Roll No. ....

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.

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