## SYSC 4106 – Winter 2020 - Case Study Assignment 1 → 30 marks (5% of the final grade) → Posted = Jan. 21, 2020 Due = Feb. 4, 2019 @ 11:55 pm on cuLearn

## Case Study 1 - Selecting Lifecycle models based on project team composition [15 marks]

Whenever possible, it is best to select the people for the project team prior to selecting the life cycle model. The characteristics of this team are important in the selection process since 1) they are responsible for the successful completion of the cycle and 2) they can assist in the selection process. Consider the following questions and assume that the response to each question is "yes:"

- 1. Are the majority of team members new to the problem domain for the project?
- 2. Are the majority of team members new to the technology domain?
- 3. Are the majority of team members new to the tools to be used on the project?
- 4. Are the team members subject to reassignment during the life cycle?
- 5. Is there training available for the project team if required?

Using the table below answer "yes" if you think the life cycle model is appropriate or "no" if not. This is not a guess work, there is need for discussion and brainstorming before you put down a yes or a no in the box. Note that it is possible to have many lifecycle models for each question. You can make the table bigger to give reason(s) for your "yes" or "no"

Project Team						
	Waterfall	V-Shaped	Prototype	Spiral	RAD	Incremental
Are the majority						
of team						
members new to						
the problem						
domain for the						
project?						
Are the majority						
of team						
members new to						
the technology						
domain for the						
project?						
Are the majority						
of team						
memebers new						
to the tools to be						
used on the						
project?						
Are the team						
members						
subject to						
reassignment						
during the life						
cycle?						
Is there training						
available for the						
project team if						
required?						

## Case study 2 [15 marks]

Given the information in table below and using the same approach we used in class and in the book:

Activity	Predecessor	Duration	ES	EF	LS	LF	Slack
		(days)					
A	None	5					
В	None	4					
С	A	3					
D	A	4					
Е	A	6					
F	B, C	4					
G	D	5					
Н	D, E	6					
I	F	6					
J	G, H	4					

- a. Construct (i.e. draw) the network diagram. Make sure to use the correct symbols and arrows to indicate direction of flow. [4 marks]
- b. Using the given table find each activity's ES, EF, LS, and LF (use the table) [8 marks]
- c. Calculate the slack for each activity (use the table) [1 mark]
- d. Find the critical path? (from the network in a) [1 mark]
- e. How long will the project take (i.e. the project duration)? [1 mark]