

TB213120V

Reg. No : .....

Name : .....

**B. Sc. DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2022**

(2021 Admissions Regular,2020 Admissions Supplementary/Improvement,2019 & 2018 Admissions Supplementary)

**SEMESTER III - CORE COURSE (COMPUTER APPLICATIONS (TRIPLE MAIN)**

**CA3B06B18 - OPERATING SYSTEMS**

**Time : 3 Hours**

**Maximum Marks : 80**

**Part A**

**I. Answer any Ten questions. Each question carries 2 marks**

**(10x2=20)**

1. What is meant by Real time system?
2. Define Operating system?
3. What do you mean by multiuser operating system?
4. What is process control block?
5. Define Turnaround Time.
6. Define Aging?
7. Define request edge and assignment edge.
8. Define 'Safe State'?
9. Define Belady's anomaly?
10. What do you meant by thrashing?
11. What is seek time?
12. Differentiate between absolute path and relative path.

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Explain the different categories of System Programs
14. Explain Load balancing in multiprocessor Operating system.
15. Briefly explain the different process schedulers
16. What are semaphores? Explain its types
17. Explain the use of Resource-Allocation Graph in describing deadlocks
18. Explain the process of paging with a neat diagram
19. Explain segmentation method
20. Discuss the different file access methods
21. Distinguish between SCAN and C\_SCAN algorithm with an example

**Part C**

**III. Answer any Two questions. Each question carries 15 marks**

**(2x15=30)**

22. Compare and contrast different types of Operating Systems
23. Give a detailed description about deadlocks and its detection.
24. Write about the techniques for structuring the page table.
25. What are files and explain the attributes, operations and access methods for files?