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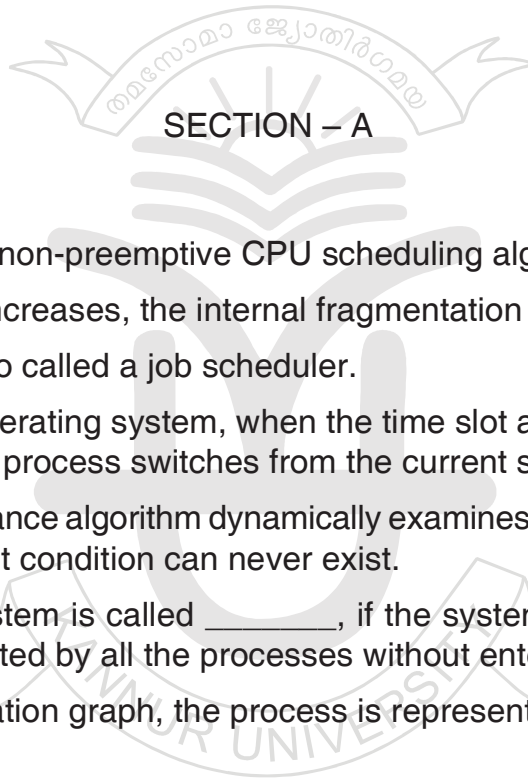
Name :

**IV Semester B.Sc. Degree (CBCSS – Supplementary / One Time Mercy
Chance) Examination, April 2024
(2014 to 2018 Admissions)**

**GENERAL COURSE IN COMPUTER SCIENCE
4A14CSC : Operating System**

Time : 3 Hours

Max. Marks : 40



SECTION – A

1. **One** word answer.

(8×0.5=4)

- _____ is a non-preemptive CPU scheduling algorithm.
- If the page size increases, the internal fragmentation _____
- _____ is also called a job scheduler.
- In a timeshare operating system, when the time slot assigned to a process is completed, the process switches from the current state to _____ state.
- A deadlock avoidance algorithm dynamically examines the _____ to ensure that a circular wait condition can never exist.
- A state of the system is called _____, if the system can allocate all the resources requested by all the processes without entering into deadlock.
- In resource allocation graph, the process is represented by a _____
- TLB stands for _____

SECTION – B

Write short notes on **any seven** of the following questions.

(7×2=14)

- What is a ready queue ?
- What is real-time operating systems ? Mention 2 types of real-time systems.
- What is demand paging ?

P.T.O.



5. Which are the 2 important information in a segment table ?
6. What is a binary semaphore ?
7. What is a mutex ?
8. What is burst time ?
9. What are the disadvantages of FCFS disk scheduling algorithm ?
10. What is the concept of C-SCAN algorithm ?
11. What is RAG ? What is its use ?

SECTION – C

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

(4×3=12)

12. What is batch operating system ? Mention its disadvantages.
13. Explain the concept of swapping.
14. What is fragmentation ? Explain 2 types of fragmentation.
15. What are the advantages and disadvantages of paging ?
16. Explain the use of compaction.
17. Explain SSTF disk scheduling algorithm.

SECTION – D

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

(2×5=10)

18. What is a semaphore ? Explain its advantages and disadvantages.
 19. Explain how deadlock prevention could be done.
 20. Explain resource request algorithm.
 21. Compare and contrast long-term and short-term scheduler.
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