8. Explain the concept of Abstract class and list its applications.
- 9. Describe in detail about throwing mechanism.
- 10. Explain the process of 'Open' files?

 $(5 \times 5 = 25 \text{ marks})$

Part C

Each full question carries 12 marks.

11. Explain nested and local classes with necessary examples.

Or

12. Write a program to implement constructor, copy constructor and destructor.

(12 marks)

13. Explain about Friend function with suitable example.

Or

14. Explain a public, private and protected inheritance.

(12 marks)

- 15. In detail explain about:
 - (a) Function overloading.
 - (b) Operator overloading.

(6 + 6 = 12 marks)

Or

- 16. In detail explain the concept of the pure virtual methods.
- 17. Write a program to use single argument in Function template.

Or

18. Write a program to demonstrate the use of throw within and outside a function.

(12 marks)

19. Explain the process of read and write files.

Or

20.

- (a) How can we determine errors while dealing with files?
- (b) How can we open a binary file and write to it?

(8 + 4 = 12 marks)

 $[5 \times 12 = 60 \text{ marks}]$