

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**  
**Office of the Dean**  
**2016**

**Full Marks: 40**  
**Time: 2 hrs**

**BIM/Eighth Semester/ ITC 307: Software Project Management**

*Candidates are required to answer the questions in their own words as far as practicable*

**Group "A"**

**Brief Answer Question:**

**[10×1=10]**

1. Why is software project management important?
2. Write one difference between objectives versus product based software.
3. List some cost benefit evaluation techniques.
4. List some practical quality measures.
5. Define leadership
6. What is meaning of getting project back on track?
7. What is resource allocation?
8. What do you convert the Z value to probabilities in PERT diagram?
9. Define contingency plan.
10. Draw a node structure for activity on node diagram with its proper labeling

**Group "B"**

**Short Answer Question (Any Five):**

**[5×4=20]**

11. Explain the step-wise framework used for developing a project.
12. What is the role of quality assessment in SPM? List some techniques to enhance software quality.  
[1+1+2]
13. Define organizational behavior and motivation. Explain Hertzberg's two-factor theory and the expectancy theory of motivation.  
[1+3]
14. What do you mean by monitoring the project? Explain project reporting structures and also list some categories of reporting.  
[1+2+1]
15. Define risk exposure and risk reduction leverage (RRL). Say a project depended on a data center which is vulnerable to physical theft. It is estimated that if a theft occurred a new computer configuration could be established for \$500,000.  
It is estimated that there is a 5% chance that a theft will occur. Installing a security alarms at a cost of \$ 1000 would reduce the chance of fire to 1%. Will the actions of installing securities alarms be worthwhile?  
[1+3]
16. Where are estimates done in a software project? List some estimation techniques and explain estimation by analogy with your own example.  
[1+1+2]

**Group "C"**

**Long A answer Questions (Any one)**

**[1×10=10]**

17. What is the significance of critical path? How an activity with a float can be critical in the long run?  
Consider the following table of information:

Activity	Precedence	Duration(Montss)
P	None	10
Q	None	4
R	P	3
S	Q	5
T	R	1
U	Q	5
V	None	4
W	T,V	6
X	R	7
Y	X,U	3

Draw the activity-On-Arrow diagram and calculate project duration and show the critical path with the forward and background rule. [1+1+8]

- 18.** If were asked as an expert to provide an estimate the effort needed to make a new software project, how do you convince the client that SLOC is not a good measure for estimation of effort required to make software? Explain COCOMO I and COCOMO –II. [2+3+5]

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