P.T.O.

BICS-003

B.Tech. IN COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination December, 2012

BICS-003: OBJECT ORIENTED PROGRAMMING

Time: 3 hours Maximum Marks: 70 Attempt any seven questions. Note: What is object oriented programming? Compare 1. and contrast OOP languages with procedure oriented languages. 2. (a) What is the role of jostream, h and math, h 5 header files? Explain in detail. What is dynamic initialization? Is it possible (b) 5 in C? 3. Write a program to check whether the 5 (a) entered number is palindrome or not. What are inline functions? Discuss it's 5 (b) advantages and disadvantages.

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- 4. What is function overloading? What are the rules for defining overloaded functions? Explain with examples.
 3+4+3=10
- 5. (a) Write a program to exchange values 5 between two classes. (use Friend Functions)
 - (b) What is the concept of data hiding? What 5 are advantages of its applications?
- 6. Write a program to declare three classes S_1 , S_2 , S_3 . The classes have a private data member variable of character data type. Read strings for the classes of S_1 and S_2 . Concatenate the strings read and assign it to the data member variables of class S_3 .
- 7. (a) What is the difference between calling 5 methods for constructor and destructor?
 - (b) What is the operator overloading? Describe rules for operator overloading.

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- 8. (a) What do you mean by inheritance? 5
 Describe various types of inheritance with examples.
 - (b) What are conditional constructors and destructors? Explain with examples.
- 9. (a) What is object oriented modelling? What is 5 it's importance?
 - (b) What are the r value and l value in an expression? Explain with examples.

- 10. Write short notes on any two of the following: 2x5=10
 - (a) Virtual function
 - (b) Polymorphism
 - (c) Exception Handling.