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IV Semester B.Sc. Degree CBCSS (OBE) Regular Examination, April 2021 (2019 Admission Only) GENERAL AWARENESS COURSE IN COMPUTER SCIENCE 4A14CSC: Operating Systems

Time: 3 Hours Max. Marks: 40

PART - A

Short answer. Answer all questions.

- 1. Define main memory.
- 2. What is the principle of optimal page replacement algorithm?
- 3. Expand RAG.
- 4. Define context switching.
- 5. What is meant by kernel of operating system?
- 6. Define booting.

 $(6 \times 1 = 6)$

PART - B

Short Essay. Answer any six questions.

- 7. Explain multiprogramming.
- 8. When will be a process suspended?
 - 9. Give any two scheduling criteria.
- 10. What is a system call?

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- 11. Define deadlock with an example.
- 12. Write any two necessary conditions for a deadlock.
- 13. What is meant by swapping?
- 14. Define paging.

 $(6 \times 2 = 12)$

PART - C

Essay – Answer any four questions.

- 15. Explain Timesharing Operating system.
- 16. How is recovery from deadlock possible?
- 17. Explain safety algorithm.
- 18. Explain the states of a process with a diagram.
- 19. What is a short term scheduler? What is its function?
- 20. Explain SCAN/C-SCAN Algorithm.

 $(4 \times 3 = 12)$

PART - D

Long essay – Answer **any two** questions.

- 21. Explain the functions of operating system.
- 22. What is a PCB? Explain.
- 23. Explain the methods of preventing deadlock.
- 24. Write notes on Virtual memory.

 $(2 \times 5 = 10)$