

NRT/KS/19/2185

Bachelor of Science (B.Sc.) Semester-VI Examination

PROGRAMMING IN "C"

Optional Paper—1

(Electronics)

Time : Three Hours]

[Maximum Marks : 50

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

(2) Draw well labelled diagrams wherever necessary.

EITHER

1. (A) What are identifiers ? What are the rules for naming identifiers ? Explain with examples.
What are constants ? List and explain different types of constants with examples. 5+5

OR

- (B) What are operators ? Explain difference between bitwise and logical operators.
Explain the use of format specifier and escape sequences in C. 5+5

EITHER

2. (A) What is an array ? Explain declaration and initialization of one-dimensional array. What are the advantages of using array ?
Explain switch statement with suitable programming example. 1+3+1+5

OR

- (B) What are decision making and branching statements ? Explain nested if else statement with example.
What is the use of continue statement in loops ? Differentiate between while loop and do_while loop. 2+3+2+3

EITHER

3. (A) What is a function ? What is an argument ? Differentiate between formal and actual argument.
What are built in functions ? Explain function with argument and return value with example. 1+1+3+2+3

OR

- (B) Define structure and explain how to initialize and access member of structure. Explain with example.
Explain the concept of union with suitable example. Differentiate between structures and union. 5+3+2

EITHER

4. (A) What is a file ? What are the types of files ? What are the uses of functions fseek(), fread() and fwrite() ?
What is a file pointer ? Explain how file is opened and closed by using file pointer ? 1+1+3+1+4

OR

(B) What is pointer ? Explain pointer declaration and initialization. Explain pointer arithmetic.
What is command line argument ? Explain with suitable program. 5+5

5. Solve any **ten** :

(A) List the separators used in C.

(B) Explain the use of size of operator.

(C) List all unary operators with their meaning.

(D) Name the exit control loop used in C.

(E) What is the use of void data type ?

(F) What are the drawbacks of using goto statement ?

(G) Is it possible to initialize unions ?

(H) What is the similarity between union and enumeration ?

(I) What are the different types of function ?

(J) What is preprocessor directive ?

(K) What is pointer operator ?

(L) What is EOF ?

1×10