Reg. No…….. Name……

B. Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2021

SEMESTER **– 6: COMPUTER APPLICATIONS (CORE COURSE)**

COURSE: **15U6CRCAP11: OPERATING SYSTEMS**

(Common for Regular 2018 admission & Improvement 2017/Supplementary 2017/2016 /2015 admissions)

Time: Three Hours Max Marks: 75

PART A

Answer all questions. Each question carries 1 mark.

1. Define OS
2. What is batch processing?
3. Define process.
4. What is a scheduler?
5. What is a semaphore?
6. Define deadlock.
7. What is compaction?
8. What is a directory?
9. What is a shell?
10. What is Linux kernel? (1 x 10 = 10)

PART B

Answer any eight questions. Each question carries 2 marks.

11. Explain multiprogramming in detail.
12. What is system call? Write an example.
13. Which are the various process states?
14. What is PCB? Write down its contents.
15. What is mutual exclusion condition?
16. What is a monitor?
17. Differentiate between internal and external priorities.
18. What is sequential access in file system?
19. Write down the features of Linux file system.
20. Mention any four advantages of Linux. (2 x 8 = 16)

PART C

Answer any five questions. Each question carries 5 marks.

21. Write short note on real time systems. Mention any one example.
22. Explain the OS services in detail.
23. Explain the various operations that can be performed on a process.
24. Which are the various types of schedulers? Explain with neat diagram.

25. What is dining philosopher's problem?
26. Which are the scheduling approaches to multiple processor scheduling?
27. Write short note on Linux Kernel. (5 x 5 = 25)

PART D

Answer any two questions. Each question carries 12 marks.

28. Define deadlock and explain the methods of recovery and avoidance of deadlocks.
29. Explain page replacement in detail.
30. Explain file implementation and directory implementation in detail.
31. Define process. Explain process scheduling in detail. (12 x 2 = 24)

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