

WAKISSHA JOINT MOCK EXAMINATIONS

MARKING GUIDE

Uganda Advanced Certificate of Education

PRINCIPLES AND PRACTICES OF AGRICULTURE P515/1

July/August 2024



SECTION A (30 MARKS)

1. C	11. B	21. B
2. D	12. A	22. B
3. C B	13. C	23. C
4. C	14. A	24. B
5. D	15. B C	25. A
6. D	16. C	26. C
7. B	17. D	27. B
8. B C	18. A	28. D
9. A	19. C	29. A
10. A	20. A D	30. C

SECTION B (70 MARKS)

31. (a) - Providing enough floor space for the birds to avoid congestion.

- Providing well balanced diet and supplements of ~~unfair~~ and minerals e.g. Calcium.

- Providing birds with clean water all the time.

- Debeaking all birds to prevent egg eating, ~~egg drinking~~.

- Identify all birds in the house for proper record keeping.

- Vaccinate all birds against infections such as Gambo ~~to C~~ and newcastle diseases

- Providing enough nesting boxes in strategic points and well darkened.

- Providing perches for birds to rest on. / exercise

- Turning the litter regularly to prevent it from cracking.

- Culling poor layers ~~in~~ sickly, ^{and} too fat.

- Taking daily and weekly records of all the activities, selling, feeding.

- Regular deworming using recommended dewormers.

- Dusting to control parasites

- Provision of green vegetable to rise nutrient content

- provision of coccidiants in drinking water to control diseases esp newcastle/coccidiosis

(5 marks)

(b) - Provide enough good quality feeds.

- Vaccinate regularly against killer diseases.

- Provide good housing for the birds.

- Clear the bushes around the farm to control predators.

- Fence the whole area where the birds are in search for feeds.

Any 5x1

- Use good breeds of cocks to improve the quality.
- Provide good laying nests.
- Regularly deworm the birds to control internal parasites.
- Provide enough clean water always.
- Regular control external parasites.
- Maintain a clean poultry house.

$5 \times 1 = 5 \text{ marks}$
~~4~~ 5 (marks)

32. (a) - Adaptation to the local conditions.

- High rate of reproduction.
- Tolerates of dirty water. *conditions*
- Has high growth rate.
- Highly resistant to parasites and diseases.
- Must be highly marketable.

- High efficiency in feed utilisation
- Availability of the feed forlings

- (b) - Poor feeding of fish reduce growth rate. *Inadequate* $6 \times 1 = 6 \text{ marks}$
- Pests and diseases attack to fish reduces growth.
 - Predator attacks to fish reducing number.
 - Rearing poor breeds of fish with low growth rates.
 - Shallow water in fish pond which affects fish growth.

→ Extreme temps
→ Extreme water pH
→ Low oxygen level
→ Overstocking of the pond

$4 \times 1 = 4 \text{ marks}$

33. (a) - Good soil depth. This *To allow proper penetration and absorption of* gives plant roots *greater volume to exploit nutrients* *and* water.

- Good soil drainage. This *which improves aeration* reduces water logging which causes poor soil aeration.
- Good aerations. Promotes health root development and functioning.
- High nutrient content, supplies enough nutrients for plant growth.
- Suitable soil pH to meet the requirements of different crop.
- Freedom from pests and diseases.
- Freedom from weeds to minimize competition.
- Good soil temperature.
- Availability of living organisms to break organic matter to release plant content.
- Good water holding capacity.
- Freedom from soil pollutants.

→ Good soil texture and structure
- Black colour / high humus content to regulate temp

(2 marks)

- (b) ~~W~~ - Enables timely planting.
- Allows decomposition of plant.
- Controls weeds.
- Enables proper water infiltration.
- Releases proper water retentions.
- Promotes soil aeration.

Any 2

- crops benefit from N₂ flush

(2 marks)

- i) - Easy to mechanize farm operations.
- It's easy to achieve a correct spacing.
- Easy to determine the optimum plant populations.
- Easy to control seed rate.
- Easy to carry out agronomic practices e.g. weeding.

