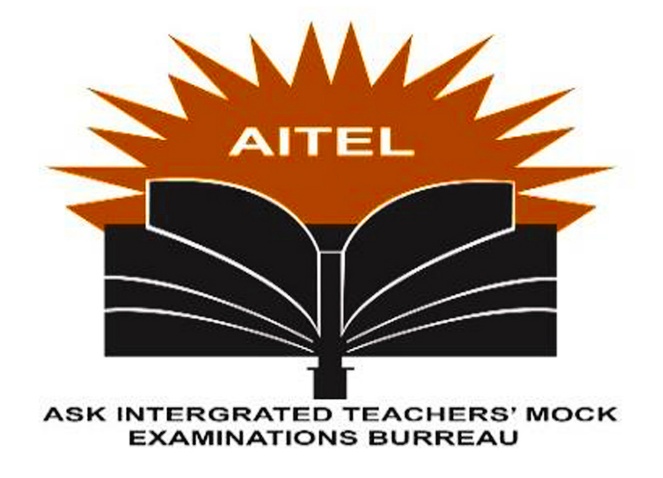
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**P515/1**

**PRINCIPLES**

**AND PRACTICES**

**OF AGRICULTURE**

**PAPER 1**

**2 HOURS**

**Uganda Advanced Certificate of Education**

**PRINCIPLES AND PRACTICES OF AGRICULTURE**

**PAPER 1**

**Time: 2hours**

**Instructions**

* *Answer all the questions in both Sections A and B.*
* *Write down the correct alternative answer in the adjacent box provided.*
* *Section B you must write the answers in the spaces provided*

**FOR EXAMINER’S USE ONLY**

|  |  |
| --- | --- |
| **Section/Question** | **Mark** |
| A |  |
| Q 31. |  |
| Q 32. |  |
| Q 33. |  |
| Q 34. |  |
| Q 35. |  |
| **Total** |  |

1. Which of the following is correct about the life cycle of a red – legged tick?

1. Its larvae falls twice on the ground.
2. Its larvae and nymph are on the same host.
3. Its larvae, nymph and adult are on different hosts.
4. Its larvae, nymph and adult are on the same host.

2. Agricultural products have an inelastic demand because they;

1. Are produced seasonally
2. Are complemented by synthesis
3. Cannot be stored for long
4. Are a necessity

3. Dumping off disease of seedlings is caused by:

1. Low moisture content of the soil C. High humidity in the nursery bed
2. High temperature in the soil D. Low PH in the nursery bed

4. Which one of the following is a control measure for trypanosomiasis?

1. Dipping C. Spraying bushes with pesticide
2. Vaccination D. Isolating sick animals.

5. One reason why it is difficult to control fungal diseases in crops is that fungi………

1. Can hardly be seen with naked eyes.
2. Produce many spores.
3. Can tolerate a wide range of soil conditions.
4. Are resistant to chemicals applied to kill them.

6. In production function, constant returns refer to;

A. Each additional unit of input results in a larger increase in output than the previous one.

B. Each additional unit of input results in a smaller increase in output.

C. The output is the same as the previous unit of input.

D. The output increases by the same amount for each additional unit of input used.

7. Which of the following may cause failure of farm buildings?

1. Use of small bricks in building construction
2. Poor mixing of building materials
3. Too deep foundation
4. Use of heavy metals in beam construction.

8. Which of the following processes does not affect the biochemical oxygen demand in the environment?

1. Nitrification C. Nitrogen fixation
2. Ammonification D. Denitrification

9. Predators in top trophic levels in a food chain are most severely affected by persistent pesticides because;

1. Their systems are highly sensitive to chemicals
2. They have rapid reproductive rates
3. They cannot store the pesticides
4. The pesticides become concentrated in their prey.

10. Which one of the following factors reduce interspecific competition in a community?

1. Resource partitioning C. Large number of species
2. High intraspecific competition D. Similar predators.

11. The following are aspects of land reforms except;

1. Re-distribution of land rights. C. Re-settlement.
2. Land tenure D. Land consolidation.

12. Which of the following is not a characteristic of a good agroforestry tree species?

1. Having a light canopy to allow sunlight penetration.
2. Being easy to establish.
3. Being deep rooted.
4. Being able to compete with crops.

13. The first step taken by a manager in decision making is;

1. Identification of the problem.
2. Laying down the possible alternatives.
3. Implementing the best alternatives.
4. Choosing the most appropriate alternative.

14. Which one of these is advantageous about privatisation of Agro-based industries?

1. It encourages more industrialisation.
2. Increases efficiency in production.
3. Reduce tax burden on industries.
4. Small scale farmers have a chance to own them.

15. Supply is more price elastic in commodities which;

1. Perish easily
2. Have many substitutes
3. Are necessities
4. Consume a small fraction of the consumer’s income

16. Immunity acquired by a newly born piglet after being fed on colostrum is termed as;

1. Passive immunity C. Natural immunity
2. Active immunity D. Temporary immunity

17. Purple colouration in leaves of cereals is mainly caused by deficiency of;

1. Phosphorus C. Calcium
2. Magnesium D. Potassium

18. Which of these may be a major limitation for using wind power?

1. It can only be used on a flat landscape
2. Electricity cannot be generated from it
3. It constantly changes direction and strength
4. It is simply exhaustible though it is free

19. Which of these is not exhibited by a well-adapted parasite?

1. Killing the host C. Killing the host
2. Inflecting moderate harm to its host D. Using more than one host

20. Which one of the following may be an effect of over liming the soil?

1. It reduces the availability of micro- nutrients
2. It improves on soil structure
3. It reduces the spread of fungal diseases
4. It reduces availability of calcium

