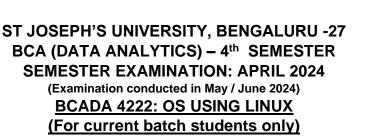
BCADA 4222_B_24

 $3 \times 10 = 30$

Registration Number:

Date & session:



Time: 2 Hours

This paper contains <u>ONE</u> printed page and <u>THREE</u> parts

<u> PART - A</u>

Answer All the questions

- 1. Define re-entrant kernels in Linux operating system.
- 2. What is the role of interprocess communication in Linux?
- 3. Write the syntax and purpose of PS command.
- 4. Write note on dentry objects.
- 5. Define page frame.

<u> PART - B</u>

Answer any Five questions

- 6. Explain LINUX file system hierarchy (Linux Directory Structure) with a neat sketch.
- 7. Define a system call. Explain how the system call differs from library functions.
- 8. Discuss the relationship among processes.
- 9. What is an orphan process? How LINUX handles orphan process? Explain.
- 10. Discuss file system mounting in LINUX with an example.
- 11. Explain the working principle of zoned page frame allocator.
- 12. Write note on Program Segments and Process Memory Regions.

Answer any Three questions

- 13. Explain how to create a process in LINUX with an example. Also discuss how to terminate a process.
- 14. Discuss how LINUX efficiently handle filesystem.
- 15. Explain how to solve external fragmentation problem using buddy system algorithm.

PART - C

16. Illustrate how to read from and write into a pipe with a suitable example.

5 X 4 = 20

Max Marks: 60

5 X 2 = 10