B.Tech 6th Semester (CSE/IT) F-Scheme

Examination, May–2017

SYSTEM PROGRAMMING & SYSTEM ADMINISTRATION

Paper-IT-303-F

Time allowed : 3 hours]   *[Maximum marks : 100*

Note : Attempt any *five* questions in all, selecting *one* question from each section. **Question No. 1 is compulsory.**

1. (a) Differentiate between UNIX and LINUX.

   (b) Write various loading schemes.

   (c) Briefly discuss directory structure of UNIX.

   (d) Explain AWK utility.

   (e) What are wild cards ? What is their use.

   (f) Define Macro.

   (g) Define terms page, block, fragments.

   (h) Write short note on filters and pipelines.

   (i) Define shell variables.

   (j) Explain any four UNIX command.

Section-A

2. What do you mean by system programming ? Discuss the major components of a programming system.   20

3. Discuss the designing of two phase assembler. How its functioning is better than single phase assembler ?   20

Section-B

4. Define Macro and Macro processor. Explain various macro facilities with example.   20

5. How the memory is managed in Unix ? Explain with the help of examples.   20

Section-C

6. (a) What is file permission ? How many types of permission used in Unix explain in detail ? 10

   (b) Explain how a user change the permission of any file.   10

7. Write short note on :

   (a) Filters and Pipelines

   (b) Vi editors and its mode of operations

Section-D

8. (a) Write a program in C-shell to find whether a string is palindrome or not.   10

   (b) How the backup and restoration is performed in Unix environment ? Explain in detail.   10

9. (a) Explain role and function of system manager in detail.   10

   (b) Discuss basic features of Linux Operating System.   10