



QP CODE: 24021090

Reg No : ......

# B.Sc DEGREE (CBCS) REGULAR EXAMINATIONS, APRIL 2024

### **Fourth Semester**

B.Sc Mathematics Model II Computer Science

#### Vocational Course - CA4VOT04 - COMPUTER SCIENCE - OPERATING SYSTEM

2017 Admission Onwards

EDB563F9

Time: 3 Hours

Max. Marks: 80

#### Part A

Answer any **ten** questions.

Each question carries **2** marks.

- What are the different views of an OS?
- 2. Define a real time OS.
- 3. Define the various services of an OS.
- 4. Define an interrrupt.
- 5. What is aging?
- 6. What is claim edge in resource allocation graph?
- 7. Define an input queue.
- 8. Define best fit and worst fit.
- 9. What is sequential access of a file?
- 10. What is the structure of a typical file systems?
- 11. Define encryption.
- 12. Define trap door

 $(10 \times 2 = 20)$ 

## Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain the features of batch OS.



- 14. Explain personal computer OS and distributed OS.
- 15. What is inter-process communication and message passing?
- 16. Explain CPU scheduling.
- 17. Explain the structure of a page table.
- 18. Explain logical views of segmentation.
- 19. What is a directory? Explain the logical structure of a directory.
- 20. Explain the difference between artifact based authentication and password.
- 21. Write a note on threat monitoring.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Explain Operating systems with its functions.
- 23. Explain priority scheduling, FCFS and shortest job first Algorithms with example.
- 24. What is a file? Explain the file attributes and file operations.
- 25. What is protection? Explain it with goal, principle and access matrix implementations.

 $(2 \times 15 = 30)$