

LIB
26/11/13 FN

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code : 75483

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Third Semester

Software Engineering

ESE 032 — OBJECT ORIENTED PROGRAMMING AND C ++

(Regulation 2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define *enum* data type. Give example.
2. Write about *new* and *delete* operators.
3. Differentiate call by reference with call by value.
4. Write the characteristics of a static variables.
5. What is copy constructor?
6. List the rules for overloading operators.
7. What do you meant by abstract class?
8. Define late binding.
9. What are get and put functions?
10. How to perform read and write operations in files?

PART B — (5 × 16 = 80 marks)

11. (a) Write a program to perform the following using SWITCH CASE :
 - (i) Generate prime numbers between X and Y
 - (ii) Sum of the numbers between X and Y which are divisible by 3.

Or

- (b) Write a program to perform the following using IF-ELSE :
 - (i) Count the vowels in a given string
 - (ii) Convert the given string from uppercase to lowercase.

12. (a) Write a program to find the volume of different shapes using function overloading.

Or

- (b) Write a function to find the maximum value in each row of the given matrix.

13. (a) Write a program to overload '+' operator for concatenating two strings.

Or

- (b) Explain briefly function overloading and operator overloading. (16)

14. (a) Create a base class namely employee. The subclasses are Permanent Employee, Temporary Employee and Visiting Employee. Calculate the salary of employees for the above different classes based on their category. Write a program to perform display and search operations for the given scenario.

Or

- (b) What is polymorphism? With the help of a simple program, discuss the usage of polymorphism.

15. (a) What are the I/O operations possible in files in C++? Explain with sample codes. (16)

Or

- (b) Write a program in C++ to illustrate the following concepts :

(i) Virtual functions

(ii) Pointers.

(8 + 8)