



L-Università  
ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE  
EXAMINATIONS BOARD

**SECONDARY EDUCATION APPLIED CERTIFICATE LEVEL  
2021 SUPPLEMENTARY SESSION**

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SUBJECT:	<b>Information Technology</b>
PAPER NUMBER:	Synoptic – Unit 2
DATE:	3 <sup>rd</sup> November 2021
TIME:	9:00 a.m. to 11:05 a.m.

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**THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR  
AFTER THE EXAMINATION.**

Answer **ALL** questions in the space provided. You may answer either in English or in Maltese.

**Scenario**

- *LJB Insure* is an insurance company.
- The managers are thinking about improving their network infrastructure.

**Question 1**

**K-1 (6 marks)**

a. Define the term 'network'.

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(2)

b. Outline **TWO** advantages and **TWO** disadvantages of networks.

Advantage 1: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Advantage 2: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Disadvantage 1: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Disadvantage 2: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

c. Differentiate between client-server and peer-to-peer architectures in terms of cost and security.

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(2)

**Question 2**

**K-2 (8 marks)**

- The managers of *LJB Insure* know that different networks and network topologies exist.
- They know that the selection of a network mainly depends on the geographical area.

a. Name **TWO** different types of networks apart from LAN and PAN:

Type of network 1: \_\_\_\_\_ (1)

Type of network 2: \_\_\_\_\_ (1)

b. Different types of networks were chosen for the company.

For each scenario, outline the chosen type of network based on geographical area.

**Scenario 1**

A Local Area Network (LAN) is to be implemented within the main offices of the company which are located in a building block in Marsaxlokk.

Outline of network:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

**Scenario 2:** Employees should be able to connect their personal computer devices, such as smartphones, tablets and laptops, through a Personal Area Network (PAN) while at work.

Outline of network:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

***This question continues on next page***









