

Department of Computer Science and Engineering  
**CSE 3223: Information System Design and Software Engineering**  
Class Test # 1( Set-A)

**Marks: 20**

**Time: 25 min**

Student ID: ..... Name: .....

**Instructions: You can use pencil; no extra pages will be given**

1. Assume that the present value of a software is USD 3000. What would be the duration to double the value at an interest rate of 12%. [5]
2. Assume that you are a system analyst of a company which basically supports the professional works. The company needs a system that can create new technology for development works. Recommend a system type and explain the reason of choosing that system. [5]
3. Consider the following activity-time chart schedule:

Activity	Immediate Predecessor	Completion Time (weeks)	Staff Needed
A	-	5	3
B	-	4	4
C	A,B	2	2
D	C	2	4
E	D	3	5

Construct the PERT network and show the Critical Path by calculating Earliest Start (ES), Latest Start (LS), Earliest Finish (EF), Latest Finish (LF) and slack times for each activity. [10]

Department of Computer Science and Engineering  
**CSE 3223: Information System Design and Software Engineering**  
Class Test # 1 (Set-B)

**Marks: 20**

**Time: 25 min**

Student ID: ..... Name: .....

**Instructions: You can use pencil; no extra pages will be given**

1. Suppose the present value of a software is USD 3000. What would be the value after 8 months at an interest rate of 12%. [5]
2. Assume that you are a system analyst of a company which basically supports the professional works. The company needs a system that can create new technology for development works. Recommend a system type and explain the reason of choosing that system. [5]
3. Consider the following activity-time chart schedule:

Activity	Immediate Predecessor	Completion Time (weeks)	Staff Needed
A	-	3	3
B	A	4	4
C	-	5	2
D	B,C	5	4
E	B,C	3	5

Construct the PERT network and show the Critical Path by calculating Earliest Start (ES), Latest Start (LS), Earliest Finish (EF), Latest Finish (LF) and slack times for each activity.