MSCCS-10

June - Examination 2016

MSCCS (Final) Examination

Operating System

Paper - MSCCS-10

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 is immutable Files?

(ii) What do you mean by Atomic Transactions?

(iii) What do you mean by shell?

(iv) What is Hash Function?

(v) Give the definition of Integrity.

(vi) How to initialize array in AWK?

(vii) What is the use of AWK?

(viii) What is the use of pipes?

(ix) What do you mean by Cipher Text?

(x) What is Trojan Horse?

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) What are public and private keys? How they are used in encryption and decryption process?

3) What is Critical Section? Discuss the Critical-Section Problem.

4) Explain with example Lamport Non token based algorithm for mutual exclusion.

5) Write short note on Sun's Network File System.

6) What is Cache Coherence Problem? Discuss the solution of that problem with example.

7) What is Kerberos? Explain its architecture in brief.

8) Explain 'Walk-through Algorithm' in brief.

9) How we can login in the UNIX? Write the steps.

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 deadlock? Explain how the deadlock handling in a Distributed System Environment is different from that in a Conventional Environment.

11) Explain how the concept of Distributed System Memory combines the merits of both Distributed and Shared Memory System. Explain consistency models in detail.

12) Discuss the Architecture and design issues related to Distributed File System.

13) What do you mean by Multiprocessor Operating System? Discuss various classification of Multiprocessors.