

- N.B. (1) Question number 1 is compulsory.  
(2) Solve any 3 from remaining.  
(3) Assume suitable data where ever necessary.

Q.1. Attempt the following:

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- Explain use of echo, expr and read command with example shell script.
- Explain use of export, set command with an example.
- Explain ping and netstat commands with example.
- Explain various Layouts in Android Programming.

Q.2.

- Explain different file access permissions in Linux. Consider you have a folder named "mydir" with two files "f1", "f2" write appropriate command/s to make both files and directory to have all the permissions only for the owner of files. 10
- Write note on iptables and with example explain how it can be used to drop traffic coming from a specific ip address to a machine. Also explain how to list all firewall rules using iptables. 10

Q3.

- Explain use of wget and curl commands to get website contents. 10
- Write note on sed. Show how it can be used for 10
  - As replacement for head command
  - As find and replace utility, for all two or more digit numbers by string 'N'

Q4.

- Write a note on process management in Linux. Explain ps command. 10
- Explain how to work with data and Files in Android application. 10

Q5.

- Explain use of httpd.conf Explain any five configuration directives used in httpd.conf file. 10
- Explain following commands with an example each. 10
  - usermod
  - chgrp
  - adduser
  - chown
  - userdel

Q6.

- Discuss significance of passwd, shadow, group and gshadow files in /etc directory. 10
- Write note on Disk partitioning. Explain role of Logical Volume Manager as device mapper. 10