

B.Tech. SEM -V Info. Tech. 2014 Course (CBCS) : WINTER - 2018
SUBJECT: SYSTEM PROGRAMMING

Day: Tuesday
Date: 27/11/2018

W-2018-2414

Time: 02.30 PM TO 05.30 PM
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.
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Q.1 What is an operating system? What are the functions and facilities of an operating system from user view point? (10)

OR

Q.1 Define language processing. State and explain the components of source language specification. (10)

Q.2 Explain the IBM 360 machine structure in detail. (10)

OR

Q.2 List the various address modification techniques used in machine language? Explain any one technique in detail. (10)

Q.3 Define an assembler. List and explain the general design procedure of an assembler. (10)

OR

Q.3 Why are searching techniques needed in assemblers? Explain in detail any one searching technique used by assembler. (10)

Q.4 What is macro expansion? Describe and explain the process of macro expansion with an example. (10)

OR

Q.4 State and explain the data structures used for implementing macro processor with their format and example. (10)

Q.5 Define linker and loader. Differentiate between static linking and dynamic linking. (10)

OR

Q.5 State and explain the functions performed by a loader. (10)

Q.6 State the tasks of lexical phase of compiler. Explain the data structures used in the lexical phase. (10)

OR

Q.6 Enlist and explain the generic phases in general model of compiler. (10)