CLASS:	**IMSc**	**SEMESTER: II**
BRANCH:	**CHEMISTRY**	**SESSION: SP/19**

SUBJECT: CS270 FUNDAMENTALS OF COMPUTER SCIENCE

TIME: 3 Hours   **FULL MARKS: 50**

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)   Define Computer. Explain with the help of Block diagram, explain different parts of computer.   [1+4]

Q.1(b)   Convert :   [3+2]
      (i)   Using 2's complement :
                $(10)_{16} - (35)_{10} = ( )_2$
      (ii)   Compute :
                $(11B)_{16} - (11)_8 + (11)_{10} + (77.7)_{10} - (11)_2 = ( )_{16}$

Q.2(a)   Define Memory & its Characteristics? Categorize different type of memory are available in the Computer, explain each of them with its characteristics.   [5]

Q.2(b)   Explain Pipeline Processing Architecture.   [5]

Q.3(a)   Distinguish the difference between Top-Down and Bottom up approach.   [5]

Q.3(b)   Discuss with an example Searching. Differentiate between Assembly language, Machine Language and High Level languages.   [5]

Q.4(a)   Define Software. Classify different types of Software.   [1+4]

Q.4(b)   Outline is Software Engineering. Explain with the help of System Development Life Cycle.   [1+4]

Q.5(a)   Define Algorithm. What are the advantages and disadvantages of Queue? Write an algorithm to insert an element in the circular queue.   [1+2+2]

Q.5(b)   Define Database Management System. What are the advantages and disadvantages of Distributed Database Management System?   [1+4]

:::::29/04/2019 M:::::