

Goa Vidyaprasarak Mandal's
Gopal Govind Poy Raiturcar College of Commerce and Economics
Farmagudi, Ponda-Goa.

B.C.A. (Semester - II) Examination – April 2015

OPERATING SYSTEM CONCEPTS

Duration : 2 hours

Marks : 50

Instructions : A.) All the questions are compulsory.
B.) Draw neat diagrams with pencil wherever required.

- I. 1. State whether the following statements are True or False. (1mk x 5 = 5 mks)
- a) System Bus does not provides for communication among processors, main memory and I/O modules.
 - b) Processor executes instruction from the memory containing the monitor.
 - c) In local replacement each process selects from only its own set of allocated frames.
 - d) The bootstrap is not stored in ROM.
 - e) A thread is a single sequence stream within in a process.
2. Answer the following. (1mk x 5 = 5 mks)
- a) What is Main Memory ?
 - b) What is Kernel ?
 - c) What is a Deadlock ?
 - d) What is Swapping ?
 - e) What is Thrashing ?
- II. 1. Explain that the Operating System is a resource allocator. (2 mks)
2. Explain the Segmentation with an example. (3 mks)
3. Explain the Process State with the diagram. (5 mks)

- III. 1. Explain the various operations of File. (2 mks)
2. Explain the Data Migration and Computation Migration. (3 mks)
3. Explain the Critical-Section Problem. (5 mks)
- IV. 1. Explain the concept of Trusted Systems. (2 mks)
2. Explain the various types of Threats. (3 mks)
3. Explain the Shared Pages with the diagram. (5 mks)
- V. 1. Explain the design issues related to Distributed Operating System. (2 mks)
2. Explain the several advantages offered by web based Operating System. (3 mks)
3. Explain the SCAN scheduling with an example. (5 mks)
