

**672****October 2017**

Time - Three hours  
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory. Answer any FOUR questions from the remaining in each PART - A and PART - B.

(2) Answer division (a) or division (b) of each question in PART-C.

(3) Each question carries 2 marks in PART - A, 3 marks in Part - B and 10 marks in PART - C.]

PART - A

1. Define algorithm.
2. What is a constant? What are its types?
3. Define array.
4. What is built-in function?
5. What is return statement?
6. What is a pointer?
7. Write the general form to open a file.
8. Write the differences between *while* and *do...while* statements.

PART - B

9. Give the importance of flowchart.
10. Explain the explicit type conversion.
11. Give the syntax of *else...if* ladder statement.
12. What are the functions used to read string? Give its general form.
13. Explain the array of pointers to strings.
14. What are the error situations that occur during input/output operations?
15. What are the advantages of pre-processor?
16. What are formal and actual arguments?

PART - C

17. (a) Explain any five types of operators in C with examples.

(Or)

- (b) (i) Explain the structure of C program.  
(ii) Explain the formatted output functions.

18. (a) Explain string handling functions.

(Or)

- (b) (i) Explain *for loop* with an example.  
(ii) Write a program to find the sum and average of given 'N' numbers.

19. (a) (i) Explain call by value with an example.  
(ii) Write a program to find whether the given year is leap or not.

(Or)

- (b) (i) Explain array of structure with an example.  
(ii) Explain union with an example.

20. (a) Explain the functions used in dynamic memory management with an example.

(Or)

- (b) (i) Write a program to find the length of a given string using pointers.  
(ii) Explain how pointers are used in structures.

21. (a) Explain about random access files.

(Or)

- (b) (i) Explain command line arguments with an example.  
(ii) Explain simple macro definition with an example.

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