

7. Which type of files can't be opened using fopen() ?

- (a) .txt. (b) .bin.
(c) .c. (d) None of the mentioned.

8. What is the output of the C code ?

```
#include <stdio.h>
int main()
{
int i=10;
int *p=&i;
printf("%d\n", *p++);
}
```

- (a) 10. (b) 11.
(c) Garbage value. (d) Address of i.

9. If there is any error while opening a file, fopen() will return _____.

- (a) Nothing. (b) EOF.
(c) NULL. (d) Depends on compiler.

10. A _____ is a collection of data items under one name in which the items share the same storage.

(10 × 1 = 10 marks)

Part B

Answer all five questions.

Each question carries 2 marks.

11. What is the basic structure of a C program ?
12. What are keywords and identifiers ?
13. Write the general form of conditional operator and explain the evaluation procedure.
14. Explain how one dimensional array is declared and initialized ?
15. How pointer variables are initialized ?

(5 × 2 = 10 marks)

Part C

*Answer any five questions.
Each question carries 4 marks.*

16. Write an algorithm and draw a flowchart to find first and second largest of n numbers?
17. Write a program to compute the sum of digits of a given integer number to a single digit ?
18. Explain the concept of call by value and call by reference with suitable examples ?
19. Differentiate between structure and union with suitable examples ?
20. Explain any two string handling functions with example ?
21. Write a program to check whether a number is palindrome or not ?
22. What are pointers ? Explain how to perform arithmetic operations on pointers ?
23. Write a program to display the prime numbers in a list of numbers ?

(5 × 4 = 20 marks)

Part D

*Answer any five questions.
Each question carries 8 marks.*

24. Explain the different types of data types available in C with examples.
25. Explain a) Arrays of structures b) Multidimensional arrays.
26. Explain different looping structures available in C with suitable examples.
27. Write a recursive function to generate and print first n Fibonacci numbers.
28. What are pointer expressions ? Write a program using pointers to compute the sum of all elements stored in an array.
29. Write a program to merge two sorted array in to a single sorted array in ascending order.
30. What are Preprocessor directives in C ? Explain various forms of macro substitution.
31. Write a program that appends one file at the end of another file.

(5 × 8 = 40 marks)