

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(AUTONOMOUS)

B.Tech. II Year II Semester Sessional Examination-II, July, 2024

Operating Systems

(Common to CSE, IT, DS, AIDS)

Time: 2 hours,

Max. Marks: 30M

5X 2M=10 M

PART-A

All Questions are compulsory.

- a) Summarize the methods for deadlock recovery.
- b) Define Thrashing.
- c) Discuss free space management.
- d) How to implement access matrix?
- e) Explain swap space management.

CO-2 BL-2
CO-3 BL-1
CO-3 BL-2
CO-5 BL-2
CO-4 BL-2

PART-B

Answer any ONE question from each Unit

1X4=4M

2X8=16M

UNIT-III

1. Examine the methods used for deadlock prevention.

4M CO-2 BL-4

OR

2. With a neat diagram, demonstrate the resource allocation graph.

4M CO-2 BL-2

UNIT-IV

3. For the given reference string 6, 1, 1, 2, 0, 3, 4, 6, 0, 2, 1, 2, 1, 2, 0, 3, 2, 1, 2, 0, Calculate the page faults and page hits using LRU and optimal page replacement algorithms

8M CO-3 BL-3

OR

4. Elaborate the approach of file allocation methods.

8M CO-3 BL-2

UNIT-V

5. With a neat diagram, Inspect the RAID structure.

8M CO-4 BL-4

OR

6. a) Discuss about the goals and principles of protection.
b) Summarize the program threats.

4M CO-5 BL-2
4M CO-5 BL-2
