

KATHMANDU UNIVERSITY
End Semester Examination [C]
November, 2017

Marks Obtained:

Level : B.E./B. Sc.
Year : IV

Course : COMP 421
Semester : II

Exam Roll No. :

Time: 30 mins.

F. M. : 10

Registration No.:

Date

NOV 17 2017

SECTION "A"

[20 Q. × 0.5 = 10 marks]

1. Use case descriptions consist of interaction among which of the following?
 Product Use case
 Actor Product and Actor
2. Why is Software architecture so important?
 Communication among stakeholders Early Design decisions
 Transferable abstraction of a system All of the mentioned
3. Which of the following are software structures?
 Module Structure Conceptual or logical structure
 Process structure All of the mentioned
4. can be defined as data that has been processed into a form that is meaningful to the recipient and is of real or perceive value in current or prospective decisions.
 System Information
 Technology Service
5. What is Architecture of software based on?
 Design Requirements
 All of the mentioned None of the mentioned
6. What would happen if different organization were given same set of requirements?
 It will produce same architecture It will produce different architecture
 It may or may not produce same architecture None of the mentioned
7. What factors does a software architecture results in?
 Technical Business
 Social All of the mentioned
8. What does Software architecture means?
 It is the structure or structure of systems It comprises of software components
 Relationship among components All of the mentioned
9. The architects are influenced by which of the following factors?
 Customers and end users Developing organization
 Background and experience of the architects All of the mentioned
10. How do developing organizations influence by architects?
 Immediate business Long term business
 Organization structure All of the mentioned

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Semester : II
F. M. : 40

SECTION "B"

[8 Q. × 4 = 32 marks]

Attempt ANY EIGHT questions:

1. What is Software Architecture? Why it is an important?
2. How can software architecture prevent risks?
3. Describe and discuss the types of Software Architecture.
4. Define Functional Modeling and Visualized the process of functional modeling steps.
5. Explain about the main principles of component-based design?
6. What are the key issues of Software Architecture Techniques?
7. Develop a block diagram which shows the hierarchical architecture.
8. Write short notes on:
 - a) Client-Server Architecture
 - b) Multi-Tire Architecture (n-tire Architecture)
 - c) Broker Architectural Style
9. What are the characteristics of Software Architecture Components?

SECTION "C"

[1 Q. × 8 = 8 marks]

Attempt ANY ONE question:

10. What are Behavioral diagrams? Construct a table which provides a brief description of Behavioral diagrams.
11. Explain about the Pipe and Filter Architecture with examples.

