

S-737

Total Pages : 3

Roll No. -----

BCA-10

Operating System

Bachelor of Computer Application (BCA/DIT)

3rd Semester, Examination 2022(Dec.)

Time: 2 Hours

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2 x 19 = 38]

P.T.O.

- Q.1. What is an operating system? Briefly explain the functions of an Operating System.
- Q.2. What is a distributed operating system? And also discuss how it is different from network operating system.
- Q.3. What is page replacement scheme? Explain with diagram. Define LRU (least-recently used) algorithm with an example.
- Q.4. What are the security threats in Operating System? Explain briefly.
- Q.5. What is Memory Partitioning? Describe memory partitioning techniques.

Section – B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4 x 8 = 32]

- Q.1. What is thread? Explain any four benefits of multithreaded program.
- Q.2. Define Process Control block. Explain with diagram.
- Q.3. Explain the CPU-I/O burst cycle with diagram. Describe Round-Robin Scheduling algorithm.
- Q.4. Write short notes on cryptography.
- Q.5. What do you mean by Access Control? What are its benefits?
- Q.6. What is DMA? What are its basic principle.
- Q.7. What do you mean by I/O management in Operating System? Explain.
- Q.8. Differentiate between Sequential and random access file.
