



## COMSATS University Islamabad, Lahore Campus

### Assignment #4 – SPRING 2019

Course Title:	Design and Analysis of Algorithms				Course Code:	CSC301	Credit Hours:	3
Course Instructor:	Dr. Hasan Jamal				Programme Name:	BCS		
Semester:	5 <sup>th</sup>	Batch:	SP17	Section:	A & B	Date:	10/05/2019	
Deadline:	14/05/2019				Maximum Marks:		10	

#### Important Instructions / Guidelines:

- Handwritten strictly.
- Maximum three persons per group are allowed for submission.
- No late submission allowed

#### Question:

[Marks: 10]

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