

- (d) Theoperator can be used to determine the length of array and structure.
 - (e)function can be used to read a single character.
 - (f) An immediate exit from the loop can be achieved by astatement.
 - (g) An.....storage class can be used to declare global variable known to all the functions in the file.
 - (h) C program execution begins from.....
 - (i) Array a[20] will have.....elements in it.
 - (j) Pointer operators are.....and
- (ii) True and False : $10 \times 1 = 10$
- (a) Body of the do while statement is executed at least once.
 - (b) strcpy (s1, s2) function copies s2 to s1.
 - (c) In switch statement, each case should be enclosed by a parenthesis.
 - (d) The printf variable list must be preceded by a "&" symbol.

8. Write a C program to copy the content of a given file say 'a.txt' to another file 'b.txt'.

OR

What are preprocessor directives? List the commonly used directives and their uses.

9. Write a program in C to print pyramid using numbers

```
1
2 3 2
3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5
```

OR

Write a program in C to find sum and subtraction of two matrices.

10. What are header files and what are its uses in C programming?

OR

Explain in detail call by value and call by reference with example.

[P. T. O.]

11. Explain the following :

- (i) feof ()
- (ii) fseek ()
- (iii) fgets ()
- (iv) fputs ()
- (v) ftell ()

OR

What is pointer? How pointer are declared in C programming language? Illustrate with a suitable example.



- (e) The statement `int*x[10]` will declare a two-dimensional array of 10 columns.
- (f) `#DEFINE` is a predefined macro.
- (g) Pointers can be multiplied.
- (h) A list of strings can be stored within a two-dimensional array.
- (i) There is a limit on the number of times a function is called.
- (j) `Char y='a'` is a valid C statement.

SECTION 'B'

Note : Answer any three questions:

$$3 \times 10 = 30$$

- 2. (a) Explain the basic structure of a 'C' program.
- (b) Classify operators in C language based on number of operands. Give suitable examples.
- 3. (a) Write a C program that finds the sum of first 50 natural numbers.
- (b) How does function definition differ from function declaration?

[P. T. O.]

4. (a) What is dynamic memory allocation?
(b) Explain break and continue statements using syntax and example.
5. (a) What are enumerated data types? Give an example.
(b) Write C program to find maximum of two numbers using ternary operator.
6. (a) Explain different string manipulation functions with examples.
(b) What are the attributes of good programming language?

SECTION 'C'

Note : All questions are compulsory. Each question has internal choice. $5 \times 10 = 50$

7. What is selection sorting? Sort the number " 5 1 4 2 8" from lowest to greatest using selection sort.

OR

What is the advantage of switch statement over if-else statement? Write a program in C using switch statement to create a simple calculator that performs addition, subtraction, multiplication and division.