

Exam. Code : 303502

Subject Code : 5292

P.G. Diploma in Computer Application (PGDCA)
2nd Semester

NETWORK CONCEPTS AND MANAGEMENT
(Hardware Software, Setting in
LINUX/UNIX/NT Environment)

Paper—I

Time Allowed—Three Hours] [Maximum Marks—50

Note :— There are **eight** questions of equal marks. Candidates are required to attempt **five** questions, selecting at least **one** question from each Section. The **fifth** question may be attempted from any section. The students can use only Non-programmable & Non-storage type calculators.

SECTION—A

1. Explain any four network topologies with the help of diagram. Also write down advantages and disadvantages of each of them.
2. (a) Define Asynchronous Transfer Mode. How virtual circuits are formed in ATM networks ?
(b) Write short notes on the following :
 - (i) ISDN
 - (ii) Router
 - (iii) Switch
 - (iv) Hub.

SECTION—B

3. Explain asymmetric key cryptography with the help of diagram. Explain the working of RSA with the help of example.
4. (a) List the classes in classful addressing and define the application of each class.
(b) Explain different account policies in Windows NT.

SECTION—C

5. Define shell. Explain various features of shell. Write a note on different role played by shell during the program execution.
6. (a) Explain the characteristics of Unix file system.
(b) Explain commands used for changing file permissions and ownership in LINUX.

SECTION—D

7. (a) Write a note on history of UNIX operating system. Also discuss its strength and weaknesses.
(b) Explain commands used for changing file permissions and ownership in LINUX environment with help of examples.
8. (a) Compare the features of NT server, UNIX and LINUX.
(b) Differentiate between absolute and relative path in LINUX environment.