

Note: All questions are compulsory.
All questions carry equal marks.
Draw neat, labelled diagrams wherever necessary.

Q.1 Attempt the following. (Any Four) 20 M

- What is Linux Kernel? Explain distributions of Linux.
- Explain the various commands used to archive file data with suitable example.
- Explain Linux architecture with proper diagram.
- Write commands for the following:
 - Create a directory "FYCS".
 - Create two files namely "Flowers" and "Fruits" with suitable data in it.
 - Count and display only repeated lines in the Flowers file.
 - Display last 5 lines of file Fruits.
 - Delete directory "FYCS".
- How to locate system environment variables in Linux?
- Write a short note on Linux Filesystem.

Q.2 Attempt the following. (Any Four) 20 M

- Explain the following:
 - Absolute Pathname
 - Relative Pathname
- What is /etc/passwd file? Explain all the fields of it.
- Explain three modes of vi editor.
- Explain softlink and hardlink with suitable example.
- What are the uses of root? Also explain the sudo command.
- Explain basics of TCP/IP model.

Q.3 Attempt the following. (Any Four) 20 M

- Why signals are used in Linux? List most common Linux signals.
- Explain following commands: nice, renice, at, batch
- Explain If..then..else..fi with suitable example.
- Explain Input Redirection with appropriate example.
- Explain while command with suitable example.
- Write a shell script to check whether the string is palindrome or not palindrome.

Q.4 Attempt the following. (Any Five) 15 M

- What are command aliases? Why do we use it?
- Explain following command with suitable example: cat, tty, rm
- Explain chmod, chown and chgrp commands in Linux.
- Explain awk command with suitable example.
- Explain the use of expr command for performing mathematical operations in Linux.
- Briefly explain jobs command with its all parameters.