B.C.A. DEGREE EXAMINATION,APRIL 2020
III Year V Semester
Operating Systems

Time : 3 Hours   **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Define operating system.
2. What are time sharing systems?
3. What is a deadlock ?
4. Differentiate external and internal fragmentation.
5. Define critical section.
6. What is a semaphore ?
7. Define cache.
8. Define virtual memory.
9. What is encryption?
10. What is the use of a buffer ?
11. Differentiate Logical and Physical address.
12. List the scheduling criteria.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Explain single and multiprocessor systems.
14. Discuss about deadlock prevention and avoidance.
15. Elaborate on segmentation.
16. Explain Direct Memory Access.
17. Write about Access Matrix.
18. Explain dynamic loading and linking.
19. Discuss the process of demand paging.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Explain SJF and Priority scheduling.

21. Discuss about any two classical problems of synchronization.

22. Explain about paging in detail.

23. Elaborate on Page replacement algorithms.

24. Discuss about kernel I/O subsystem.

B.C.A. DEGREE EXAMINATION,APRIL 2020
III Year V Semester
Operating Systems

Time : 3 Hours   **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Define operating system.
2. What are time sharing systems?
3. What is a deadlock ?
4. Differentiate external and internal fragmentation.
5. Define critical section.
6. What is a semaphore ?
7. Define cache.
8. Define virtual memory.
9. What is encryption?
10. What is the use of a buffer ?
11. Differentiate Logical and Physical address.
12. List the scheduling criteria.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Explain single and multiprocessor systems.
14. Discuss about deadlock prevention and avoidance.
15. Elaborate on segmentation.
16. Explain Direct Memory Access.
17. Write about Access Matrix.
18. Explain dynamic loading and linking.
19. Discuss the process of demand paging.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Explain SJF and Priority scheduling.

21. Discuss about any two classical problems of synchronization.

22. Explain about paging in detail.

23. Elaborate on Page replacement algorithms.

24. Discuss about kernel I/O subsystem.