Reg. No	Name	20U113

B. C. A. DEGREE END SEMESTER EXAMINATION - OCT 2020 : FEBRUARY 2021 SEMESTER 1 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE: 19U1CRBCA2: PROGRAMMING IN C

(For Regular - 2020 Admission and Supplementary - 2016/2017/2018/2019 Admissions)

Time: Three Hours Max. Marks: 75

PART A

Answer All (1 mark each)

- 1. What is a flowchart?
- 2. What are high level languages?
- 3. What is constant?
- 4. What is the use of return statement in C?
- 5. What is lifetime of a variable?
- 6. What is command line argument?
- 7. What is dynamic memory allocation?
- 8. Write the syntax of typedef statement.
- 9. What you mean C preprocessor?
- 10. What is the use of strlen() function in C?

 $(1 \times 10 = 10)$

PART B Answer any 8 (2 marks each)

- 11. What are the basic symbols of a flowchart?
- 12. What are the basic difference between compiler and interpreters?
- 13. What is the output of this program ?
 void main()
 {
 int a=b=c=10;
 a=b=c=50;
 printf("\n %d %d %d",a,b,c);
 }
- 14. Write a syntax for while loop.
- 15. What is nested loop?
- 16. What are the limitations of an array?
- 17. What do you mean by call by reference?
- 18. How a structure is different from an array?
- 19. What is pointer arithmetic in C?
- 20. Write the syntax and purpose of getc()?

 $(2 \times 8 = 16)$

PART C Answer any 5 (5 marks each)

- 21. What are the difference between assembly language and high level languages?
- 22. Explain conditional operator with example program?
- 23. Write a program to find area and perimeter of a circle by reading the radius.
- 24. Write a program to print multiplication table of a given number.
- 25. What is the difference between call by value and call by reference?
- 26. What is the difference between malloc and calloc in c?
- 27. What are string functions in c?

 $(5 \times 5 = 25)$

PART D Answer any 2 (12 marks each)

- 28. a) Write a program to sort an integer array in decreasing order using bubble sort?
- b) Demonstrate the execution of the above program in the array [2,4,1,5,7,3,8]29. a) Explain different storage classes in C?
 - b) Explain general form of a function with example?
- 30. What is the difference between union and structure in C?
- 31. Explain any five file handling functions with its syntax and use in C.

 $(12 \times 2 = 24)$