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Total No. of Pages: 02

Total No. of Questions: 09

B.TECH(EE, 3D ANIMATION & GRAPHICS, CSE, ECE, ETE, IT) (Sem.-3rd)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code: BTCS-305

Paper ID: [A1129]

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATE:

- (i)Section --A, is Compulsory.
(ii)Attempt any four questions from Section-B.
(iii)Attempt any two questions from Section-C.

Section -A

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|---------|--|-----|
| Q.1.(a) | What is scope resolutions operator? | (2) |
| (b) | What is default coustructor? | (2) |
| (c) | What is the use of virtual keyword? | (2) |
| (d) | What are abstract classes? | (2) |
| (e) | What are nested classes? | (2) |
| (f) | What are manipulators? | (2) |
| (g) | What is the difference between calling method of constructor and destructor? | (2) |
| (h) | What is the need of friend functions? | (2) |
| (i) | When do we use reference operator with objects? | (2) |
| (j) | What is late binding? | (2) |

Section –B

- Q.2.** What are the different ways in which we can have abstraction in Objected Oriented Programming? Explain each with the help of an example. (5)
- Q.3.** Explain the constructors with default arguments. How constructors can be called explicitly? (5)

Q.4. What do you mean by an array of objects? Explain how members of objects can be accessed in array of objects with the help of C++ program (5)

Q.5. Why principle of substitution cause slicing problem? What are the different ways to avoid it? (5)

Q.6. What are the advantages of using Template functions? How are they different from the macros? (5)

Section -C

Q.7. What is the difference between overloading and overriding of a function? Write a program in C++ to overload == operator and compare two objects using the operator. (10)

Q.8. What are the different ways to achieve the polymorphism in C++? Explain the pure polymorphism with example. (10)

Q.9. What is the use of Templates in C++? Explain the use of Standard template library with the help of a C++ Program. Also Explain how exceptions are caught in C++ (10)

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