Reg. No. :	••••
Name :	

# IV Semester B.Sc. Degree CBCSS (OBE) Regular/Supplementary/ Improvement Examination, April 2022 (2019 Admission Onwards) GENERAL AWARENESS COURSE IN COMPUTER SCIENCE 4A14CSC: Operating Systems

Time: 3 Hours

Max. Marks: 40

## PART – A

# (Short Answer)

Answer all questions.

- 1. Define virtual memory.
- 2. Expand SSTF.
- 3. What is mutual exclusion in deadlock?
- 4. Expand PCB.
- 5. Define microkernel.
- 6. What is a multiuser operating system?

 $(6 \times 1 = 6)$ 

PART - B

# (Short Essay)

Answer any six questions.

- 7. Explain multiprocessing.
- 8. When can a process resume operation?
- 9. What is the purpose of a scheduling queue ?
- 10. What is a Kernel? Explain its major aim?
- 11. What is RAG? What is its use?
- 12. What is circular wait in context of a deadlock?
- 13. What is contiguous allocation?
- 14. Define segmentation.

 $(6 \times 2 = 12)$ 

P.T.O.

### PART - C

### (Essay)

# Answer any four questions.

- 15. Explain any three functions of an operating system.
- 16. Explain the characteristics of a deadlock.
- 17. Explain safe and unsafe state of a system.
- 18. Explain context switching.
- 19. What is a long term scheduler? What is its function?
- 20. Explain FCFS and SRTProcess Scheduling Algorithm.

 $(4 \times 3 = 12)$ 

### PART - D

### (Long Essay)

### Answer any two questions.

- 21. Explain the types of Operating system.
- 22. Explain the different operations on processes.
- 23. Explain the methods of preventing deadlock.
- 24. Explain the different page replacement algorithms.

 $(2 \times 5 = 10)$