### 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

| 1) §  | Select the correct a   | lternative and i               | ewrite the sentence.                               | (1 mark each)         |
|---|--|--------------------------------|--|-----------------------|
| 1.  | - I  | emory to secondary             | heme in which any proce<br>memory so that the main |                       |
|   | i) Swapping  | ii) Exchanging                 | iii) Demanding                                     | iv) Rolling           |
| 2.  | In a system that uses paging, the operating system copies a disk page in physical memory only if an attempt is made to access it and that page is not already memory (i.e., if a page fault occurs). |                                |  |                       |
|   | i) demand  | ii) swap prefetch              | iii) loader  | iv) thrashing         |
| 3.  | In computer operatin management.   | g systems, demand              | paging is a method of                              | memory                |
|   | i) artificial  | ii) virtual                    | iii) cache   | iv) None of these     |
| 4. vi was originally hard-linked to a line editor namedits name from. |  |                                | r named; that's                                    | s where this mode got |
|   | i) input   | ii) ex                         | iii) command                                       | iv) insert            |
| 5.  | . mode is us   | ed for file handling an        | nd performing substitution.                        |                       |
|   | i) Command   |                                |  | iv) insert            |
| 6.  | Vi uses the command to switch to another file. But this operation will only work if the current file is saved.   |                                |  |                       |
|   |  | ii) :w                         | iii) :x  | iv) :e                |
| 7.  | . Vi saves up to nine  | deleted or changed b           | blocks of whole lines in bu                        | affers numbered from  |
|   | i) 1 to 9  | ii) 11 to 19                   | iii) i to iX                                       | iv) None of these     |
| 8.  | . Vi provides twenty-six i) named  | buffers ii) numbered           | iii) unnamed                                       | iv) None of these     |
|   |  |                                |  |                       |
| 9   | i) "s4dd   | lines into buffer s. ii) "s4yy | iii) "s4xx   | iv) "s4dx             |
| 1   | 0command   | I moves five lines of t        | ext into a vi buffer named a                       |                       |
|   | i) "add5   | ii) A5dd                       | iii) a5dd  | iv) "a5dd             |
| 1   | 1. The last  | leletions are stored by        | vi in numbered buffers.                            |                       |
|   | i) ten   | ii) eleven                     | iii) nine  | iv) seven             |

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

#### O3) 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.