

B.C.A Semester - 4 (CBCS) Examination**March/April-2026 [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 the following. (03)
- 1) OS stands for _____
 - 2) FCFS stands for _____
 - 3) SJN stands for _____
- Que. 1 (B) Attempt the following: (Any two) (06)
- 1) What is an OS? Write features of it.
 - 2) Write a note on Round robin scheduling.
 - 3) Explain Contiguous memory allocation in brief.
 - 4) Discuss Virtual memory using paging.
- Que. 1 (C) Attempt the following: (Any one) (05)
- 1) Explain types of OS as features point of view.
 - 2) Explain process state transition diagram.
- Que. 2 (A) Attempt the following. (03)
- 1) _____ command is used for making a new file.
 - 2) _____ command is used to remove directory.
 - 3) _____ command is used for comparing two files.
- Que. 2 (B) Attempt the following: (Any two) (06)
- 1) Explain the directory structure of Unix.
 - 2) Explain grep, fgrep and egrep with example.
 - 3) Explain ls command with different options.
 - 4) Discuss date and cal command.
- Que. 2 (C) Attempt the following: (Any one) (05)
- 1) Explain Unix architecture.
 - 2) Explain types of files in Unix file system.
- Que. 3 (A) Attempt the following. (03)
- 1) GPL stands for _____
 - 2) CUI stands for _____
 - 3) IFS stands for _____
- Que. 3 (B) Attempt the following: (Any two) (06)
- 1) Write a note on shell variables.
 - 2) Write features of Linux.
 - 3) Differentiate open-source v/s free ware.
 - 4) Explain case statement with example.

- Que. 3 (C) Attempt the following: (Any one) (05)
- 1) Explain looping statements.
 - 2) Write installation and configuration steps of Linux using Ubuntu.
- Que. 4 (A) Attempt the following. (03)
- 1) KDE stands for _____
 - 2) GNOME stands for _____
 - 3) GUI stands for _____
- Que. 4 (B) Attempt the following: (Any two) (06)
- 1) Write a note on window manager of layered structure of X.
 - 2) Explain Startx command in Linux.
 - 3) Explain how to create and delete files and folders.
 - 4) Explain any one method of installation and uninstallation of software on Ubuntu.
- Que. 4 (C) Attempt the following: (Any one) (05)
- 1) Explain KDE desktop.
 - 2) Explain GNOME desktop.
- Que. 5 (A) Attempt the following. (03)
- 1) LDAP stands for _____
 - 2) DNS stands for _____
 - 3) FTP stands for _____
- Que. 5 (B) Attempt the following :(Any two) (06)
- 1) Write a note on LDAP services.
 - 2) Explain FTP services.
 - 3) Write a note on Apache server.
 - 4) Write a note on working with WINE.
- Que. 5 (C) Attempt the following: (Any one) (05)
- 1) Explain how to create user account and password in Linux.
 - 2) Explain Samba server.
