



EXAM DETAILS		TRAINEE'S DETAILS	
Sector	ICT & MULTIMEDIA	Trainee's name	
Trade	NIT	Trainer's name	H. Love
Module code	NITID401	Module title	IoT SYSTEM DEVELOPMENT
Level	L4	Date	

# (Answer all Questions)

#### 1.

Using the IoT system development lifecycle, analyze how poor requirements identification can cause failure in an IoT project. Provide at least three consequences and explain why they occur.

#### 2.

You are tasked with developing an IoT smart-farming system. Based on functional and non-functional requirements, List ten(10) functional and non-functional requirements for this system.

## 3.

Describe how technical feasibility, operational feasibility, and economic feasibility interact during the planning phase of an IoT project. Use a practical example to illustrate your explanation.

#### 4.

Compare and analyze two IoT data collection methods, explaining their advantages, limitations, and the situations where each method is most suitable.

## 5.

Discuss the importance of simulation and emulation tools in IoT system development. Provide examples and explain how they reduce development risks before hardware deployment.

# 6.

An IoT developer must choose between Wi-Fi, ZigBee, Bluetooth, and LoRa for connectivity. Analyze each protocol and justify which technology you would select for:

- a) Smart home automation
- b) Long-range agricultural monitoring Explain your reasoning clearly.