



COMSATS University Islamabad, Lahore Campus

Quiz # 3 – FALL 2020

Course Title:	Design and Analysis of Algorithms				Course Code:	CSC301	Credit Hours:	3(3,0)
Course Instructor:	Dr. Hasan Jamal				Programme Name:	BCS		
Semester:		Batch:		Section:		Date:	25/12/2020	
Name				Student ID		Marks	10	
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Question 1:

[Marks: 4]

Apply the bottom-up dynamic programming algorithm to the following instance of the knapsack problem.
The Weight capacity W is 6.

Item	Weight	Value
1	3	\$25
2	2	\$20
3	1	\$15
4	4	\$40
5	5	\$50

Question 2:

[Marks: 6]

Apply the bottom-up dynamic programming algorithm to the following instance of the knapsack problem.
The Weight capacity W is 16.

Item	Weight	Value
1	2	\$20
2	5	\$30
3	10	\$50
4	5	\$10