

# National University of Computer and Emerging Sciences, Lahore Campus



**Course:** Introduction to Software Project Management  
**Program:** BS (Computer Science)  
**Duration:** 90 Minutes  
**Paper Date:** 17-Jun-2020  
**Section:** A,B  
**Exam:** Quiz 2

**Course Code:** CS-450  
**Semester:** Spring 2020  
**Total Marks:** 10  
**Weight** 5 %  
**Page(s):** 1  
**Roll No.**

1. Refer to the activity estimates and precedents below.
  - a. Replace D1-D10 with any number(s) between 1 and 10 randomly. You may use a number more than once, however, do not use the same number for all durations, or any obvious/systematic pattern like 1 for D1, 2 for D2, etc.
  - b. Create a precedence network, using the following labeling conventions:

Activity label		Duration	
Earliest start	Activity description	Earliest finish	
Latest start		Latest finish	
Activity span		Float	

Hint: You may draw a rough network using simple boxes, and when you have worked it out, then draw the detailed one with the labeling conventions.

- c. Perform forward pass and backward pass, calculate the span and float and identify the critical path(s).

Note: Use Week 0 as the starting point and the week number used should indicate the end of each week. Calculate the numbers accordingly.

Activity ID	Activity Description	Estimated Duration (Weeks)	Precedents
1	Develop Specifications	D1	
2	Design Hardware	D2	1
3	Design Software	D3	1
4	Develop User Manual	D4	1
5	Build Hardware	D5	2
6	Code Software	D6	3
7	Load Data	D7	5,6
8	Test	D8	5,6
9	Train Users	D9	4,8
10	Deploy	D10	7,9