

Roll No:

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Examination: ODD SEMESTER-2024
BTech CSEAI (5th Semester) BACKLOG

Paper Name : Object Oriented Programming

Paper Code: BTCSEAI-504

Time: 3 hours

Maximum marks: 75

Note: This question paper contains two sections Section A and B.

Follow proper numbering for answering the questions.

BL - Bloom's Taxonomy Levels (1: Remembering, 2: Understanding, 3: Applying, 4: Analysing, 5: Evaluating, 6: Creating) CO - Course Outcomes.

Section-A

All questions are compulsory in this section.

Marking Scheme : 7 X 5 = 35 marks.

Q.N.	Questions	Mark	CO	BL
Q1	What do you mean by constants, variable, keywords and identifiers? Give example of each.	5	CO1	BL2
Q2	What is dynamic memory allocation? Which keywords are used to implement dynamic memory allocation in C++?	5	CO2	BL3
Q3	Write a C++ program to display names, rollnos and grades of 3 students who have appeared in the examination. Declare the class of name, rollnos and grade. Create an array of class objects. Read and display the contents of the array	5	CO2	BL3
Q4	Differentiate between call by value and call by reference.	5	CO2	BL3
Q5	What is friend function? What is significance of using a friend class?	5	CO2	BL3
Q6	What is static member function? How it is different from inline function?	5	CO2	BL3
Q7	Define i) class ii) object iii) inheritance iv) Message Passing v) Identity	5	CO1	BL2

Section-B

Attempt any FOUR questions in this section.

Marking Scheme : 4X 10 = 40 marks.

Q.N.	Questions	Mark	CO	BL
Q1	What are the features and advantages of object-oriented programming with an example.	10	CO1	BL2
Q2	How a class accomplishes data hiding? Explain using an example?	10	CO2	BL3
Q3	What is polymorphism? What are its advantages and types?	10	CO4	BL4

Q4	What are Constructors? Discuss the types of Constructors giving an example.	10	CO3	BL 2
Q5	Write a C++ program to generate Fibonacci series using recursion with member function.	10	CO2	BL3
Q6	Define a class named "Train" representing following members: -Train Name, Source, Destination, Journey Date Capacity Member Functions: - -Initialise members -Input Train Data -Display Data Write a C++ program to create the Train class with the specifications given above.	10	CO2	BL3