Sep-21-00672

B. Tech. EXAMINATION, 2021

Semester II (CBCS)

COMPUTER FUNDAMENTALS & PROGRAMMING

IN C++

CS-101

Time : 2 Hours   *Maximum Marks : 60*

The candidates shall limit their answers precisely within 20 pages only (A4 size sheets/assignment sheets), no extra sheet allowed. The candidates should write only on one side of the page and the back side of the page should remain blank. Only blue ball pen is admissible.

Note : Attempt *Four* questions in all, selecting *one* question from any of the Sections A, B, C and D. Q. No. **9** is compulsory.

Section A

1. What is an Operating System and what are the goals and functions of an Operating System ?   **15**

2. What is computer ? What are the different generation of computer with thier advantages and disadvantages ?

15

Section B

3. What are the types of computer number system ? Perform the following expressions :

   (a) $(FACE)_{16} = (?)_2$

   (B) $(101010)_2 \rightarrow \rightarrow (?_{10})$ **15**

4. What is computer memory ? Explain their types in detail with the help of example. **15**

Section C

5. What is object oriented programming ? Differentiate between C and C++. **15**

6. What is operator ? Explain various types of operators used in C++. **15**

Section D

7. Discuss the various control structure using in C++ with the help of example. **15**

8. What is function in C++ ? Explain with example. Write C++ Program to Find the Square Root of a Number. **15**

(Compulsory Question)

9. Write short notes on the following : **10×1.5=15**

   (a) Structure

   (b) Call by value

   (c) Break Statements

   (d) Do-while Loop

   (e) Character constant and Integer Constant

   (f) Header files in C++

   (g) Assembler

   (h) Application software

   (i) Recursion

   (j) Booting