MSCCS-10/MSCCS-204/MCA-204

June - Examination 2019

MSCCS-Final/MCA-IInd Year Examination

Operating System

Paper - MSCCS-10/MSCCS-204/MCA-204

Time : 3 Hours] **[Max. Marks :- 80**

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

Section - A $8 \times 2 = 16$

(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) Define Process

(ii) What do you understand by Atomicity of a transaction?

(iii) What is Kernel?

(iv) Define Dead Lock.

(v) What is the full form of NORMA?

(vi) Define Transaction.

(vii) Elaborate the term DSM.

(viii) Differentiate the terms Encryption and Decryption.

Section - B $4 \times 8 = 32$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

2) Explan critical section Problem.

3) How can we perform Input and Output in awk?

4) What is the application of Regular Expression?

5) Explain relationship between Shell and kernel in Linux.

6) What is the need for Advanced operating system.

7) Explain Remote Procedure Calls in detail.

8) Describe Token-based algorithm of Mutual Exclusion.

9) Write a short note on Shadow Paging.

Section - C $2 \times 16 = 32$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

10) Explain four different characterstics of Dead Lock. Also explain different methods for deadlock handling.

11) Write short notes on -
    (i) Message Passing Model
    (ii) Name Resolution in Distributed File System
    (iii) Kerberos
    (iv) Cache coherence

12) Give an account on security issues in a system and also explain possible protection mechanisms in short.

13) What do you understand by a Database Operating System. How conflict resolution can be performed using serializability.