SOUTH EASTERN UNIVERSITY OF SRI LANKA

In-Course Assessment 03

CIS 21012 – Platform Technologies

Answer all Questions.   **Time allowed: 30 minutes**

A. What is deadlock in an Operating System?

B. Explain the situations when a deadlock can arise

C. What does it mean by a recourse allocation graph

D. Suppose we have **five (05)** processes and **three (03)** resources, A, B, and C. A has **three (03)** instances, B has **five (05)** instances and C has **four (04)** instances. Can the system execute the following processes without deadlock?

Process	Maximum Need			Allocation		
	A	B	C	A	B	C
P1	1	2	3	0	1	1
P2	3	3	0	0	1	0
P3	0	1	1	0	0	1
P4	4	5	3	1	2	1
P5	1	1	2	1	0	1