

FYCS/SEM II/REG/Introduction to OOPs using C++

Time: 2½ hrs.

Marks:75

- Note:**
1. All questions are compulsory with internal choice.
 2. Draw neat diagrams wherever necessary.
 3. Figures to the right indicate full marks.

Q.1 Answer the following (any four) (20)

- (a) Explain the characteristics on OOP.
- (b) Explain increment and decrement data types used in C++.
- (c) What is class? Explain with suitable example.
- (d) Write a program to print class Student with (roll,name) as members and void get() and void print() as member functions.
- (e) Explain nested if-else statement with suitable example.
- (f) Write a program to print the reverse of a number using loop.

Q.2 Answer the following (any four) (20)

- (a) What is function? Explain with example.
- (b) Explain constructor and its types.
- (c) Write a short note on static binding.
- (d) Explain the term Aggregation.
- (e) Explain accessor methods with example.
- (f) Write a C++ program to demonstrate destructor.

Q.3 Answer the following (any four) (20)

- (a) Explain the types of Inheritance.
- (b) Write a note on virtual function.
- (c) Explain any two file stream classes needed for the file manipulation.
- (d) Explain the concept of pointer object with suitable example.
- (e) Explain generalization with suitable example.
- (f) Write a program to demonstrate Multilevel inheritance.

Q.4 Answer the following (any five) (15)

- (a) Explain single dimensional array with suitable example.
- (b) Explain any strlen() and strcmp() functions.
- (c) Write a program to print area of circle using constructor.
- (d) Explain static function with suitable example.
- (e) How this pointer is used as an object of a class?
- (f) Explain any two data types used in C++.

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