

B.E. / B.Tech. (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL / MAY 2011

GEO INFORMATICS ENGINEERING

FOURTH SEMESTER

GI 9253 OBJECT ORIENTED PROGRAMMING

(REGULATIONS 2008)

Max Mark : 100

Time: 3 hr

Answer ALL Questions

Part – A (10 x 2 = 20 Mark)

1. Distinguish between the terms objects and classes?
2. What do you mean by object oriented user interface?
3. What is the use of scope resolution operator?
4. What is the use of .* operator?
5. Differentiate between Structure and Class in C++?
6. List the special characteristics of member functions?
7. When do we make a class virtual?
8. What does inheritance mean in C++?
9. What is the use of Integrated Development Environment?
10. What is the significance of data control?

Part – B (5 x 16 = 80 Mark)

11. a. (i) Explain in detail the various steps involved in Object Oriented Design (8)
(ii) Discuss how data and functions are shared in the Object Oriented Programming and list the characteristics ? (8)

12. a. (i) Write a C++ program with function using reference variables as arguments to swap the values of a pair of integers? (8)
(ii) Explain the selection and loop control structure with the syntax?(8)

OR

- b. (i) Explain about the manipulators used in C++? (8)
(ii) Write a C++ program using function overloading to estimate the volume of a cube (s^3), cylinder ($3.14519r^2h$) and rectangular box (lbh) ? (8)

13. a. (i). What is Friend function and list its characteristics (8)

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(ii). Write a C++ program with class to add the following

T1 = 3 Hours and 40 Minutes

T2 = 4 Hours and 45 Minutes

Using Objects as Function Arguments ? (8)

OR

b.(i). What is Arrays of Objects and write a C++ program to accept and display the three supervisors name, age and salary using Arrays of Objects concept? (8)

(ii) What is Constructor and list its special characteristics? (8)

14. a.(i) Explain the Classes used for file stream operations? (8)

(ii). Class B was derived from Class A to estimate the sum and average of four numbers w,x,y,z. The Class A stores the values and w and x and Class B stores the values of y and z. Write a C++ program to implement this? (8)

OR

b.(i). What is Error Handling and list the Error Handling functions ? (8)

(ii). Class D was derived from both Class B and Class C. Class B stores the values of a and b and Class C stores the values of c and d and Class D performs the multiplication of a,b,c and d. What type of Inheritance is this and write a C++ program by deriving base class as public. (8)

15. a.(i) Explain about the Remote Data Objects? (8)

(ii). Explain in detail how GIS Customization can be used by the District Administrators in Rural Planning? (8)

OR

b (i). Discuss in detail how GIS Customization can be used by the Decision makers in the Regional Level Planning ? (8)

(ii). Explain about the Data Reports ? (8)