



RAN - 2111000306020086

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**T.Y.B.Sc. (Computer Science) (Sem. 6) Examination October - 2023**

**606 - Operating System**

**Time: 2 Hours ]**

**[ Total Marks: 50**

**સૂચના : / Instructions**

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નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**T.Y.B.Sc. (Computer Science) (Sem. 6)**

Name of the Subject :

**606 - Operating System**

Subject Code No.: **2111000306020086**

Seat No.:

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Student's Signature

- (2) Answer all the questions.
- (3) Figures in the right indicates full marks
- (4) Illustrate your answer with necessary example, if required.

**Que-1. Answer the following questions. [ Any SEVEN ]**

**[10]**

1. What is system call and interrupt?
2. Explain need of DMA.
3. What is address space?
4. Explain use of shared page.
5. Explain use of defragmentation.
6. What is main purpose of round robin process scheduling algorithm.
7. Differentiate Response time and Turnaround time.
8. Explain the significance of Thread.
9. What do you mean by non preemption?

**Que-2. Answer the following questions. [Any TWO]**

**[12]**

- a) Explain steps of booting process.
- b) Explain need of disk space management.
- c) Explain contiguous and non contiguous allocation of memory.

**Que-3. Answer the following questions. [Any TWO] [12]**

- a) Write a note on evolution of OS.
- b) Explain attributes, types, access, and protections in reference to file structure.
- c) What is segmentation? Explain implementation of pure segmentation.

**Que-4. Answer the following questions. [Any THREE] [12]**

- a) Explain SCAN and C-SCAN disk arm scheduling algorithms.
  - b) What is victim frame? Explain page fault, demand paging and need of page replacement.
  - c) Explain deadlock avoidance, prevention and recovery.
  - d) Explain different states of process.
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