

B Sc C A/ BCA DEGREE END SEMESTER EXAMINATION - APRIL 2026**UGP (HONS.) SEMESTER 2: DISCIPLINE SPECIFIC COURSE****COURSE: 24UCAPDSC102/24UBCADCC103 - OOPS WITH C++***(For Regular 2025 Admission and Improvement/Supplementary 2024 Admission)*

Time : 1.5 Hours

Max. Marks: 50

PART – A**Answer any 5 Questions**

1. List various types of pointers in C++. (U,CO3)
 2. Define Object and Class in C++ with a simple example. (U,CO2)
 3. Explain the purpose of decision-making statements in C++. (U,CO1)
 4. What is an array? How is it declared and initialized in C++? (U,CO1)
 5. Explain the concept of strings in C++. (U,CO1)
 6. What is a 'main' function? State the purpose of return statement? (An, CO4)
 7. What is exception handling in C++? (U,CO4)
- (2 x 5 = 10)**

PART - B**Answer any 4 Questions**

8. What do you mean by function overloading? Write the rules associated with function overloading. Give suitable example to support your answer? (U,CO1)
 9. Write a C++ program to demonstrate the use of a default constructor. Create a class named Employee with the following private data members: employee ID, employee name and salary and member function: display(). (A,CO4)
 10. Elaborate different methods for defining member functions in a class? (U,CO3)
 11. Explain single inheritance and multilevel inheritance with diagrams and examples.(U,CO4)
 12. Explain the use of ifstream and ofstream classes in file operations. (U,CO4)
 13. Write a C++ program to create a class Array that dynamically allocates memory for n integers using a constructor. Implement a destructor to release the allocated memory. Include member functions to read and display the array elements. (A,CO4)
- (5 x 4 = 20)**

PART - C
Answer any 2 Questions

14. Explain the concept of pointers in c++. Discuss this pointer with an example programs?
(U,CO4)
15. Describe file handling in C++. Explain different file modes and explain reading and writing data to files using file streams is done?
(An,CO3)
16. Write a C++ program to read and write employee details into a file and demonstrate proper error handling.
(A,CO4)
(10 x 2 = 20)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Marks.
CO1	Implement the programmes with the concepts of objectoriented programming language and statements.	A	3,4,5,8	11
CO2	Modify the C++ programmes by reuse the codes having C++ class concepts.	A	2	2
CO3	Apply the concept of polymorphism.	A	1,10,15	17
CO4	Implement the concept of constructors, inheritance and files.	A	6,7,9,11,12,13,14,16	44

Cognitive Level (CL): C - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;