

Roll No.

Total No. of Questions : 07]

[Total No. of Pages : 02

Paper ID [B0218]

(Please fill this Paper ID in OMR Sheet)

BCA (Sem. - 4th)

OPERATING SYSTEMS (BC - 404)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

Section - A

Q1)

(10 x 2 = 20)

- a) List the three functions of resource management.
- b) What is busy waiting?
- c) What do you mean by system threats?
- d) List any three resources of a virtual computer.
- e) Give the advantages of multitasking.
- f) What is a scheduler?
- g) What do you mean by inter-process communication?
- h) What is a parallel system?
- i) Discuss the non-preemptive scheduling.
- j) List four necessary conditions for dead lock.

Section - B

(4 x 10 = 40)

- Q2)** State and discuss the differences between Distributed System and Real Time systems.
- Q3)** What is the primary goal of Authentication and how can you achieve that through the password mechanism?
- Q4)** Explain through a diagram, the principle of address translation in paging scheme.
- Q5)** What is a scheduler? Explain the primary objective of scheduling. Explain.
- Q6)** How can you prevent a system from deadlock? Explain.
- Q7)** Write short notes on the following :
- (a) Encryption.
 - (b) Swapping.

