

MSCCS-10/MSCCS-204/MCA-204

June - 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 security threat.
- (ii) What is Semaphore?
- (iii) What is Kernel in Linux?
- (iv) How can we declare array in awk?
- (v) What is the need of database operating system?
- (vi) Define critical section.

- (vii) What is cache consistency?
- (viii) What is the effect of security violation?
- (ix) Define cryptography.
- (x) What do you understand by Transaction.

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 different authentication procedures.
- 3) Give deadlock characteristics.
- 4) Explain pipes in shell programming.
- 5) Discuss process synchronization.
- 6) Explain token based algorithm for mutual exclusion.
- 7) Give an account on mounting and caching in distributed file system.
- 8) Discuss safety mechanism in Access Matrix Model.
- 9) Write a note on shadow paging.

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) (i) Write shell script to find factorial of a number.
(ii) Give a short note on client server computing model.
 - 11) Explain distributed mutual exclusion using any one algorithm.
 - 12) Detail cut memory coherence and consistency models.
 - 13) What is Keberos? Give RSA method of public key cryptography.
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