

KATHMANDU UNIVERSITY
End Semester Examination [C]
April 2022

Level : B.E.
Year : IV
Time : 2 hrs. 30 mins.

Course : COMP 401
Semester : I
F.M. : 40

SECTION "B"

[6Q. × 4 = 24 marks]

Attempt ANY SIX questions.

1. Define software engineering. Briefly explain the types of software based on their applications.
2. With diagram, discuss on a general model of the design process.
3. Describe principles of agile methods.
4. With diagram, briefly explain layered structure of socio-technical systems.
5. Define software risk. Explain risk management process.
6. Discuss on factors affecting software pricing.
7. Briefly explain static software product metrics.

SECTION "C"

[2Q. × 8 = 16 marks]

Attempt ANY TWO questions.

8. Define requirement engineering. Draw a spiral view of the requirements engineering process. How requirements are discovered? Explain it. [1+4+3]
9. Mention testing guidelines. With diagram, describe test driven development (TDD). [4+4]
10. By referring to the activity duration and dependency chart below, draw activity network and activity bar chart. Also, trace the critical path. [6+2]

Task	Duration	Dependencies
T1	8	
T2	15	
T3	15	T1 (M1)
T4	10	
T5	40	T2, T4 (M2)
T6	5	T1, T2 (M3)
T7	20	T1 (M1)
T8	25	T4 (M5)
T9	10	T3, T6 (M4)
T10	15	T5, T7 (M7)
T11	7	T9 (M6)
T12	5	T11 (M8)

