

Shivaji University, Kolhapur
Question Bank for March 2022 (Summer) Examination
B.Sc. Part – III Semester – VI (CBCS)
Computer Science Paper – XV
DSE-23F Linux Part – II
Subject Code: 81718

Q1) Select the correct alternative and rewrite the sentence. (1 mark each)

1. _____ is a memory management scheme in which any process can be temporarily swapped from main memory to secondary memory so that the main memory can be made available for other processes.
i) Swapping ii) Exchanging iii) Demanding iv) Rolling
2. In a system that uses _____ paging, the operating system copies a disk page into physical memory only if an attempt is made to access it and that page is not already in memory (i.e., if a page fault occurs).
i) demand ii) swap prefetch iii) loader iv) thrashing
3. In computer operating systems, demand paging is a method of _____ memory management.
i) artificial ii) virtual iii) cache iv) None of these
4. vi was originally hard-linked to a line editor named _____; that's where this mode got its name from.
i) input ii) ex iii) command iv) insert
5. _____ mode is used for file handling and performing substitution.
i) Command ii) Input iii) ex iv) insert
6. Vi uses the _____ command to switch to another file. But this operation will only work if the current file is saved.
i) :q ii) :w iii) :x iv) :e
7. Vi saves up to nine deleted or changed blocks of whole lines in buffers numbered from _____.
i) 1 to 9 ii) 11 to 19 iii) i to iX iv) None of these
8. Vi provides twenty-six _____ buffers.
i) named ii) numbered iii) unnamed iv) None of these
9. _____ copied 4 lines into buffer s.
i) "s4dd ii) "s4yy iii) "s4xx iv) "s4dx
10. _____ command moves five lines of text into a vi buffer named a.
i) "add5 ii) A5dd iii) a5dd iv) "a5dd
11. The last _____ deletions are stored by vi in numbered buffers.
i) ten ii) eleven iii) nine iv) seven

38. To achieve reliable transport in TCP, _____ is used to check the safe and sound arrival of data.
- | | |
|--------------|--------------------|
| i) Packet | ii) Buffer |
| iii) Segment | iv) Acknowledgment |
39. This _____ option of wall command in Linux display version information and exit.
- | | |
|---------|------------------------|
| i) -n | ii) -t |
| iii) -v | iv) None of the above. |
40. _____ is a job scheduling utility present in UNIX like systems.
- | | |
|-----------|----------|
| i) corn | ii) kron |
| iii) cron | iv) cran |

Q2) Attempt any two of the following:

(08 marks each)

1. Explain the concept of swapping in detail.
2. Explain the concept of demand paging in detail.
3. How the memory management is done in Linux?
4. Explain handling of multiple files using vi editor.
5. Explain the ex mode of vi editor to handle multiple files in it.
6. How to edit text with different operators using vi editor?
7. Give the brief explanation of the sed command with suitable examples.
8. Define grep. Explain the grep command with syntax and suitable examples.
9. Explain shell functions with example.
10. Explain the concept of shell and subshell in detail with example.
11. Define array. Explain an array with suitable examples.
12. What is Firewall in Linux? How does firewalld works? Explain in detail.
13. How user communication can be done in Linux operating system? Explain in detail with proper commands.
14. How wall and write commands can be used for user communication in Linux? Explain with example.
15. Explain write and wall command with example.

Q3) Attempt any four of the following

(4 marks each)

- 1) Explain the concept of named buffer.
- 2) Explain the concept of numbered buffer.
- 3) Explain entering control characters in vi editor.
- 4) How search a pattern or character in a file using vi editor?
- 5) Write a shell script to check given number is Armstrong or not.
- 6) Explain how to export shell variable?
- 7) List and explain the options of grep command.
- 8) Explain an internal commands used by sed command.
- 9) Explain command line arguments with suitable example.
- 10) How to write selected lines to a file using sed?
- 11) Explain array in shell programming.