

. is compulsory. Attempt any four questions selecting one questions from each unit.

Explain the following in brief: -

- State some of the features of 'C' language.
- Why 'C' language is known as 'mid-level language'?
- What is a syntax error? How do we detect them?
- How 'switch' statement works?
- What is the purpose of 'union' in 'C' language?
- What do you understand by 'compiled code'?
- List the differences between 'pointer to array' and 'array of pointers.
- What do you mean by operators "#" & "##"?
- List the differences between 'Structures' and 'Union'.
- List '2' functions of 'math.h' and 'string.h' header file.

(10x2.5)

Handwritten notes:
 # → include a directive
 ## → more pre-processor
 # to pre-processor

UNIT-I

- Explain the relational and logical operators with the help of examples.
- Write a program to find the maximum among '5' number. The program should use do....while loop.
- Explain the functioning of 'break', 'continue' and 'exit' function with examples.
- Write a program to reverse a string.

UNIT-II

- Discuss the features and working of 'call by value' and 'call by reference'. Also give example to explain them.
- Write a program to multiply two matrices of order (n x n) with dynamic memory allocation technique.
- Write the output of following, if i = 5 for each case,
 - $i = (i++) * (i++)$
 - $i = (++i) * (i++)$
 - $i = (++i) * (++i)$
- List the scope of automatic, external static and registers in detail.

UNIT-III

- What do you mean by bit-wise operations. Explain about some bit-wise operators. Also provide the example for each.
 - Write a program to find the size of 'Union' function if 'Union' contain the following data types:
 char name [20];
 int number;
 float decimal;
- Explain about some file handling functions in detail.
 - Write a program to transfer each line of first file to second file.

UNIT-IV

- What are the differences between library file and header file?
 - List '5' functions of each header file.
 - stdio.h
 - string.h
 - process.h
- What do you understand by function prototype, formal arguments and actual arguments?
 - List '5' functions for each header file.
 - conio.h

Handwritten notes:
 abort, _exit, _cexit, _c_exit, exit