Bangladesh University of Business and Technology (BUBT)
Department of Computer Science and Engineering
Class Test - 02: Summer 2020
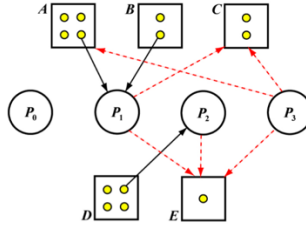Program: B.Sc. in CSE, 39th Intake Sec-01
Course Code: CSE 309 │ Course Title: Operating Systems

Time– 30 minutes   **Marks – 05**

[Answer the following questions.]

1.   Describe the following resource allocation graph.   [02]

2.   A system has four processes and four allocatable resources. The current allocation   [03]
      and maximum needs are as follows:

Process	Allocation				Need				Existing Resources	Available Resources
	A	B	C	D	A	B	C	D	7 3 5 6	2 0 2 1
P1	1	0	1	2	1	1	0	1		
P2	0	1	0	1	0	1	1	2		
P3	2	1	1	0	2	1	0	0		
P4	2	1	0	1	0	0	1	1		
P5	0	0	1	1	1	2	2	0		

Is the system in a safe state? Why or why not?