



K17U 0679

Reg. No. :

Name :

Fourth Semester B.C.A. Degree (CBCSS-Reg./Sup./Imp.)
Examination May 2017
Core Course
4B08BCA : OPERATING SYSTEM
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. One word answer :

- a) _____ is a term given to a system that may have several processes in "States of execution" at the same time.
- b) Interval between time of submission and time of completion of a job is called _____
- c) A scheduler which selects jobs from secondary storage device is called _____
- d) "Throughput" of a system is _____
- e) A set of techniques that allows to execute a program which is not entirely in memory is called _____
- f) The total time to prepare a disk drive mechanism for a block of data to be read from is its _____
- g) _____ is a technique of temporarily removing inactive programs from the memory of computer system.
- h) In UNIX, a new process is created by _____ system call. (8×½=4)

SECTION – B

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

2. What is multiprogramming ?
3. List the various services of an operating system.

P.T.O.



4. Define process scheduling and process scheduler.
5. Define a deadlock.
6. Explain the difference between internal and external fragmentation.
7. What do you mean by spooling ?
8. What is the function of I/O scheduler ?
9. Explain the syntax of a typical call in SFS.
10. What is the purpose of grep command ?
11. What is the function of page allocator in Linux ? (7×2=14)

SECTION – C

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

12. Write a short note on real time operating systems.
13. What are the advantages of multiprocessor operating systems ?
14. What is a deadlock ? What are the necessary conditions for the occurrence of a deadlock ? Explain.
15. How memory protection and allocation are implemented in contiguous memory allocation ?
16. With the help of a diagram, explain about segmentation.
17. What are the basic functions of device management ? Explain. (4×3=12)

SECTION – D

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

18. Discuss any four CPU scheduling algorithms.
19. Discuss demand paging in detail.
20. Write short notes on :
 - a) Basic File System and Logical File System.
 - b) Memory management in Linux.
21. Explain about various deadlock handling techniques. (2×5=10)