

MSCCS-10/MSCCS-204/MCA-204

December – Examination 2020 MCA/PGDCA Examination

Operating System

Paper : PGDCA-204/MCA-204

Time : 2 Hours]

[Maximum Marks : 80

Note :- The question paper is divided into two Sections A and B. 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 upto **30** words. Each question carries 2 marks.

1. (i) Define Authentication.
(ii) Explain relationship between shell and kernel.
(iii) Explain Filters.
(iv) Define global knowledge in distributed operating system.
(v) Define Mutual Exclusion.
(vi) Define Cryptography.
(vii) Define Alias.
(viii) Define Checkpoint.
5. Give performance metrics of Mutual Exclusion.
6. Explain Remote Procedure Call.
7. Write a note on naming conflict and its resolution in distributed file system.
8. Write the various design principles for secure system.
9. List the various multiprocessor operating system design issues.

Section-B **4×16=64**

(Short Answer Type Questions)

Note :- Answer any *four* questions. Answer should not exceed **200** words. Each question carries 16 marks.

2. Explain critical section problem.
3. Explain deadlock avoidance.
4. What do you understand by Message Passing ?
How is it performed in distributed operating system?