



**Requirements for this paper:**

Multiple-choice  
cards:

Non-programmable  
calculator:

Grid paper:

Laptop:

Open book  
examination:

<b>EXAMINATION:</b>	SUPPLEMENTARY EXAM	<b>PROGRAMME:</b>	Dip
<b>MODULE CODE:</b>	NATIS51210	<b>DURATION:</b>	3 HOURS
<b>MODULE DESCRIPTION:</b>	AGRICULTURAL TECHNOLOGY & INNOVATION	<b>MARKS:</b>	100
<b>EXAMINER(S):</b>	MAXWELL CHIMBUNDE	<b>DATE:</b>	
<b>MODERATOR(S):</b>	PROF AHMED MOHAMED	<b>TIME:</b>	

**INSTRUCTIONS:**

- Answer ALL questions.

**QUESTION 1**

(i) LIST THE KEY FACTORS TO CONSIDER WHEN SELECTING PLANTING TECHNOLOGY FOR A SPECIFIC CROP

**10 MARKS**

(ii) NAME THE TECHNOLOGY IN THE PICTURE BELOW. FOR WHICH ACTIVITIES CAN IT BE USED ON A FARM?



**10 MARKS**

**(20 MARKS)**

**QUESTION 2**

(i) WHAT IS BIOLOGICAL PEST CONTROL

**3 MARKS**

(ii) GIVE 4 EXAMPLES OF PREDATORS USED IN PEST CONTROL.

**5 MARKS**

(ii) WHAT ARE THE ADVANTAGES OF USING PREDATORS IN PEST CONTROL

**6 MARKS**

(iii) EXPLAIN THE CHALLENGES AND CONSIDERATIIONS WHEN A FARM DECIDES TO USE PREDATORS IN PEST CONTROL.

**6 MARKS**  
**(20 MARKS)**

**QUESTION 3**

(i) DESCRIBE THE FOUR MAIN FUNCTIONS A COMBINE HARVESTOR DOES DURING HARVESTING

**8 MARKS**

(ii) LABEL THE MAIN PARTS OF A COMBINE HARVESTOR IN THE DIAGRAM BELOW.



**6 MARKS**

(iii) WHAT DETERMINES WHETHER A FARMER MUST OWN A COMBINE HARVESTOR?

**6 MARKS**  
**(20 MARKS)**

**QUESTION 4**

(i) WHAT ROLE DO WEARABLE DEVICES PLAY IN LIVESTOCK MANAGEMENT?

**10 MARKS**

(ii) DESCRIBE THE POTENTIAL CHALLENGES OF IMPLEMENTING 4IR IN AGRICULTURE.

**5 MARKS**

(iii) DESCRIBE WHAT IS HAPPENING IN THE PICTURE BELOW. WHAT ARE THE ADVANTAGES AND DISADVANTAGES?



**5 MARKS**  
**(20 MARKS)**

**QUESTION 5**

(i)WHAT ARE THE CHALLENGES FACED BY SMALL SCALE FARMERS IN ADOPTING NEW TECHNOLOGIES?

**10 MARKS**

(ii)AND WHAT CAN BE DONE TO FACILITATE THE ADOPTION?

**10 MARKS**  
**(20 MARKS)**