"Investing in Africa's Future"

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

ACP 308: AGROFORESTRY

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2019

LECTURER: MTAITA TA

DURATION: 3 HOURS

INSTRUCTIONS

1. Write your Registration Number on the answer sheet [NOT YOUR NAME]

---

2. Use Answer Sheets Provided TO Answer **Five** Questions Only

---

3. Begin your answer for Each Question on a New Page

---

4. Credit is Given for Neat Presentation

Question One

a) With reference to Zimbabwe, discuss four major factors that influence the adoption of agroforestry practices by farmers **[10]**

b) Defend one of the following statements **[10]**

- Conventional farmer: Agroforestry systems can never be as productive or economically viable as monocultures. Conventional agriculture is sustainable if managed well.
- Agroforestry farmer: Agroforestry systems improve overall economic, ecologic, and social benefits obtained from the land. Polycultures with woody plant species are more sustainable than monocultures.

Question Two

a) Agro forestry can be separated into three sub-system classifications – agri-silviculture, Silvi-pastoral and agro silvo-pastoral. Explain. **[6]**

b) Elucidate five benefits of agro forestry **[5]**

c) Explain the environmental benefits of agroforestry **[9]**

Question three

a) Agroforestry is a collective name for land-use systems involving trees combined with crops and/or animals on the same unit of land. Identify and elaborate any five characteristics of agroforestry. **[5]**

b) Discuss ten Steps in the decision-making process when getting started with agro forestry systems **[15]**

Question Four

a) Explain how agro forestry helps to improve industrial growth. **[10]**

b) Discuss Constraints in adoption of agro forestry by the farmers. **[10]**

Question five

a) Elucidate five benefits of multipurpose trees in agro forestry.   **[5]**

b) Discuss the following types of interactions that have been recognized between trees and crops in agro forestry systems;

i. *Complementary,*   **[2]**

ii. *Competitive, and*   **[5]**

iii. *Allelopathy*   **[8]**

Question six

Discuss five agro forestry systems that use trees, shrubs, grasses, and herbaceous plants to produce commercially valuable products.   **[20]**

Question Seven

a) With examples, explain the protective and productive functions of agroforestry   **[10]**

b) Explain any three Silvipastoral systems in agroforestry   **[10]**

End of Examination Paper