

ISLAMIC UNIVERSITY OF TECHNOLOGY

Course Name: Software Design and Architectures

Course Code: SWE 4601

Quiz 3

Time: 22 minutes

Marks: 15

Student ID:

Date: 22.03.2023

Answer the following questions:

1.

a)

What is an architectural pattern? Give 3 examples of architectural pattern.

2
(CO1)
(PO1)

b)

What is stratification for software components? Apply vertical stratification of the components for a ride-sharing application. Usually, a ride-sharing application has authentication, ride matching, navigation, etc. as major features.

4
(CO2)
(PO1)

c)

What are the benefits of partitioning software architecture?

2
(CO1)
(PO1)
2.

a)

Assume, a client has some digital images and wants to process those images to generate good-quality images. The generated image will be less noisy, the edges of the image will be sharpened, the image size will be reduced, and the output format of the image will be either **.jpg** or **.png**. Which architectural pattern is appropriate to solve the problem? Briefly explain it for the current context.

4
(CO2)
(PO2)

b)

Differentiate master-slave and client-server architecture with an example.

3
(CO2)
(PO2)