

**799****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. What are low level language and high level language?
2. List the relational operators in C.
3. Write the use of break statement.
4. Write the use and syntax of `clrscr( )`.
5. What is recursion?
6. Write the difference between structure and union.
7. Write the use and syntax of `free( )` function.
8. What are keywords?

PART – B

9. Draw any three flowchart symbols with their meaning.
10. What are identifiers? Write any two rules for identifiers.
11. Write the use and syntax of type cast operator.
12. Write the use and syntax of `do...while` statement.
13. Write the use, syntax and example for `gets( )` function.
14. What is structure? Write the syntax to define a structure.
15. What is union? Write the syntax to define union.
16. Explain the use of `exp( )`, `pow( )` and `sqrt( )` functions.

[Turn over...

PART - C

17. (a) (i) Explain the structure of C program.  
(ii) What is constant? Explain numeric constant with types and example.  
(Or)
- (b) How will you compile, link and run a C program? Draw the diagram of program execution process.
18. (a) (i) Explain about arithmetic operators and conditional operators in C.  
(ii) Explain about nested *if...else* statement with example.  
(Or)
- (b) (i) Explain formatted *output* statement with an example.  
(ii) Explain *while* statement with an example.
19. (a) (i) How will you declare and initialise two dimensional arrays?  
(ii) What is function? Write the general form of defining function.  
(Or)
- (b) (i) Explain the use and syntax of any five functions in *ctype.h*.  
(ii) Explain about any two storage classes with an example.
20. (a) (i) Explain arrays of structure with an example.  
(ii) Explain structure within structure with an example.  
(Or)
- (b) Explain the functions used for dynamic memory allocation with an example.
21. (a) (i) Write C program to find sum of series using *while* loop.  
(ii) Write C program to find equivalent resistance of three resistances connected in series and parallel.  
(Or)
- (b) (i) Write C program to swap the values of two variables.  
(ii) Write C program to draw the symbol of diode using graphics.
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