

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

B.C.A. (Semester - II) Examination – April 2016

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)
- Synchronization is often necessary when processes communicate.
 - Processor performs the data processing functions.
 - I/O Modules moves data between the computer and external environments.
 - Main Memory is not the volatile memory.
 - Operating System does not manage all resources.
2. Answer the following. (1mk x 5 = 5 mks)
- What is Swapping ?
 - What is a Trojan Horse ?
 - What is a Deadlock ?
 - What is Thrashing ?
 - What is Internal Fragmentation ?
- II. 1. Explain the major services of an Operating System. (2 mks)
2. Explain the Data Migration and the Computation Migration. (3 mks)
3. Explain the First-Come-First-Serve Scheduling with an example. (5 mks)

- III. 1. Explain the Cryptography as a security tool. (2 mks)
2. Explain the I/O Buffering with an example. (3 mks)
3. Explain the Optimal Page Replacement with an example. (5 mks)
- IV. 1. Explain the design issues related to Distributed Operating System. (2 mks)
2. Explain the Demand Paging. (3 mks)
3. Explain the Process State with the diagram. (5 mks)
- V. 1. Explain the concept of Trusted System. (2 mks)
2. Explain the Resource Management in the web based Operating System. (3 mks)
3. Explain the Peterson's Solution. (5 mks)
