**OSUNIT 3 : Numerical Assignment**

Q1 : Find out safe sequence for execution of 3 processes using Banker’s

Algorithm. Find out Need matrix.

Max Resources (Existence res matrix) : R1= 15, R2=8

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Allocation Matrix | | |  | Maximum Requirement Matrix | | |
|  | R1 | R2 |  |  | R1 | R2 |
| P1 | 2 | 1 |  | P1 | 5 | 6 |
| P2 | 3 | 2 |  | P2 | 8 | 5 |
| P3 | 3 | 0 |  | P3 | 4 | 8 |

Q2. Q1 : Find out safe sequence for execution of foll processes using Banker’s

Algorithm. Find out Need matrix.

Max Resources (Existence res matrix) : R1= 13, R2=7,R3=10

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Allocation Matrix | | | | Maximum Requirement Matrix | | |
|  | R1 | R2 | R3 | R1 | R2 | R3 |
| P1 | 2 | 1 | 1 | 4 | 3 | 3 |
| P2 | 7 | 2 | 3 | 7 | 2 | 4 |
| P3 | 3 | 2 | 2 | 4 | 2 | 5 |
| P4 | 1 | 1 | 3 | 5 | 3 | 3 |

Q3 : Find out safe sequence for execution of foll processes using Banker’s

Algorithm. Find out Need matrix.

Max Resources (Existence res matrix) : R1= 5, R2=5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Allocation Matrix | | |  | Maximum Requirement Matrix | | |
|  | R1 | R2 |  |  | R1 | R2 |
| P1 | 1 | 0 |  | P1 | 1 | 1 |
| P2 | 1 | 1 |  | P2 | 2 | 3 |
| P3 | 1 | 2 |  | P3 | 2 | 2 |
| P4 | 1 | 1 |  | P4 | 3 | 2 |