

11. Explain Deadlock Handling in detail using suitable examples.
12. Explain different types of Multiprocessor operating system.
13. Explain Ricart-Agrawala Mutual Exclusion algorithm.

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

**December – Examination 2023
MCA (IInd Year) Examination
COMPUTER SCIENCE
(Operating System)
Paper : MSCCS-10/MSCCS-204/
MSCCSC-204/MCA-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 Kernel Plode.
- (ii) Define Authentication.
- (iii) Explain Filters.
- (iv) What is Awk and Gawk ?
- (v) Write full form of NUMA.
- (vi) Define Cryptography.
- (vii) Define Mutual Exclusion.
- (viii) Define Checkpoint.

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. Describe the architecture of distributed shared economy.
3. Explain prevention methods of deadlock.

4. Write a note on Distributed Operating System.
5. Explain migration algorithms.
6. What is the requirement of mutual exclusion algorithm ?
7. What is Cache Coherence ?
8. Write the various design principles for secure system.
9. Write a short note on Shadow Paging.

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 coherence and consistency models in detail.