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# BCA-13

## June - Examination 2017

## BCA Pt. III Examination

## Operating System II

## Paper - BCA-13

**Time : 3 Hours ]** **[ Max. Marks :- 100**

**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

**Section - A** $10 \times 2 = 20$

(Very Short Answer Questions)

**Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1) (i) What are the desirable characteristics of real time system?

(ii) What is bash?

(iii) Give an example of chmod command.

(iv) List five applications of multimedia.

(v) Which scheduling algorithm suffers from starvation?

(vi) What is the full form of NTFS?

(vii) What do you mean by compression?

(viii) Why 'thread' is known as light weight process?

(ix) What is the use of ls command?

(x) Define rotational latency.

## Section - B

$4 \times 10 = 40$

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

2) Write short note on distributed memory management.

3) What are the advantages of distributed system over centralized system?

4) Write script, using case statement to perform basic math operations like addition, subtraction, multiplication and division.

5) Differentiate between Su, Sudo and gksu.

6) Describe password file and shadow password file used to track the user in Linux.

7) Discuss ·NIS server and client in brief. Write steps of implementing NIS server.

8) What do you mean by multiprocessor system? Distinguish tightly coupled system and loosely coupled system.

9) Describe the architecture of sun network file system (NFS) with neat diagram.

## Section - C $2 \times 20 = 40$

(Long Answer Questions)

**Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

10) What is remote procedure call? Explain its working. Also give the advantages of using RPC in distributed system.

11) What do you mean by distributed file system? Discuss the system. Design issues related to DFS.

12) Suppose that a disk drive has 200 cylinders, numbered 0 to 199. The head starts at cylinder 53. The queue of pending requests; in FIFO order, is

    98, 183, 37, 122, 14, 124, 65, 67

    What is the total distance (in cylinder's) that the disk arm moves to satisfy all the pending requests, for each of the following disk-scheduling algorithms?

    (i) FIFO

    (ii) SSTF

    (iii) SCAN

13) What are the features of Linux OS? Explain the file and directory structure of Linux OS.