K19U 0564

Reg. No. : .....

Name : .....

IV Semester B.Sc. Degree (CBCSS – Reg./Supp./Imp.) Examination, April 2019
(2014 Admission Onwards)
GENERAL COURSE IN COMPUTER SCIENCE
4A14CSC : Operating System

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. **One** word answer : **(8×0.5=4)**
   a) Batch processing is implemented by locating a component of the BP system is called _____
   b) Expand LBR.
   c) What is the basis of multi-programmed operating systems ?
   d) The solution to the problem of indefinite blockage of low-priority process is called
   e) Which provides a set of methods for ensuring that at least one of the necessary conditions can't hold ?
   f) The scan algorithm is sometimes called as _____
   g) In _____ system a series of jobs are executed without manual intervention.
   h) Deadlocks can be described in terms of a direct graph called _____

SECTION – B

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

2. What is a system call ?
3. What is time slice ?
4. What is context switch ?

P.T.O.

5. What are the advantages of RR scheduling ?
6. What is CPU-I/O burst cycle ?
7. What are deadlocks ?
8. What is process termination ?
9. Differentiate internal and external fragmentation.
10. What is context switch ?
11. When do you say that a process is in safe state ?

SECTION – C

Write short notes on **any four** of the following questions : **(4×3=12)**

12. Explain IO subsystem with the help of the diagram.
13. Discuss the memory layout of a multiprogramming system.
14. Discuss process states with diagram.
15. Explain circular wait in deadlock prevention.
16. Explain SSTF scheduling with the help of an example.
17. How to select a disk scheduling algorithm ?

SECTION – D

Write short notes on **any two** of the following questions : **(2×5=10)**

18. Discuss the three batch monitor functions.
19. Discuss different scheduling criteria.
20. Discuss Banker's algorithm with an example.
21. Explain demand paging in detail.
