BPP–1110

M.Sc. (Previous) Examination, 2022
INFORMATION TECHNOLOGY

MIT–103

(Operating System)

Time : 3 Hours]   [*Maximum Marks : 50*

Section–A   **(Marks : 2 × 10 = 20)**

Note :–   Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section–B   **(Marks : 3 × 5 = 15)**

Note :–   Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

Section–C   **(Marks : 5 × 3 = 15)**

Note :–   Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section–A

1. (i)   What is Operating System ?

    (ii)   What is Process Control Block ?

(iii) What is Throughput ?

(iv) What is Turnaround time ?

(v) What is Semaphore ?

(vi) Write the condition of Deadlock.

(vii) What is Unix ?

(viii) What is kill process in Unix ?

(ix) What is system variable in Unix ?

(x) What is Shell Script ?

Section–B

2. What is Real Time System ? Explain the real time system with example.

Or

What is Multiprogramming Batch Mode Operating System ? Explain with example.

3. Explain the SJF and SRTM in CPU scheduling.

Or

Explain the Demand Paging.

4. What is bounded buffer problem ? Explain.

Or

What is Reader and Writer Problem ? Explain.

5. Explain the types of Shell.

Or

Explain the inode and block storage of file.

6. Write a program in Unix to print factorial number.

Or

Write a program in Unix to print Fibonacci series.

Section–C

7. Explain the structure of Operating System.

8. Explain the different types of page replacement policies and algorithm with example.

9. What is Deadlock ? Explain detection and recovery from deadlock.

10. Explain the Unix File System.

11. Explain the different types of Loop with example in Unix.