

Reg. No

Name

24U222

B C A DEGREE END SEMESTER EXAMINATION - MARCH 2024
SEMESTER 2 - MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE : 19U2CRBCA5 - OOPS WITH C++

(For Regular - 2023 Admission and Improvement / Supplementary – 2021/2020/2019 Admissions)

Time : Three Hours

Max. Marks: 75

PART A

Answer All (1 mark each)

1. What is the significance of classes in the field of software?
2. How to declare a class template?
3. What do you mean by overloading?
4. What is the need of data type modifiers in c++?
5. Write a definition for a variable of type pointer to float?
6. Define the term 'Exception'?
7. What do you mean by Zero pointer?
8. What is the need for a class?
9. What do you mean by abstract class?
10. What are the features of reference variable?

(1 x 10 = 10)

PART B

Answer any 8 (2 marks each)

11. What is a constructor? What does it do?
12. What are keywords? Can Keywords be used as an identifiers?
13. What is containership? How does it differ from inheritance?
14. What is an identifier? List the rules of naming an identifier of C++?
15. Differentiate between the get_pointer and put_pointer of a file?
16. Define constant pointer?
17. Explain the importance of derived class with an example?
18. What is the general form of a pointer declaration and initialisation? Explain with an example.
19. What are the different attributes associated with a class?
20. Why do we need multiple catch blocks for a single try block? Give an example?

(2 x 8 = 16)

PART C

Answer any 5 (5 marks each)

21. Explain about dynamic memory allocation operators ?
22. What are input and output streams? What is the significance of fstream.h file?
23. What are memory leaks? What are the possible reasons for it? How can memory leaks be avoided?
24. Write a C++ program to illustrate the working of call-by-value method of a function invoking?
25. What is Inheritance? Bring out the various types of inheritance?

26. Discuss a situation in which the private derivation will be more appropriate as compared to public derivation?
27. Explain the usage of following with the help of an example
a) constant b)reference c) variable d) union

(5 x 5 = 25)

PART D

Answer any 2 (12 marks each)

28. Explain pointer to objects? What is this pointer? Write a complete program to illustrate the use of this pointer?
29. What is Object Oriented programmng? Explain the features of OOP.
30. What are iostreams in C++? Explain the stream class hierarchy?
31. Explain the concepts of constructors and destructors?

(12 x 2 = 24)