

KATHMANDU UNIVERSITY
End Semester Examination [C]
April, 2023

Marks Scored:

Level : B.E./B.Sc.

Year : IV

Exam Roll No. :

Time: 30 mins.

Registration No.:

Course : COMP 401

Semester : I

F.M. : 10

Date :

06 APR 2023

SECTION "A"

[20Q. × 0.5 = 10 marks]

Encircle the most appropriate alternative from each set of choices.

1. Which one is not related to the ethical principles?
a. product b. process c. profession d. public
2. Which is not the concern of Mentcare system?
a. privacy b. safety c. both a and b d. none of these
3. Which one is level 4 in capability maturity level?
a. managed b. quantitatively managed
c. qualitatively managed d. defined
4. Process improvement has how many activities?
a. 2 b. 4 c. 5 d. 3
5. Which refers to the requirement is properly understood?
a. testability b. traceability c. completeness d. comprehensibility
6. Which one is related to requirements conflicts?
a. validity b. realism c. integrity d. consistency
7. The structure of a requirements document consists of how many sections/chapters?
a. 8 b. 9 c. 7 d. 10
8. Which one is not non-functional requirement?
a. size b. usability c. speed d. none
9. Requirement elicitation has how many stages?
a. 3 b. 4 c. 5 d. 2
10. In which team test the software at the developer's site?
a. regression test b. alpha test c. beta test d. unit test
11. Which is a benefit of test-driven development?
a. system documentation b. simplified debugging
c. both a and b d. none of these
12. Which one does affect system lifetime?
a. investment cost b. loss of expertise c. ROI d. all of these

13. Which one is sociotechnical system?
a. off the shelf applications
b. control system
c. command and control system
d. all of these
14. Which one isn't related to group communication?
a. physical work environment
b. group composition
c. group structure
d. none of these
15. In which type there isn't enough work?
a. task-oriented
b. self-oriented
c. interaction-oriented
d. both a and c

Fill in the blank.

16. Group quality standards can be developed by the _____.
17. Constraints imposed on the software by the hardware platform are _____.
18. Post-architecture level uses the same formula as the early design model but with _____ rather than _____ associated multipliers.
19. Software specifications are usually _____.
20. Encapsulation of _____ avoids repetition of past mistakes.

KATHMANDU UNIVERSITY
End Semester Examination [C]
April, 2023

06 APR 2023

Level : B.E./B.Sc.
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. (**Question no. 4 is compulsory**)

1. Define software engineering. Describe essential attributes of good software. [1+3]
2. With a diagram, explain the general model of the design process.
3. Describe partition testing.
4. With a diagram, discuss on layered structure of sociotechnical systems.
5. Define risk. With examples, briefly discuss on project, product, and business risks. [1+3]
6. Explain the factors affecting software pricing.
7. Discuss on product standards and process standards. Mention problems with standards. [1+3]

SECTION "C"
[2Q × 8 = 16 marks]

Attempt *ANY TWO* questions. (**Question no. 9 is compulsory**)

8. With a diagram, explain requirement engineering processes in detail.
9. Write a story for prescribing medication. Mention test case description for medicine dose checking. [4+4]
10. What is project plan? Describe different sections of project plan. With a diagram, explain project planning process. [1+3+4]