2. ANALYSIS OF STARVATION FOR THE GIVEN RESOURCE REQUEST ORDER

Consider 4 processes P1, P2, P3 and P4 in a distributed system. The Resource request model is expressed as P1→ P2 || P3 → P4 || P1.

(Note: → indicates sequential and || indicate concurrent executions)

a. Apply Lamport's D-Mutex algorithm for the given resource request model. (10 Marks)

b. Inspect the steps for the occurrence of starvation (10 Marks)

c. Conclude whether the system suffers due to starvation or not for the given scenario. (10 Marks)

a. Examine the importance of reliability of the processes involved in the system. (10 Marks)