21. Which one of the following least effectively measures the efficiency of a farmer on a farm?

1. Comparison of actual yields with expected yields
2. Comparing net profits with capital invested
3. Comparing of yields of one enterprise with the same enterprise on a different farm

D. Comparing of fixed costs and gross incomes of the farm.

22. The ability of a material to extend in all direction when subjected to comprehensive forces is termed as;

1. Hardness C. Malleability
2. Ductility D. Toughness

23. In which of the following horizons of the soil profile does eluviation and illuviation occur respectively?

1. Horizon B and Horizon A C. Horizon A and Horizon B
2. Horizon C and Horizon B D. Horizon B and Horizon C

24. Which of the following heat signs indicates that the cow is ready to be mounted?

1. Lordosis C. Mucus discharge from the vulva
2. Continuous bellowing D. Twitching the tail to expose the vulva.

25. During wet processing of coffee, the ripe berries are pulped with an aim of;

1. Removing the stalks that remained on the berries during harvesting.
2. Removing the red cover to expose mucilage parchment.
3. Softening the red cover to ease crushing of coffee beans.
4. Removing black spots in order to improve coffee quality.

26. Which of the following hormones in farm animals will result into premature birth if its concentration is in insufficient amounts?

1. Progesterone C. Oestrogen
2. Oxytocin D. Prolactine

27. The main function of manure in soil conservation is to;

1. Hold soil particles together C. Increase activity of soil organisms.

B. Encourage grass cover D. Provide a firm soil cover

28. Biological weathering can occur under the influence of the following except;

1. Action of hooved animals C. Exfoliation
2. Human activities D) Expansion of plant roots

29. The bacterial which converts ammonia into nitrates in the soil are;

1. Nitrobacter and Azotobacter
2. Rhizobium and Azobacter
3. Pseudomonas and Nitrosomonas
4. Nitrobacter and clostridium

30. In preparation of silage, molasses are added to;

1. Increase the nutrient content
2. Provide a good aroma
3. Provide food for micro – organisms
4. Speed up fermentation.

**SECTION B**

***Write answers in the spaces provided.***

31. (a) Explain four features of a good fish pond (04 marks)

1. ……………………………………………………………………………………
2. ……………………………………………………………………………………
3. ……………………………………………………………………………………
4. ……………………………………………………………………………………

b) Explain six management practices a farmer may carryout in order to increase the yieldof fish on the farm. (06 marks)

1. ……………………………………………………………………………………
2. ……………………………………………………………………………………
3. ……………………………………………………………………………………
4. ……………………………………………………………………………………
5. ……………………………………………………………………………………
6. ……………………………………………………………………………………

32. Differentiate between the following terms

i) Soil catena and soil profile (02 marks)

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ii) Cation exchange capacity and PH. (02 marks)

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iii) Strip cropping and contour ploughing (02 marks)

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iv) Eluviation and illuviation (02 marks)

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v) Hydration and hydrolysis (02 marks)

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33. (a) Define the term sustainable Agriculture (02 marks)

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(b) Explain four characteristics of sustainable Agriculture (04 marks)

i)…………………………………………………………………………………….…………

ii)………………………………………………………………………………………………

iii)………………………………………………………………………………………………

iv)………………………………………………………………………………………………

c) Give four advantages of organic farming (04 marks)

1. ……………………………………………………………………………………...........
2. ……………………………………………………………………………………………
3. ……………………………………………………………………………………………
4. ……………………………………………………………………………………………

34. (a) Define the term gender (02 marks)

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b) Explain four factors that may influence the productivity of women in Agricultural production. (04 marks)

i) ……………………………………………………………………………………..............

ii)…………………………………………………………………………………………….

iii)……………………………………………………………………………………………

iv)……………………………………………………………………………………………

c) Show how the sex ratio in the population can affect agricultural production. (04 marks)

i)……………………………………………………………………………………...…………

ii)……………………………………………………………………………………………….

iii)……………………………………………………………………………………………….

iv)………………………………………………………………………………………………

35. (a) Explain five factors that influence power output from a draught animal. (05 marks)

i)……………………………………………………………………………………..................

ii)………………………………………………………………………………………………

iii)…………………………………………………………………………………………….

iv)…………………………………………………………………………………………….

v)……………………………………………………………………………………………..

b) State five reasons why ox-cultivation succeeded in some parts of East Africa. (05 marks)

i)……………………………………………………………………………………...……….

ii)………………………………………………………………………………………………

iii)………………………………………………………………………………………………

iv)………………………………………………………………………………………………

36. (a) State four objectives of the NAADS programme. (04 marks)

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b) Explain four challenges that were faced by the implementers of the NAADS programme. (04 marks)

i)……………………………………………………………………………………..................

ii)………………………………………………………………………………………………..

iii)………………………………………………………………………………………………..

iv)………………………………………………………………………………………………..

c) State any two land reforms (02 marks)

i) ………………………………………………………………………………………………...

ii)………………………………………………………………………………………………...

37. (a) State five farming practices that can lead to draught (05 marks)

i)……………………………………………………………………………………...

ii)………………………………………………………………………………………

iii)………………………………………………………………………………………

iv)………………………………………………………………………………………

v)……………………………………………………………………………………..

b) Give five measures that can be undertaken to reduce the impact of draught. (05 marks)

i)……………………………………………………………………………………...................

ii)………………………………………………………………………………………………...

iii)………………………………………………………………………………………………..

iv)………………………………………………………………………………………………..

v)………………………………………………………………………………………………...

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