



K21U 0868

Reg. No. : .....

Name : .....

**IV Semester B.Sc. Degree (CBCSS – Sup./Imp.) Examination, April 2021  
(2014-'18 Admissions)  
GENERAL COURSE IN COMPUTER SCIENCE  
4A14 CSC : Operating Systems**

Time : 3 Hours

Max. Marks : 40

**SECTION – A**

1. One Word Answer. (8×0.5=4)
- a) Magnetic tape drives and their tapes and CD and DVD drives and platters are typical \_\_\_\_\_ storage devices.
  - b) A software that manages hardware and other applications is called \_\_\_\_\_
  - c) As a process executes, it changes its \_\_\_\_\_
  - d) Each PCB includes a pointer field that points to the next \_\_\_\_\_ in the ready queue.
  - e) Changing the CPU from current process to another process is called \_\_\_\_\_
  - f) Whenever the CPU becomes idle, \_\_\_\_\_ scheduler must select one of the processes in the ready queue to be executed.
  - g) The \_\_\_\_\_ scheduling algorithm is designed especially for timesharing systems.
  - h) The main memory must accommodate both the \_\_\_\_\_ and the various user processes.

**SECTION – B**

Write short notes on **any seven** of the following questions. (7×2 =14)

- 2. What is MMU ?
- 3. What is CPU scheduling ?
- 4. What is the problem with priority scheduling ?

P.T.O.



5. Define Turnaround time.
6. State dispatch latency.
7. What is race condition ?
8. Explain the working of deadlock avoidance mechanism.
9. What is entry section in critical section problem ?
10. Narrate the significance of PCB.
11. What is batch operating system ?

SECTION – C

Answer **any four** of the following questions.

(4×3=12)

12. Briefly explain Round Robin Scheduling.
13. What are the tasks of dispatcher ?
14. Narrate various criteria to be considered in CPU scheduling.
15. Differentiate pre-emption and non-preemption.
16. Which are the methods for handling deadlock ?
17. Write about the various schedulers used in OS.

SECTION – D

Answer an essay on **any two** of the following questions.

(2×5=10)

18. Compare and differentiate SCAN Scheduling and C-SCAN Scheduling.
  19. Discuss various services in Basic page replacement policy.
  20. With the help of a diagram, explain PCB.
  21. Write an essay on the functions and services provided by the operating system.
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