K25U 3074

Reg. No. : .....

Name : .....

III Semester B.Sc. Degree (CBCSS – OBE – Supplementary/Improvement) Examination, November 2025

(2023 Admission)

GENERAL AWARENESS COURSE IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

3A01 AIML : Operating System and Linux Shell Programming

Time : 3 Hours Max. Marks : 40

PART – A

(Short Answer)

Answer **all** questions. **Each** question carries **1** mark.

1. What is a batch processing system ?
2. What is demand paging ?
3. What is the difference between single (') and double (") quotes in shell scripts ?
4. What is a thread ?
5. What is meant by redirecting input/output ?
6. How do you write comments in a shell script ? **(6×1=6)**

PART – B

(Short Essay)

Answer **any six** questions. **Each** question carries **2** marks.

7. Compare continue and break statements in AWK.
8. Explain the real time system.
9. What is the echo command used for ?
10. Write down the states of a process.

P.T.O.

11. What is the purpose of mounting in file systems ?

12. What is the purpose of the return command in a shell function ?

13. What are editors ? Explain emacs editors.

14. What are the common file operations supported by operating systems ? **(6×2=12)**

PART – C

(Essay)

Answer **any four** questions. **Each** question carries **3** marks.

15. Explain contiguous memory allocation.

16. Describe reading and printing data in shell programming.

17. Explain different types of variables in shell script.

18. Explain priority scheduling.

19. How are patterns and actions structured in an AWK script ?

20. Explain deadlock prevention methods. **(4×3=12)**

PART – D

(Long Essay)

Answer **any two** questions. **Each** question carries **5** marks.

21. Explain various OS operations.

22. Explain deadlock detection.

23. Explain FCFS and SJF scheduling algorithms.

24. Explain standard Input/Output and I/O redirection in Unix. **(2×5=10)**