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# QP - 203

## I Semester B.A./B.Sc. Examination, March/April 2022 (CBCS) (Repeaters) (2014-15 and Onwards) COMPUTER SCIENCE – I Programming Concepts Using 'C'

Time : 3 Hours

Max. Marks: 70

Instruction : Answer all Sections.

### SECTION - A

I. Answer any ten questions. Each question carries 2 marks :

 $(10 \times 2 = 20)$ 

- 1) What is variable ? Show variable declaration and initialization.
- 2) Define algorithm and flowchart.
- 3) What is software ? Mention the types of software.
- 4) What is function ?
- 5) Give the differences between while loop and do while loop.
- 6) What is ternary operator ? Write the syntax.
- 7) Define array. Mention its types.
- 8) What is string ? List string related functions.
- 9) What is enum?
- 10) Define pointer. Give example.
- 11) What is command line arguments ?
- 12) What is file ? What are the types of files ?

## SECTION - B

II. Answer any five questions. Each question carries 10 marks :

(5×10=50)

- 13) a) List and explain the data types supported by C language.
  - b) Write an algorithm and flowchart to find the biggest of 3 numbers.
- 14) a) With example explain bitwise operators.
  - b) Explain break and continue statement.

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- 15) a) What is recursive function ? Give example.
  - b) Define a loop and write the differences between while and do while loop.
- 16) a) Explain storage classes.
  - b) Explain static and dynamic memory allocation.
- (17) a) With example explain pointer to an array.
  - b) Explain 2-dimensional array with example.
  - 18) a) With example explain call by reference parameter passing mechanism.
    - b) What is structure ? How to declare and initialize structure. Give example.
  - 19) a) List and explain memory allocation function.
    - b) Write a C program to create and implement user defined header file.
  - 20) a) What are pre-processor directives ? Explain any 4 pre-processor directives.
    - b) With example explain fopen() function.