

**GEETANJALI COLLEGE OF COMPUTER SCIENCE & COMMERCE (BBA)**  
**PRELIMINARY EXAM**  
**B.C.A. & B.Sc. (IT) SEM - 4**

**Subject : Operating System Concepts with Unix/Linux**  
**Time : 2 Hours.**

**Date: 12/03/2025**  
**Marks: 50**

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**Q-1-(A) ANSWER THE FOLLOWING.**

**(3)**

1. SJF stands for\_\_\_\_\_.
2. Queue at Ticket window is example of \_\_\_\_\_ type of scheduling algorithm.
3. What is the full form of PCB?

**Q-1-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain Context Switching.

**Q-1-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain RR with suitable example.

**OR**

**Q-1-(A) ANSWER THE FOLLOWING.**

**(3)**

1. Define an Operating System.
2. When running process requires some input/output then it goes to \_\_\_\_\_ state.
3. What is Process?

**Q-1-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain Explain Process state transition diagram in brief.

**Q-1-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain FCFS with suitable example.

**Q-2-(A) ANSWER THE FOLLOWING.**

**(3)**

1. Define deadlock.
2. What is fragmentation?
3. Explain the concept of paging.

**Q-2-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain deadlock prevention techniques.

**Q-2-(c) ANSWER IN BRIEF.**

**(5)**

1. Describe contiguous and non-contiguous memory allocation.

**OR**

**Q-2-(A) ANSWER THE FOLLOWING.**

**(3)**

1. In Paging, we divide the programs into equal sized blocks called \_\_\_\_\_ and the main memory is Divided into equal sized blocks known as \_\_\_\_\_.
2. What is internal Fragmentation?
3. Full form of SMT \_\_\_\_\_.

**Q-2-(B) ANSWER IN BRIEF.**

**(2)**

1. What is the difference between paging and segmentation?

**Q-2-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain physical memory and Virtual Memory.

**Q-3-(A) ANSWER THE FOLLOWING.**

**(3)**

1. Who Developed Unix?
2. What is the extension for a shell script file?
3. Name any two Unix file system types.

**Q-3-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain Different types of shells in Unix.

**Q-3-(c) ANSWER IN BRIEF.**

**(5)**

1. Write a short note on VI Editor.

**Q-3-(A) ANSWER THE FOLLOWING.**

**(3)**

1. The Bourne shell written by?
2. BASH Stands for\_\_\_\_\_.
3. How many Types of Permission in Linux?

**Q-3-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain Following Command:
  - Cat
  - Passwd

**Q-3-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain comparison command in Linux.

**Q-4-(A) ANSWER THE FOLLOWING.**

**(3)**

1. What is Shell Variables?
2. Name two shell keywords.
3. Explain test command.

**Q-4-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain Positional Parameters.

**Q-4-(c) ANSWER IN BRIEF**

1. Write a shell script to Display a Digital Clock.

OR

**Q-4-(A) ANSWER THE FOLLOWING.**

**(3)**

1. Which directory contains system configuration files processors?
2. How many Types of Looping Structure in Linux?
3. What is system variable?

**Q-4-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain decision statements in UNIX.

**Q-4-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain Nano Editor.

**Q-5-(A) ANSWER THE FOLLOWING.**

**(3)**

1. GPL Stands For \_\_\_\_\_.
2. Write syntax to add user to particular group.
3. The UFW is an acronym for \_\_\_\_\_.

**Q-5-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain the difference between LILO and GRUB.

**Q-5-(c) ANSWER IN BRIEF.**

**(5)**

1. Explain the installation and configuration of a Samba server.

OR

**Q-5-(A) ANSWER THE FOLLOWING.**

**(3)**

1. Full form Of UFW \_\_\_\_\_.
2. Wine stands for \_\_\_\_\_.
3. List the Special three section of the smb.conf file.

**Q-5-(B) ANSWER IN BRIEF.**

**(2)**

1. Explain firewall and how to enable firewall in Linux.

**Q-5-(c) ANSWER IN BRIEF.**

**(5)**

1. Describe the installation and working of an Apache server in Linux.

**BEST OF LUCK**