16008(J)   ⌐J -16

B. Tech 2nd Semester Examination

Introduction to Computer Fundamentals & Programming in C++ (CBS)

CS-101

Time : 3 Hours   Max. 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 any one question each from Sections A, B, C and D. Section E is compulsory. Each Section carries 12 marks.

SECTION - A

1. What is computer? Explain the evolution of computers and also the classification of computers.   (12)

OR

2. Explain the significance of compiler, interpreter and assembler. How they are different from each other?   (12)

SECTION - B

3. Describe the various types storage units like Byte, Kilo byte etc. How they are related to each other?   (12)

OR

4. Write a detailed note on secondary memory and its types.
                                                     (12)

SECTION - C

5. (a)   What is break statement?

[P.T.O.]

(b) Write a menu driven program in C++ to calculate addition, subtraction, multiplication and division of two integers using switch statement.   (12)

OR

6. What are various data types available in C++? Explain by giving syntax and examples.   (12)

SECTION - D

7. Write a C++ code to illustrate the difference between call by value and call by reference.   (12)

OR

8. Write a program in C++ to count vowels, consonants, digits and special characters in a string using functions.   (12)

SECTION - E

9. (i)   What are functions?

    (ii)   Define the term compiler.

    (iii) What is the use of switch statement?

    (iv)   How conditional operator works?

    (v)   Differentiate between relational and logical operators.

    (vi)   What is system software?

    (vii) What is use of endl and setw()?

    (viii) Define type casting.

    (ix)   What is machine level language?

    (x)   How structure is different from union?

    (xi)   When is do while loop used?

    (xii) What is cache memory?   (1×12=12)