

B.C.A Semester - 4 (CBCS) Examination**March/April-2025 [NEW COURSE]****Operating Systems Concepts with Unix / Linux(Core)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Attempt following questions. (03)
- 1) What is an operating system?
 - 2) FCFS stands for _____
 - 3) What is Virtual Memory?
- Que.1(B) Attempt following. (Attempt Any Two) (06)
- 1) Explain features of Operating System.
 - 2) Explain process state transition diagram.
 - 3) Explain Round Robin CPU Scheduling Algorithm.
 - 4) Explain Batch Operating System in detail.
- Que.1(C) Attempt following. (Attempt Any One) (05)
- 1) Explain Time Sharing Operating System in detail.
 - 2) Explain types of memory allocation techniques in detail
- Que.2(A) Attempt following questions. (03)
- 1) Explain cd command in brief.
 - 2) Explain rm command in brief.
 - 3) Explain pg command in brief.
- Que.2(B) Attempt following. (Attempt Any Two) (06)
- 1) Explain types of Unix shell in detail.
 - 2) Explain types of file systems available in Unix.
 - 3) Explain Unix File and Directory permissions.
 - 4) Explain grep, fgrep and egrep commands.
- Que.2(C) Attempt following. (Attempt Any One) (05)
- 1) Explain various modes in vi editor in detail.
 - 2) Explain concept of Mounting and Demounting of file in Unix.
- Que.3(A) Attempt following questions. (03)
- 1) GPL stands for _____.
 - 2) CLI stands for _____.
 - 3) Which system variable gives path for home directory?
- Que.3(B) Attempt following. (Attempt any two) (06)
- 1) Explain structure and features of Linux OS.
 - 2) Explain break and continue statement with example.
 - 3) Explain for loop with example.
 - 4) Explain CLI and GUI user interfaces in brief.
- Que.3(C) Attempt following. (Attempt any one) (05)
- 1) Explain types of Operators available in Shell Programming.
 - 2) Explain decision statements in shell programming with example.
- Que.4(A) Attempt following questions. (03)
- 1) Which command is used to create new directory?
 - 2) Which command is used to move or rename the files and folder?
 - 3) KDE stands for _____.

- Que.4(B) Attempt following. (Attempt any two) (06)
- 1) Explain process of Install / Uninstall software on Ubuntu.
 - 2) Write a short note on Window Manager.
 - 3) How window manager works on KDE Desktop environment?
 - 4) How to configure xorg.conf file?
- Que.4(C) Attempt following. (Attempt any one) (05)
- 1) Explain GNOME desktop in detail.
 - 2) Explain KDE Panel in detail.
- Que.5(A) Attempt following questions. (03)
- 1) FTP stands for _____.
 - 2) DNS stands for _____.
 - 3) LDAP stands for _____.
- Que.5(B) Attempt following. (Attempt any two) (06)
- 1) How to install and manage Samba Server?
 - 2) How to install and manage Apache Server?
 - 3) Explain FTP service in detail.
 - 4) Explain LDAP service in detail.
- Que.5(C) Attempt following. (Attempt any one) (05)
- 1) How to create and manage user account and password?
 - 2) Write short note on WINE software.
