

### **School of Computing and Information Technology**

# CSIT985 Strategic Network Design

## Sample Examination Questions Spring Session 2022

Exam duration 3 hours

Weighting 40%

Items permitted by examiner Open Book

Directions to students Real exam format will be including

10 (ten) Short Answer questions to be answered Each question is worth 3 marks.

01 (one) Essay question to be answered Essay question is worth 10 marks.

Each Question will be on a separate quiz page

This document is a sample of questions only, it is not a sample of final exam.

The real exam questions may be coming from different topics and each topic may have different number of questions.

Note: The sample questions are not necessarily the same questions to be tested in real exam. They are just samples.

#### **Short-answer questions**

- 1. Explain how two of the following questions can be used to determine whether or not a strategic plan should be developed.
  - a. What purpose will the strategic plan serve?
  - b. How will it help the organization?
  - c. Will it be better than the system we use now?
  - d. Are those in leadership positions committed to strategic planning?
  - e. How much will it cost in terms of time and personnel effort?
  - f. Who should be on the planning team?
  - g. Does anyone have experience with strategic planning?
  - h. What overriding crises would inhibit our ability to plan?
- 2. Bandwidth is one resource that needs to be considered in network design. Identify and briefly describe two other resources that must be considered in network design.
- 3. As discussed in lectures, what are the differences between in-band and out-of-band approached in network management?
- 4. As discussed in lectures which service metrics could be used for measuring the delay? Define three of them.
- 5. As discussed in lectures, why is it important to consider frequency and time duration for application transactions when characterising application behaviour?
- 6. Briefly describe all architectural models as discussed in lectures.
- 7. Using examples describes briefly the types of external relationships that should be considered for one of the component architectures discussed in lectures.
- 8. Define two security and privacy mechanisms as discussed in lectures.
- 9. As discussed in lectures, what are the expected results of the design process? Define two of them.
- 10. Describe the SDN technology as discussed in lectures.
- 11. As discussed in lectures, what are advantages and disadvantages of NFV?

#### **Essay Sample**

- 1. Define three stages including the network analysis, architecture, and design process as discussed in lectures.
- 2. Discussing the importance of security and privacy in the strategic network design. Why threat analysis is important in developing the security and privacy plan? What should be considered in the threat analysis? Give three examples about threats.