B.Tech. SEM -V Info. Tech. 2014 Course (CBCS) : SUMMER - 2019
SUBJECT: SYSTEM PROGRAMMING

Day: Monday   Time: 10.00 AM TO 01.00 PM

Date: 13/05/2019   S-2019-2679   Max. Marks: 60

N.B:
1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labeled diagrams **WHEREVER** necessary.

Q.1   What are language processors? Explain the phases of language processors. **(10)**

OR

Q.1   List and explain the components of programming system. **(10)**

Q.2   What are index registers? Explain address modification using index registers with an example. **(10)**

OR

Q.2   Explain the functions and purpose of registers used in IBM 360. **(10)**

Q.3   Explain the following data structures with their format and use in assembler design. **(10)**
     i) Machine Operation Table
     ii) Pseudo Operation Table
     iii) Location Counter

OR

Q.3   What is table ordering? Why is it needed in assembler design? Explain any one technique used for table ordering in assembler. **(10)**

Q.4   With the help of neat diagram, state and explain the steps employed by macro processor for processing macro calls and their expansion. **(10)**

OR

Q.4   What is a macro? State the advantages of using macro facility. State the features of macro and explain any one in detail. **(10)**

Q.5   List and explain the design steps followed by an absolute loader. **(10)**

OR

Q.5   What is program relocation? Explain the self relocating programs. **(10)**

Q.6   Briefly explain the problem of recognizing syntactic units and interpreting their meaning during the compiling process. **(10)**

OR

Q.6   What is the task of storage allocation phase of compiler? Enlist the steps in the implementation of this phase. **(10)**

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