

**TB222450W**

**Reg. No : .....**

**Name : .....**

**BCA DEGREE (C.B.C.S.) EXAMINATION, MARCH 2023**

**2022 Admissions Regular & 2021 Admissions Supplementary / Improvement And 2020, 2019 And 2018 Admissions  
Supplementary**

**SEMESTER II - COMPLEMENTARY COURSE 1  
(CLOUD TECHNOLOGY AND INFORMATION SECURITY MANAGEMENT)**

**BCA2B04B18 - OPERATING SYSTEM**

**Time : 3 Hours**

**Maximum Marks : 80**

**Part A**

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

**(10x2=20)**

1. List the different types of Operating system.
2. Define Microkernel OS structure.
3. Define deadlock.
4. Define the concept of thread.
5. Describe a cooperating process.
6. List the different types of frame allocation.
7. Define segmentation.
8. state the difference between Static and Dynamic loading.
9. Define indexed allocation.
10. Define swap-space.
11. Differentiate between protection and security.
12. List the different program threats.

**Part B**

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

**(6x5=30)**

13. List the various functions of system call with example.
14. Write a note on operating system services.
15. Explain the different types of process schedulers.
16. Explain the four necessary conditions for deadlock prevention.
17. Explain the three type of address representation used in a program memory.
18. Discuss about segmentation in memory management.
19. Explain protection and consistency semantics.
20. Write a note on Revocation of Access Matrix.
21. Discuss on the concept of cryptography.

**Part C**

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

**(2x15=30)**

22. Explain the concept of virtualization and system boot in detail.
23. Explain about i) Deadlocks ii) Deadlock detection iii) Mutual exclusion.

24. Explain the concept of memory management in detail.

25. Explain about i) One-time Passwords ii) Program threats iii) Cryptography.