

October 2018

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 is flowchart? Draw any two symbols with their meaning.
2. What is character constant? Give an example.
3. List the arithmetic operators with an example.
4. Write the syntax of *while* statement.
5. What is array?
6. What are built-in functions? Give an example.
7. What is dynamic memory allocation?
8. Write two differences between structure and union.

PART – B

9. What is algorithm? Write the properties of algorithm.
10. State the use and syntax of declaring variables.
11. Write the use, syntax and example of `gets()` functions.
12. State the use of `abs()`, `clrscr()` and `getch()` functions.
13. What are formal and actual arguments?
14. Which operator is used to access the structure member? Write the syntax.
15. What is array within structure? Give an example.
16. Write the use and syntax of `break` statement.

[Turn over.....

PART – C

17. (a) (i) List any five features of C language.
(ii) Explain the structure of C program.

(Or)

- (b) Explain program development cycle with a diagram.

18. (a) (i) Explain about *if else* statement with an example.
(ii) Explain about *for* loop with syntax and an example.

(Or)

- (b) Explain increment, decrement operators, conditional operator and bit wise operators with examples.

19. (a) (i) Write the syntax and example to declare and initialise two dimensional arrays.
(ii) Explain about any two storage classes.

(Or)

- (b) Explain the functions used for writing strings with syntax and example.

20. (a) (i) Explain structure within structure with an example.
(ii) What is union? Write the syntax and example to define union.

(Or)

- (b) Explain the functions used for dynamic memory allocation with an example.

21. (a) (i) Write C language program to swap the values of two variables.
(ii) Write C language program to find the resonant frequency of RLC circuit.

(Or)

- (b) Write C language program to draw the symbol of NPN transistor using graphics.
