

Seat No. : _____

LB-103

April-2014

S.Y. M.Sc. (CA & IT) Sem.-IV

(Integrated)

Open Source Technology

Time : 3 Hours]

[Max. Marks : 100

1. (a) Answer any **two** : (5 marks each) **10**
- (1) Explain Rapid Prototype and Spiral Model used to create OSS in detail.
 - (2) What are different terms and condition related with the software released under Artistic License and what permission does this License give to end user ?
 - (3) Why creative common license is used ? Explain structure of this License in detail.
- (b) Attempt any **two** : (3 marks each) **6**
- (1) Define OSS. What are different term and condition for a software to be called an open source software ?
 - (2) Differentiate Cathedral an Bazaar methodology used in the development of OSS.
 - (3) What is GNU GPL ?
- (c) Attempt **all** : (1 mark each) **4**
- (1) Define Copyleft.
 - (2) What is AGPL ?
 - (3) What is GNU GPL and who is its founder ?
 - (4) Define Intellectual property right.
2. (a) Answer any **two** : (5 marks each) **10**
- (1) Explain system architecture of Unix System.
 - (2) List different type of Shell. Explain them in detail and also explain Compatibility between them.
 - (3) List the characteristic of Unix System. Explain any five in detail.
- (b) Attempt any **two** : (3 marks each) **6**
- (1) What are Positional Parameters and Special Variable ? Explain any five special variable.
 - (2) What are environment variables ? Explain PS1, PS2, PATH, HOME, PWD.
 - (3) Explain “tr” command.

- (c) Attempt **all** : (1 marks each) **4**
- (1) Which directory is at the top of file system ?
 - (2) The _____ option in case statement represent the default condition.
 - (3) What is difference between inode and inode table ?
 - (4) In which directory all the configuration files are stored ?
3. (a) Answer any **two** : (5 marks each) **10**
- (1) What is RPM and its usage ? Explain different features of RPM with examples.
 - (2) Explain user and group administration. What permission would you set so that different members of a same group can not access each others files ?
 - (3) Explain disk related commands with examples.
- (b) Attempt any **two** : (3 marks each) **6**
- (1) What is “yum” ? Differentiate “yum” and “RPM”.
 - (2) Explain “test” command.
 - (3) Explain run level.
- (c) Attempt **all**. (1 mark each) **4**
- (1) What is GPG and why it is used ?
 - (2) Which file is edited for the configuration of a Web Server in Linux ?
 - (3) Write the command to install MYSQL server using “yum”.
 - (4) What is the use of run level 5 ?
4. (a) Answer any **two** : (5 marks each) **10**
- (1) Explain “/etc/passwd” and “/etc/shadow” file.
 - (2) Explain “grep” commands with examples.
 - (3) What is link ? List and explain types of link in detail.
- (b) Attempt any **two** : (3 marks each) **6**
- (1) Explain “tee” command.
 - (2) Explain standard input-output in brief.
 - (3) Explain “comm.” and “cmp” commands.
- (c) Attempt **all**. (1 mark each) **4**
- (1) Which command is used to open a file in a shell script ?
 - (2) The option used with the “echo” command to avoid outputting a new line character is _____.
 - (3) What is the use of stty sane command ?
 - (4) Explain “\$?”.

5. (a) Answer any **two** : (5 marks each) **10**
- (1) Explain mechanism of “Process Creation”.
 - (2) How scheduling of process is done ? Explain with examples.
 - (3) Explain “ps” command, foreground and background jobs with examples.
- (b) Attempt any **two** : (3 marks each) **6**
- (1) How would you change priority for a particular process ? Explain with example.
 - (2) How shell is created ?
 - (3) List and explain any 6 awk inbuilt variable.
- (c) Attempt **all** : (1 marks each) **4**
- (1) What is zombie process ?
 - (2) What is the use of BEGIN and END section in awk script ?
 - (3) Where the default output of “nohup” command is stored ?
 - (4) What is the use of “script” command and where its default output is saved ?
-

