

**MSCCS-10/MSCCS-204/MCA-204**

December - Examination 2018

**MSCCS-Final/MCA-IIInd Year Examination**  
**Operating System****Paper - MSCCS-10/MSCCS-204/MCA-204****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 × 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) Define computer worm.
- (ii) What do you understand by critical region.
- (iii) Explain redirection in shell programming.
- (iv) What is awk and gawk?
- (v) What is Remote Procedure Call?
- (vi) Explain what is performance metric of mutual exclusion.
- (vii) Define mutual exclusion.
- (viii) Define Dead lock

- (ix) What do you understand by DSM?
- (x) Define Cryptography.

**Section - B****4 × 10 = 40**

(Short Answer Questions)

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

- 2) Explain critical section problem.
- 3) Explain role of Regular Expression in Filter.
- 4) Write a note on Distributed operating system.
- 5) Explain Lamport's algorithm of Distributed Mutual Exclusion.
- 6) Give different design issues of Distributed file system.
- 7) Explain migration algorithms.
- 8) Give different models of cryptographic systems.
- 9) Give multiprocessor operating system design issues.

**Section - C****2 × 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 do you understand by dead lock handling? Explain deadlock detection and Resolution.
- 11) Explain different types of multiprocessor operating system.
- 12) Give quorum - based mutual exclusion algorithm in detail.
- 13) Give a detailed note on public key cryptography.