

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

B.C.A. (Semester - II) Examination, April 2019
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. (1 mk x 5 = 5 mks)
- Resident Monitor is software always in memory.
 - Operating System is a control program.
 - A thread is a single sequence stream within in a process.
 - Virus dropper does not insert virus onto the system.
 - A program is not a collection of segments.
2. Answer the following. (1 mk x 5 = 5 mks)
- What is Multi-programmed Batch System ?
 - What is a Deadlock ?
 - What is a Page offset ?
 - What is Internal Fragmentation ?
 - What is a System Bus ?
- II. 1. Explain the concept of Trusted Systems. (2 mks)
2. Explain Tree-Structured Directories. (3 mks)
3. Explain the Critical-Section Problem. (5 mks)
- III. 1. Explain the major services of an Operating System. (2 mks)
2. Explain Contiguous Memory Allocation. (3 mks)
3. Explain Process Control Block with the diagram. (5 mks)
- IV. 1. Explain the Symmetric Encryption. (2 mks)
2. Explain the Load Balancing in Process Migration. (3 mks)
3. Explain the Optimal Page Replacement with an example. (5 mks)
- V. 1. Explain the goal of Distributed File Systems. (2 mks)
2. Explain Web based Operating System. (3 mks)
3. Explain the First-Come-First-Serve Disk Scheduling with an example. (5 mks)
