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BCA DEGREE END SEMESTER EXAMINATION OCTOBER 2016

SEMESTER - 1: CORE COURSE

COURSE: 16U1CRBCA2; PROGRAMMING IN 'C'

For Regular (2016 Admission)

Time: Three Hours Max Marks: 75

SECTION - A

Answer all Questions. Each question carries 1 mark

- 1. Define Flowchart.
- 2. Compare assembler with compiler.
- 3. Name the different data types in C.
- 4. Distinguish between variable and constant.
- 5. Write C program to find even numbers between 20 and 30 using for loop.
- 6. What is the minimum number of times that a do while loop can be executed?.
- 7. Differentiate between formal arguments and actual arguments.
- 8. Define a structure for representing rollno, name and mark of a student.
- 9. Explain how a file can be opened in read mode.
- 10. Explain any two string handling function in C.

 $(1 \times 10 = 10)$

SECTION - B

Answer any eight Questions. Each question carries 2marks

- 11. Draw a flowchart to find the largest among three different numbers entered by user.
- 12. What is the use of conditional operators in C? Explain with an example.
- 13. What is meant by operator precedence? What are the relative precedence of arithmetic operators?
- 14. Differentiate between break and continue statement.
- 15. Explain user defined functions with example.
- 16. Explain the concept of multidimensional array with example.
- 17. Write a program to find factorial of a number using recursion...
- 18. With the help of an example explain what is the use of typedef?
- 19. Illustrate the difference between static and dynamic memory allocation with the help of an example.
- 20. Explain fopen function and list file modes available in C.

SECTION - C

Answer any **five** Questions. Each question carries 5 marks

- 21. Give an algorithm and flowchart to display Fibonacci Series.
- 22. Compare if and switch with examples.
- 23. Write a C program to generate first N prime numbers.
- 24. Write a program using function to test whether a given string is palindrome or not.
- 25. With suitable example discuss pointer arithmetic in C.
- 26. Define structure and union. How does a union differ from a structure?
- 27. Explain macro with an example. Distinguish between the execution of macro and function.

 $(5 \times 5 = 25)$

SECTION - D

Answer any two Questions. Each question carries 12 marks

- 28. Explain different loop control statements in C with example.
- 29. What are the various storage classes in C? Explain with examples.
- 30. Write a C program to find the product of two matrices and print the result in column wise.
- 31. Write a C program to perform bubble sort for preparing the rank list of students using array of structure. $(12 \times 2 = 24)$
