ROLL No: Total number of pages:[]]

## MCA 3<sup>rd</sup> Sem

# **Operating System** Subject Code: MCAP1-313

Paper ID:

Time allowed: 3 Hrs Max Marks:60

#### Important Instructions:

All questions are compulsory

#### PART A (10x 2marks)

- Short-Answer Questions: Q. 1. (a) How operating system work as resource manager? (b) What are real time system? (c) What is SJF scheduling? (d) What are the various functions of kernel. (e). What is segmentation? (f) What is thrashing? (g) What are threads?
  - (h) Define Inter process communication.
  - (i) Define virus and worms.
  - (j) Differentiate between LOOK and C-LOOK?

### PART B (5×8marks)

What is Operating System? What are its views? Explain various types of CO1 Q. 2. operating systems.

OR CO<sub>1</sub> Write a short note on:

a) Operating System structure b) PCB Explain the concept of Paging in Memory Management schemes.

CO<sub>2</sub> Q. 3. CO<sub>2</sub>

Explain various CPU scheduling algorithms. What is deadlock? Explain various deadlock prevention and avoidance CO3 Q. 4.

techniques? OR CO<sub>3</sub>

Explain various page replacement algorithms. What is file and directory? Explain various file allocation methods. CO<sub>4</sub>

Q. 5. OR CO<sub>4</sub>

Write a short note on: b) Thrashing a) Virtual Memory Explain various security measures used for operating system. CO<sub>5</sub>

Q. 6. Write a short note on case studies of LINUX/UNIX operating systems? CO5