N. B.: (1) **All** questions are **compulsory**.
(2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
(3) Answers to the **same question** must be **written together**.
(4) Numbers to the **right** indicate **marks**.
(5) Draw **neat labelled diagrams** wherever **necessary**.
(6) Use of **Non-programmable** calculators is **allowed**.

1.Attempt _any two_ **of the following** 10

    a. Explain the GRUB configuration file.
    b. List and explain the duties of system administrator.
    c. What is RAID? Explain different types of RAID.
    d. Write the purpose of the following directories of /(root)
        a. bin **b**. boot   **c**. etc   **d**. Home   **e**. initrd

2.Attempt _any two_ **of the following** 10

    a. Explain the concept of CIDR with suitable example.
    b. What is DHCP? How is it configured?
    c. Explain the concept of NFS with suitable example.
    d. Explain the use of cron files.

3.Attempt _any two_ **of the following** 10

    a. Explain the smbclient and smbmount commands with suitable example.
    b. Explain the browseable, writable, create mode, directory mode and max connection parameters of [home] section of samba configuration file.
    c. Explain the concept of catching proxy server.
    d. Write the purpose of the following NTP utility programs
        a. ntpdate
        b. ntpdc
        c. ntp-keygen
        d. ntptime
        e. ntptrace

4.Attempt _any two_ **of the following** 10

    a. What is the use of zone file? Explain with suitable example.
    b. Write the purpose of the following secure services.
        a. SSH
        b. scp
        c. sftp
        d. telnet
        e. rlogin
    c. List and explain different types of domain name servers.
    d. What is xinetd? Explain how it works?

5.Attempt *any two* **of the following**   **10**

    a. What is MDA? Explain how it works?
    b. Write the purpose of the following parameters of vsftpd.conf file
           a. anonymous_enable
           b. write_enable
           c. chown_username
           d. ftpd_banner
           e. dirmessage_enable
    c. Write the advantages of vsftpd.
    d. List and explain the key components that are essential for email to work. Explain in short.

6.Attempt *any two* **of the following**   **10**

    a. Explain the following values of AllowOverride directive of <Directory > block of apache
       server configuration file.
           a. All
           b. AuthConfig
           c. FileInfo
           d. Limit
           e. None
    b. Write an SSI page that will display the long listing of the directory /home/tyit.
    c. Explain rpmquery command with options.
    d. Write the syntax of useradd command used to create new user account.