B C A DEGREE END SEMESTER EXAMINATION - JULY 2021
SEMESTER 2 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY
COURSE : **16U2CRBCA5 : OOPS WITH C++**

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time : Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. Is null statement a valid statement. Justify your answer
2. What is the effect of absence of break in switch-case statement
3. What is the significance of classes in the field of software?
4. Define Global class?
5. What do you mean by inheritance?
6. List any four operator that cannot be overloaded?
7. What do you mean by NULL pointer?
8. What do you mean by Zero pointer?
9. What is the use of get_pointer?
10. Define class template?

(1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. How the data and functions are organised in an object oriented program?
12. Explain about character set of C++?
13. In what way, aside from being functions, are class function members different from class data members?
14. What are the benefits and drawbacks of temporary instances?
15. Define Base class and Derived class? How they are related?
16. How does the public derivation of a class differ from private and protected derivation?
17. Define free store?
18. Explain about function returning pointers with an example?
19. What is a file? Which library file of c++ provides facilitates for file input/output operations?
20. Discuss the two methods of opening a file withing a C++ program. When is one method preferred over the other?

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Explain briefly the concepts of data abstraction and encapsulation with the help of an example?
22. What is parameter passing? Explain parameter passing schemes supported by C++?
23. Name the different forms of inheritance. How are they different from one another?
24. What is multiple inheritance and multilevel inheritance? When can multiple inheritance lead to ambiguity?
25. What is pointer arithmetic? How is it performed? Support your answer with an example.
26. What is dynamic memory management? How is handled in C++? Explain with suitable example.
27. What role is played by file modes in file operations? Describe the various file mode constants and their meanings.

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Bring out the salient features of structured orogramming and object programming?

29. Explain the concepts of constructors and destructors?

30. Explain the concept and use of this pointer? Give an example.

31. Explain the role of seekp(), tellp(), seekg() and tellp() function in the process of random access in a binary file?

(12 x 2 = 24)