Reg. No ..... Name **23U210**

B C A DEGREE END SEMESTER EXAMINATION : MARCH 2023

SEMESTER 2 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE : **19U2CRBCA4 : OPERATING SYSTEM**

(For Regular - 2022 Admission and Improvement / Supplementary – 2021/2020/2019 Admissions)

Time : Three Hours Max. Marks: 75

PART A
Answer All (1 mark each)

1. Define response time.
2. What is the function of an interpreter?
3. What is worms?
4. What is paging?
5. What is Belady's anomaly?
6. What is page fault trap?
7. What is Semaphore?
8. What is the purpose of linker?
9. Can you provide a definition for decryption?
10. Define First fit.

(1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. What is boot control block?
12. What is interrupts? List the type of interrupts.
13. Explain about inter process communication.
14. What is language based protection?
15. What is the relationship between threads and process?
16. What is the function of TLB?
17. Can you distinguish between authentication and authorization?
18. What is protection ring?
19. What are language translators? List any two translators.
20. Define Monitor. Explain how it overcomes the drawback of semaphores.

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Explain about Segmentation.
22. How to Recover From Deadlock situations? Discuss in detail.
23. Explain the monolithic structure of operating system with neat diagram.
24. Write a short note on context switching with a neat diagram.
25. What is operating system? What are functions of operating system?

26. Discuss various issues involved in selecting appropriate disk scheduling algorithm.

27. Write a short note on contiguous allocation method.

(5 x 5 = 25)

PART D

Answer any 2 (12 marks each)

28. What are system calls? Explain different categories of system calls with example?

29. What is cryptography? Explain the general types of cryptography.

30. Consider a computer system with 40 bit virtual addressing and page size 16KB. If computer system has one level page table and each page table entry requires 48 bits, the find the size of page table in MB?

31. Define Non-preemptive scheduling algorithm.Aslo explain different Scheduling algorithms.

(12 x 2 = 24)