



# RAN-1212

## Third Year B.Sc. (Semester-VI) Examination

### March / April - 2019

### Computer Science: Paper-606

### (Operating System -II)

Time: 2 Hours ]

[ Total Marks: 50

સૂચના : / Instructions

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

Name of the Examination:

Third Year B.Sc. (Semester-VI)

Name of the Subject :

Computer Science: Paper-606

Subject Code No.:

1 2 1 2

Seat No.:

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Student's Signature

Q. 1 Answer the Following

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- 1 Explain Belady's Anomaly.
- 2 List the four conditions which causes deadlock to occur.
- 3 What information does PCB hold?
- 4 Explain the importance of context switch in process.
- 5 Explain the role of valid and invalid bit in a page table.
- 6 What does segment table base register and segment table length register indicates in a segment table ?
- 7 Explain the commands Pipe and getpid.

Q. 2 Answer the following ANY TWO

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- 1 Explain the term process? Explain the various stages of process.
- 2 Explain Deadlock prevention in detail.
- 3 Explain the importance of scheduling in process management ? Explain any one scheduling algorithm.

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[ 1 ]

[ P.T.O. ]

**Q3**                      **Answer the following ANY TWO**                      **12**

- 1      Explain Segmentation in detail with proper example.
- 2      If the Reference string is : 0 1 2 3 0 1 4 0 1 2 3 4 and we have physical memory of 3 frames, then calculate page faults using FIFO Algorithm.
- 3      If the Reference string is : 1 2 3 2 1 5 2 1 6 2 5 6 3 1 3 6 1 2 4 3 and we have physical memory of 3 frames, then calculate page faults using LRU Algorithm.

**Q4**                      **Answer the following ANY TWO**                      **10**

- 1      Explain Memory commands in Unix.
  - 2      Explain the structure of file in Unix.
  - 3      Differentiate between Physical and logical address.
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