

AH-124

April-2015

S.Y. M.Sc.,(CA & IT), Integrated Sem.-IV, Open Source Technology (O.S.T.)

Time : 3 Hours]

[Max. Marks : 100

1. Answer any **four**. **20**
- (1) Name any three models which can be used to create Open Source Software. Explain Built and Fix model in detail.
 - (2) Explain history and idea behind Open Source. Define OSS and also explain Freedom 0 to 3 related to it.
 - (3) Explain GNU GPL with its versions. List type of GNU GPL and explain LGPL.
 - (4) Explain Artistic License in detail.
 - (5) Explain three layers of Creative Common License. List and explain different Symbols used in CC. Create license symbol and state permissions attach with it for :
 - (i) Attribution Non Commercial,
 - (ii) Attribution Non Commercial-Share Alike
 - (iii) Attribution-Share Alike
 - (iv) Attribution No Derivs
 - (v) Attribution Non Commercial No Derivs
2. Answer **all** : **20**
- (1) What is yum and its use ? List and explain difference option given in yum to install and update software with example.
 - (2) Explain user administration related command in detail. Consider a below scenario and give command to perform the task: There are three batches in a institute FY, SY, TY. There are 3 students in each batch.

Create three groups by the name of batch, create five user with user name as name of group and roll no (FY1 to FY 3, SY 1 to SY 3, TY 1 to TY 3), with working shell as bash and home directory as roll no. also give command to delete FY group and SY1, SY2 user in SY group. Give permission to all users such that they cannot enter in to home directory of other user.
 - (3) Explain rpm in detail.
 - (4) Explain Is command in detail with example.

3. Answer any **four** **20**
- (1) Define Shell. List and explain type of shell and also give compatibility between them.
 - (2) Explain Unix system architecture in detail.
 - (3) What is the significance of I/O, explain with its file descriptors ? Also explain PIPE with diagram and example.
 - (4) Explain “tr”, “head” and “tail” commands with examples.
 - (5) Explain “diff”, “cmp” and “cut” command.
4. Answer any **four** **20**
- (1) Explain “tput” and “ssty” command with example.
 - (2) Define variable. List and explain type of variable found in Unix and also state the rules which should be followed while naming variable ? List any four special variable found in Unix.
 - (3) Explain the significance of “etc/passwd” and “/etc/shadow” file.
 - (4) Explain type of files found in Unix.
 - (5) Define link also list and explain types of link in detail and also differentiate between them.
5. Answer any **four** **20**
- (1) Explain “ps” and “nice” command with option and examples.
 - (2) Define process. Explain fork, exec system calls and explain the process how shell is created.
 - (3) What is process scheduling ? Explain any two process scheduling related commands.
 - (4) What is “awk” ? List advantages and disadvantages of awk. List and explain any five function in awk.
 - (5) Explain “grep” command with example. Also explain wildcard used with “grep” command.
-