

Total No. of Questions:-4
Class Roll No

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Enrollment No .

LNCTU
CS – 104

Mid-Semester Examination-I (DEC 2024)

B.Tech. I Semester (CSE/CSE-AIML)

PROGRAMMING AND PROBLEM SOLVING USING C++ (PPS)

Duration: 1hr 30min

Max. Marks: 20

Note: Attempt all questions.

Q1.A) Discuss in detail various types of computers through classification of computers. **[CO-1 / 5 Marks]**

Or

B) Discuss CPU organization in detail? Also explain any two I/O devices that you know. **[CO-1 / 5 Marks]**

Q2. A) Convert the following decimal numbers into Binary, Octal and Hexa-decimal numbers.

(i) 156 (ii) 24.75

B) Differentiate between system software and application software. **[CO-1 / 5 Marks]**

Or

C) What do you mean by generations of computers? Explain different generations of computers in detail.

D) Convert $F8_{(16)}$ into Octal, Binary and decimal numbers. **[CO-1 / 5 Marks]**

Q3. A) What do you understand by an Algorithm? Highlight its importance. Write Algorithm for finding largest of given 3 numbers. **[CO-2 / 5 Marks]**

Or

B) Explain in detail the problem-solving strategy in computers? List out any 3 algorithm design strategies. **[CO-2 / 5 Marks]**

Q4. A) What is a Flow Chart? Explain different symbols used in a flow chart? Also draw a flow chat for printing a larger number of the given two numbers.

Or

B) What is a header file in C? List out at least 5 header files used in C and discuss any one of them in detail? **[CO-2 / 5 Marks]**