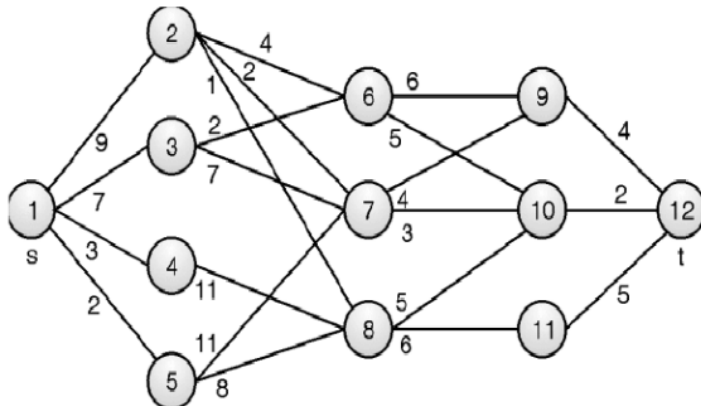


Subject Code: PC602IT				AY:2024-25
 MATRUSRI ENGINEERING COLLEGE (An Autonomous Institution) 16-1-486, Saidabad, Hyderabad-500059 (Approved by AICTE, Affiliated to Osmania University) 				
Department of Information Technology				
B.E. VI-SEM Assignment -3				
Subject: DAA (PC602IT)		Marks: 10 M		
S.No.	Questions	Marks	BL	CO
1	Solve the following 0/1 Knapsack problem using dynamic programming $P=(10, 8, 12)$, $W=(2, 3, 7)$, $C=10$, $n=3$.	2 M	L3	CO3
2	Find minimum path cost between vertex s and t for following multistage graph using dynamic programming 	3M	L3	CO3
3	Consider three stages of a system with $r_1=0.3$, $r_2=0.5$, $r_3=0.2$ and $c_1=30$, $c_2=20$, $c_3=30$ Where the total cost of the system is $C=80$ and $u_1=2$, $u_2=3$, $u_3=2$ find the reliability design.	2 M	L3	CO3
4	Let $n=4$ and (a_1,a_2,a_3,a_4) Construct optimal binary search for $(a_1, a_2, a_3, a_4) = (\text{do}, \text{if}, \text{int}, \text{while})$, $p(1 : 4) = (3,3,1,1)$ $q(0 : 4)=(2,3,1,1,1)$	3 M	L3	CO3
5	Apply Floyd’s algorithm for constructing the all pairs shortest path for the following graph. 