

Sixth Semester B. Sc. Examination

ELECTRONICS

Paper – I

Programming in 'C'

Time : Three Hours]

[Max. Marks : 50

- N. B. : (1) All questions are compulsory and carry equal marks.
(2) Use either ANSI 'C' or TURBO 'C' for program.

EITHER

1. (A) List the different data types supported by 'C' language ? Explain these data types with respect to format specification, range, size and keyword. 20

OR

- (B) What is an operator in 'C' ? List the different operator used in 'C'. Explain any two 'C' operators with examples.
Explain precedence and associativity of an arithmetic operators used in 'C'. 1 + 3 + 4 + 2

EITHER

2. (A) Give syntax of simple if – statement. Differentiate between simple if and if – else statement with example. Explain ladder if – else statement and nested if statement. 2 + 2 + 6

OR

- (B) State the rules for making use of 'for' loop in 'C'.
Write a program in 'C' to print.

1
1 2
1 2 3
1 2 3 4 4 + 6

EITHER

3. (A) What is a function ?
Explain the need for user define function.
Illustrate the different categorise of function.
Write a function to find the factorial of a given number. 1 + 1 + 4 + 4

OR

- (B) What is a structure ?
How does structure differ from array ?
Explain template, tag and size of a structure.
How do we initialize structure during declaration ?
Give example. 2 + 2 + 3 + 3

EITHER

4. (A) What is a pointer ?
Explain the utility of a pointer.
How is pointer variable declared and initialized ?
Write a program to exchange the values of two variable using pointers. 1 + 2 + 4 + 3

OR

- (B) What is file in 'C' ?

Describe in brief f_{open} () function and explain all file opening modes.

How does the opened file is closed ?

What is command line argument. Explain with example.

1 + 5 + 1 + 3

5. Answer any **ten** questions from following :—

- (a) Mention the rules for writing a variable name.
- (b) Mention the point of difference between ' = ' and ' = = '.
- (c) What is C – Token ?
- (d) Give the syntax of switch statement.
- (e) What is the difference between do while and while loops ?
- (f) Give the syntax for one – dimensional array.
- (g) What is Union ?
- (h) Write the scope of the members of Union.
- (i) Differentiate between Union and structure.
- (j) What is the significance of EOF ?
- (k) Write down the syntax of f_{seek} function.
- (l) State true or false and justify your answer.
(P+1) increments the content of the location pointed by P. 1 x 10 = 10