July-22-00211

B. Tech. EXAMINATION, 2022

Semester II (CBCS)

COMPUTER FUNDAMENTALS &

PROGRAMMING IN C++

CS-101

Time : 3 Hours   *Maximum Marks : 60*

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt *Five* questions in all, selecting *one* question from each Section A, B, C and D. Q. No. 9 is compulsory.

Section A

1. Describe the basics of computer and its operation with diagram.   . 10

2. Explain the role of complier, interpreter and assembler.

10

Section B

3. Discuss the different types of number systems and give one example from binary to octal. **10**

4. Explain the different types of storage units. **10**

Section C

5. (a) What are different types of C++ tokens ? **5**

(b) Explain the structure of a C++ program. **5**

6. (a) Describe the built-in data types. **5**

(b) Explain the different types of operators used in C++. **5**

Section D

7. (a) Write a program using switch case statement. **5**

(b) Give the difference between call by value and call by reference. **5**

8. (a) Write a program to find greatest among two numbers. **5**

(b) Explain the one dimensional array with example.

5

(Compulsory Question)

9. (a) Define the process of booting.

(b) What is type casting ?

(c) What is the function of address and data bus ?

(d) Give the difference between global and local variables.

(e) Define the cache memory.

(f) What is application software ?

(g) Define a structure.

(h) Explain break statement.

(i) What is an array ?

(j) What is default argument ? **10×2=20**