

Total No. of Pages : 04

Roll No.

MCA-11/M.Sc.IT-11/MIT(CS)-304

Operating System/Introduction

to Operating System

Master of computer application/

Master of Science in

Information Technology/

Master of Science (Cyber Security)

(MCA/MSc.IT-11/12/16/17/MSCCS-18)

Third Semester, Examination-2019

Time : 3 Hours

[Maximum Marks : 80

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section A contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any three (03) questions only. **(3×15=45)**

(2)

1. Write a note on following :

Parallel System, real time system and distributed system.

2. Explain FIFO page replacement algorithm with example.

3. Explain the round robin scheduling with example.

4. What is process and explain the Process states by using labelled diagram?

5. Explain the Banker's algorithm for deadlock avoidance.

Section–B

(Short-Answer-Type Questions)

Note : Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only. **(5×7=35)**

1. Explain the functions of operating system.

2. What are the difference between process and thread?

3. Write a short note on semaphore.

(3)

4. What do you understand by memory management concept in operating system?
5. What is file and explain any five operations on file?
6. Explain the concept of principles of I/O software.
7. Write a short note on following :
Authentication and Access control
8. What are the differences between primitive and non-primitive scheduling?