- Reduces competition for nutrients
- Control disease e.g. Groundnut rosette
- High yields

(2 marks)

- ii) - High total fields per unit area.
- Controls soil erosion.
- Maximum utilization of nutrients.
- Legumes fix nitrogen into the soil.
- Controls weeds.
- Moisture conservation
- Acts as an insurance against total crop loss.
- Interrupts the disease and pest spread.

Any 2

34. (a) Energy is the capacity / ability to do work while power is the rate at ^{which} ~~where~~ work is done. (2 marks)

- (b) (i) It can be used in wheel barrow for propelling the load tray towards. (1 mark)
(ii) Facilitating loading and unloading of produce ~~on~~ ^{to} and from tracks. (1 mark)
(iii) A screw ~~driver~~ is used for tightening and loosening bolts on the farm machinery. (1 mark)

- Carrying heavy materials
- Lift water from deeper well
- Locking and opening of doors
- Steering by the drivers

- walking up hills
- moving up hills

(c) (i) Work done = Force x Distance

$$60 \times 3 = 180 \text{ J}$$

$$= 180 \text{ J}$$

$$\text{Power} = \frac{\text{work done}}{\text{Time}}$$

$$= \frac{180}{4} = 45 \text{ W}$$

$$= 45 \text{ W or } 0.045 \text{ KW}$$

35. (a)

- Age of the cutting with very young and old having low rate of rooting.
- Treatment of seeds with IAA, IBA.
- Inadequate soil moisture stimulates rooting.
- Warm soil temperature which encourages rooting.
- Presence of active buds on the cuttings.
- Good soil drainage encourages faster rooting.
- Adequate soil air for root respiration.
- Good soil structure facilitates easy rooting.
- Suitable soil pH
- Compatible

(b) Mature faster. (5 marks)

- Can survive in harsh soil conditions.
- Grafted mangoes can be easily harvested due to height.
- They are easy to spray.
- They produce seedless fruits hence easy to consume.
- High yields are obtained.
- They can be more resistant to disease
- Increase quality juice
- See growth rate

36. (a) This refers to the process of allocating the scarce resources of the farm to (5 marks)

(b) Enables the farmer to achieve his objectives in relation to his farm. (2 marks)

- It enables careful examination of the existing resources and their best allocations.
- It helps farmers to take decisions in relation to selection of crops.
- It helps a farmer to identify the input and credit needs.
- It helps in estimating future costs and returns.
- It provides a management frame work that will allow --- responses to changing conditions.

Helps in anticipating problems and taking steps.

It helps in establish a basis for evaluating management decision.

Enables farmer to achieve his

4X1 ms

- (c) - Preparing the farm map.
 - Recording the history of the farm.
 - Planning the labour requirements.
 - Planning the land use and soil conservations practices.
 - Planning livestock programme.
 - Planning the marketing of produce.

8 - financial statement
 9 - Planning land use & soil conservation practices
 10 - Managing and planning of marketing of produce
 11 - Risk management
 12 - monitoring & evaluation

1 Global setting
 2 Resource assessments
 3 preparing farm map
 4 Planning farm management structure
 5 Planning labour requirements
 6 Selection of the enterprise
 7 Planning livestock programme
 (4 marks)
 Any 4x1

37. BALANCE SHEET OF MR. MULWANA'S FARM BUSINESS AT 31ST/ DEC/2014. 1mk

Liabilities	SHS	ASSETS	SHS
Long term liabilities		Fixed assets	
Long term loan.	8,500,000	buildings	20,000,000
Bank overdraft	966,000		

Current liabilities		Current assets	
Debts payable	600,000	Provisionary notes	105,000
Depreciations	694,000	Debts receivable	860,000
Interest on loan	947,000	Cash at bank	72,000
Leppard insurance	28,500	Value of maize	512,000
		Value of sheep	365,000
		Prepaid expense	890,000
Sub total	11,735,500		22,804,000
Net capital / network	11,068,500		
Total liabilities	22,804,500	Total assets	22,804,000

(8 marks)

- b) The farm is solvent; Reason assets outweigh liabilities so the farm can pay off all its debts and remain afloat in business.

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