K20U 0948

Reg. No. : .....

Name : .....

IV Semester B.C.A. Degree (CBCSS-Reg./Sup./Imp.) Examination, April 2020
(2014 Admn. Onwards)
Core Course
4B08 BCA : OPERATING SYSTEM

Time : 3 Hours Max. Marks : 40

SECTION – A

1. **One** word answer. **(8×0.5=4)**

   a) _____ refers to a situation in which a process is ready to execute but is continuously denied access to a processor in deference to other processes.

   b) _____ scheduling policy is most suitable for time shared operating systems.

   c) _____ technique can be used to resolve conflicts, such as competition for resources and to synchronize processes so that they can cooperate.

   d) The number of processes completed per unit time is known as _____

   e) Fixed partition memory management largely face the problem of _____

   f) Degree of multiprogramming is controlled by _____ scheduler.

   g) Physical memory is broken into fixed size blocks called _____

   h) _____ UNIX command is used to list files from the directory.

SECTION – B

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

2. What is PCB ?

3. What is multiprogramming ?

P.T.O.

4. What is meant by physical address ?
5. What is demand paging ?
6. Define thread.
7. What is Belady's Anomaly ?
8. When is a system in safe state ?
9. What is page fault ?
10. What is shell in UNIX ?
11. Which command is used to 1) remove a directory 2) remove a file ?

SECTION – C

Answer **any four** of the following questions. **(4×3=12)**

12. What are different types of operating systems ? Explain in detail.
13. Define process. What are various states of a process ?
14. Differentiate long term and short term scheduler.
15. Discuss the concept of demand paging.
16. Write short note on I/O traffic controller.
17. What are the file types available in Unix ?

SECTION – D

Write an essay on **any two** of the following questions. **(2×5=10)**

18. What is deadlock ? What are the necessary conditions for the occurrence of a deadlock ?
19. Explain about nonpreemptive process scheduling policies.
20. Discuss paged memory management scheme in detail.
21. Explain the hierarchical model of a file system.