

**KAMANI SCIENCE COLLEGE & PRATAPRAI ARTS COLLEGE, AMRELI**  
**SAMPLE PAPER (BCA SEM 4)**

**Sub: CS – 22 : Operating Systems Concepts With Unix / Linux**

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|---|-----|--|---|
| 1 | (A) | Answer the Following:<br>1. Define Round Robin.<br>2. Give any four name of OS type.<br>3. Define Thread.<br>4. Define OS.                         | 4 |
|   | (B) | Answer any one in brief:<br>1. Define Batch OS.<br>2. Define Features point of view OS.  | 2 |
|   | (C) | Answer any one in detail:<br>1. Explain Threads & Multi-Threads with types.<br>2. Explain Types of OS.   | 3 |
|   | (D) | Answer any one :<br>1. Explain FCFS CPU Scheduling Algorithm.<br>2. Explain Round Robin with Example.  | 5 |
| 2 | (A) | Answer the Following:<br>1. Define Deadlock.<br>2. Define Deadlock prevention.<br>3. Define Paging.<br>4. Define Frame.                            | 4 |
|   | (B) | Answer any one in brief:<br>1. Define Internal Fragmentation.<br>2. Define Physical Address.   | 2 |
|   | (C) | Answer any one in detail:<br>1. What is Deadlock Situation? Explain in detail.<br>2. Explain Continuous Memory Allocation.                         | 3 |
|   | (D) | Answer any one :<br>1. Explain Virtual Memory Using Paging.<br>2. Explain Virtual Memory Using Segmentation.                                       | 5 |
| 3 | (A) | Answer the Following:<br>1. Define cd command.<br>2. _____ command is used to remove empty directory.<br>3. Define shell.<br>4. Define ps command. | 4 |
|   | (B) | Answer any one in brief:<br>1. Define who and pwd command.<br>2. Define ls and mkdir command.  | 2 |
|   | (C) | Answer any one in detail:<br>1. Explain redirection and piping with example.<br>2. Explain nice, kill and at command.                              | 3 |
|   | (D) | Answer any one :<br>1. Explain Unix Architecture.  | 5 |

## 2. Explain Unix File System.

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|---|---|---|
| 4 | (A) Answer the Following:   | 4 |
|   | 1. Define variable in shell.  |   |
|   | 2. Define Keyword in shell.   |   |
|   | 3. Define System Variable in shell.   |   |
|   | 4. Define set and unset.  |   |
|   | (B) Answer any one in brief:  | 2 |
|   | 1. Define echo.   |   |
|   | 2. Define positional parameter.   |   |
|   | (C) Answer any one in detail:   | 3 |
|   | 1. Explain vi editor with modes.  |   |
|   | 2. Explain Decision statements in shell scripting.                              |   |
|   | (D) Answer any one :  | 5 |
|   | 1. Explain loop and array in shell scripting.                                   |   |
|   | 2. Write a shell code to enter any number and check that number is odd or even. |   |
| 5 | (A) Answer the Following:   | 4 |
|   | 1. Define LILO.   |   |
|   | 2. Define GRUB.   |   |
|   | 3. GPL stands for.  |   |
|   | 4. LDAP stands for.   |   |
|   | (B) Answer any one in brief:  | 2 |
|   | 1. Define DNS.  |   |
|   | 2. Define WINE.   |   |
|   | (C) Answer any one in detail:   | 3 |
|   | 1. Explain Freeware, shareware and open source.                                 |   |
|   | 2. Explain installation steps of linux using ubuntu.                            |   |
|   | (D) Answer any one :  | 5 |
|   | 1. Explain installation and managing samba server.                              |   |
|   | 2. Explain booting process of linux.  |   |