

Bachelor of Science (B.Sc.) Semester–VI (C.B.S.) Examination

PROGRAMMING IN "C"

Paper–1

(Electronics)

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) **All** questions are compulsory and carry equal marks.

(2) Draw neat diagram wherever necessary.

EITHER

1. (A) Explain the role of keywords and operators in C programming. List the rules for naming variables giving example. Explain the use of bitwise operators with examples. 3+2+5=10

OR

- (B) State the use of In-Equality operator. Write a program to compute sum and average of three integers. 3+7=10

EITHER

2. (A) Explain the control structure if-else. Write a program to read ten integers from keyboard and print the sum of even and odd numbers separately. 4+6=10

OR

- (B) Explain different loops available in C language with examples. Draw the related flowcharts. 10

EITHER

3. (A) (i) What is function ? Explain necessity of a user defined function.
(ii) How does a library function differ from a user defined one ?
(iii) Explain the use of recursive function in finding factorial of a number. 3+3+4=10

OR

- (B) (i) State the salient features of array, structure and union.
(ii) Explain the syntax for initialization in each case. 6+4=10

EITHER

4. (A) (i) What is a pointer ? List advantages of its usage.
(ii) Explain pointer initialization.
(iii) Differentiate between call by value and call by reference with suitable example.

$$3+2+5=10$$

OR

- (B) (i) List the file operations supported by C language.
(ii) Write a program to create a file to store ten records containing roll number, name and percentage marks.

$$3+7=10$$

5. Solve any **ten** :

- (a) State the merits of 'C' language.
- (b) What is an escape sequence in C ?
- (c) Differentiate between assignment and equality operators.
- (d) What is the necessity of arrays ?
- (e) State the syntax for 'switch' in C.
- (f) Differentiate between local and global variables.
- (g) State the use of void function.
- (h) What is a period operator ?
- (i) Explain the action of f seek () statement.
- (j) What do you understand by scale factor of a variable ?
- (k) What is a command line argument ?
- (l) What is the default initial value of an automatic storage class variable ?

$$1 \times 10 = 10$$