K21U 0944

Reg. No. : .....

Name : .....

IV Semester B.C.A. Degree (CBCSS – Sup./Imp.) Examination, April 2021
(2014-'18 Admissions)
Core Course
4B08 BCA : OPERATING SYSTEM

Time : 3 Hours Max. Marks : 40

SECTION – A

1. One word answer. (8×0.5=4)
   a) The objective of multiprogramming is _____
   b) The operating system of a computer serves as a software interface between the user and the _____
   c) If the quantum time of round robin algorithm is very large, then it is equivalent to _____ algorithm.
   d) Fixed partition memory management scheme largely face the problem of _____
   e) _____ keeps track of the status of all devices, control units, and channels.
   f) In paging, physical memory is broken into fixed sized blocks called _____
   g) Switching the CPU to another process requires to save the state of the old process and loading new process state is called as _____
   h) _____ command is used to move one or more files or directories from one place to another in file system like UNIX.

SECTION – B

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

2. Define address space.
3. What do you mean by an interrupt ?
4. Define process control block.

P.T.O.

5. What is turnaround time ?
6. What is starvation ?
7. Define Trashing.
8. What is reference bit ?
9. What is the function of I/O device handler ?
10. List any four features of UNIX operating system.
11. What is the UNIX command to 1) make a new directory 2) remove a directory ?

SECTION – C

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

12. Explain the hierarchical operating system view.
13. Discuss the characteristics of deadlock.
14. Differentiate various schedulers and scheduling queues for processor scheduling.
15. What is the difference between first fit and best fit algorithms?
16. Write note on :
    1) I/O Traffic controller
    2) I/O scheduler
17. List Korn shell features.

SECTION – D

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

18. Define operating system and discuss the functions of an operating system.
19. Evaluate the various process scheduling algorithms.
20. Explain the methods for handling deadlock.
21. Discuss contiguous memory allocation, paging and segmentation schemes.