

MCA-204/MSCCS-10/MSCCS-204**June – Examination 2020****MSCCS (Final)/MCA (IInd Year)
Examination****Operating System****Paper : MCA-204/MSCCS-10/MSCCS-204***Time : 3 Hours]**[Maximum Marks : 80*

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

Section-A**8×2=16****(Very Short Answer Type Questions)**

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

1. (i) Define Computer Worm.
- (ii) Define Process.
- (iii) What is Deadlock ?

- (iv) Write names of any *five* distributed mutual exclusion algorithms.
- (v) Define Transaction.
- (vi) What do you understand by Mutual Exclusion ?
- (vii) Write full forms of DSM and UMA.
- (viii) Define Time Stamp.

Section–B **4×8=32**

(Short Answer Type Questions)

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

2. Explain critical section problem.
3. Write characteristics of deadlock.
4. Explain atomic transaction with example.
5. What is the role of kernel in Linux ?
6. Explain how input and output can be performed in AWK.
7. Write need of pipes.
8. Explain client server computing model.
9. Write a brief note on remote procedure calls.

Section–C **2×16=32**

(Long Answer Type Questions)

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

10. Explain process synchronization. Also differentiate monitors and semaphores.
11. Explain message passing model in distributed operating systems.
12. Explain various methods of handling deadlocks.
13. Explain cache coherence problem and its solutions in detail.