SEM–3027

M.Sc. (IIIrd Semester) Examination, 2022
CYBER SECURITY

Paper – MCSEC–304

(Operating System)

Time : 3 Hours]   [*Maximum Marks : 40*

The question paper contains three Sections.

Section–A   **(Marks : 1 × 10 = 10)**

Note :– Answer all the *ten* questions carries **1** mark each. The answer should not exceed **50** words.

Section–B   **(Marks : 3 × 5 = 15)**

Note :– Answer any *five* questions by selecting at least *one* question from each Unit. Each question carries **3** marks. Answer should not exceed **200** words.

Section–C   **(Marks : 5 × 3 = 15)**

Note :– Answer *three* questions by selecting *one* question from each Unit. Each question carries **5** marks. The answer should not exceed **500** words.

Section–A

1. Attempt all questions. Answers should not exceed **50** words in each question :

   (i)   What is PCB ?

   (ii)   What is Thread ?

   (iii)   What is Context Switching ?

   (iv)   What is Turnaround Time ?

   (v)   What is Deadlock ?

   (vi)   What is Page ?

   (vii)   What is Synchronisation ?

   (viii) What is Man Command ?

   (ix)   What is shell script in Linux ?

   (x)   What is file permission in Linux ?

Section–B

Unit–I

2. What is System Calls ?

3. Define pre-imitative scheduling.

4. Explain process states.

Unit–II

5. What is Semaphore ?

6. What is Paging ?

7. Define banker's algorithm.

Unit–III

8. What is looping define according Linux ?

9. Define the steps of Linux installation.

10. What is file and user in Linux ?

Section–C

Unit–I

11. What is Operating System ? Define its structure, type and process.

12. What is CPU scheduling ? Define its algorithms in detail.

Unit–II

13. What is deadlock ? Define its detection, prevention and avoidance.

14. What is Paging ? Define the various types of page replacement technique.

Unit–III

15. What is decision-making statements ? How many statements are used in Linux ?

16. Write *ten* commands of Linux in detail with example.