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SF—16—2022

FACULTY OF COMPUTER STUDIES

B.Sc. (First Year) (First Semester) EXAMINATION

JUNE/JULY, 2022

(CBCS/Rev. Course)

COMPUTER SCIENCE

Paper (BCS-102) (Part-I)

(Introduction to Programming Language Using C)

(Friday, 1-7-2022)

Time : 9.30 a.m. to 1.15 p.m.

Time—3.45 Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Assume suitable data, if required.

1. Attempt any *five* of the following (3 marks each) : 15

- (a) Explain machine language.
- (b) Explain variables. Write down the basics rules to build variable names in C language.
- (c) Explain structure of any C program.
- (d) Explain algorithm and its symbols.
- (e) Explain history of C language.
- (f) What is meant by translator ? Explain its types.
- (g) Explain break, goto and continue.

2. Attempt any *three* of the following (5 marks each) : 15

- (a) Explain primary data types in C language.
- (b) Write a program to calculate the square of the given number.
- (c) Explain flowcharts in detail.
- (d) Write a program to perform swapping of two numbers.
- (e) Explain modulus operator with example.

P.T.O.

3. Attempt any *three* of the following (5 marks each) : 15
- (a) Explain if-else statement with example.
 - (b) Explain ternary operator with example.
 - (c) Write a program to check whether given number is positive or negative.
 - (d) Explain nested if-else statement with example.
 - (e) Explain looping statements in C language.
4. Attempt any *three* of the following (5 marks each) : 15
- (a) Write a program to print the following pattern :

```
1
1 2
1 2 3
1 2 3 4
```
 - (b) Explain switch-case statement in detail with example.
 - (c) Define function. Explain with example.
 - (d) Write a program to perform reverse of any digit number.
 - (e) Define Array. Explain two-dimensional array.
5. Write short notes on any *three* of the following : 15
- (a) Else-if ladder statement
 - (b) Passing arrays to functions
 - (c) Keywords
 - (d) Languages
 - (e) Formatted and unformatted I/O statement.