

# **NATIONAL UNIVERSITY OF LESOTHO**

**FACULTY OF AGRICULTURE**

**B.Sc. AGRICULTURE EXAMINATION**

**CPS 2501– BASIC FARM ENGINEERING**

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**JANUARY 2021**

**MARKS: 100**

**TIME: 3 HRS**

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**INSTRUCTIONS:**      **Answer all questions.**

**Number your answers correctly.**

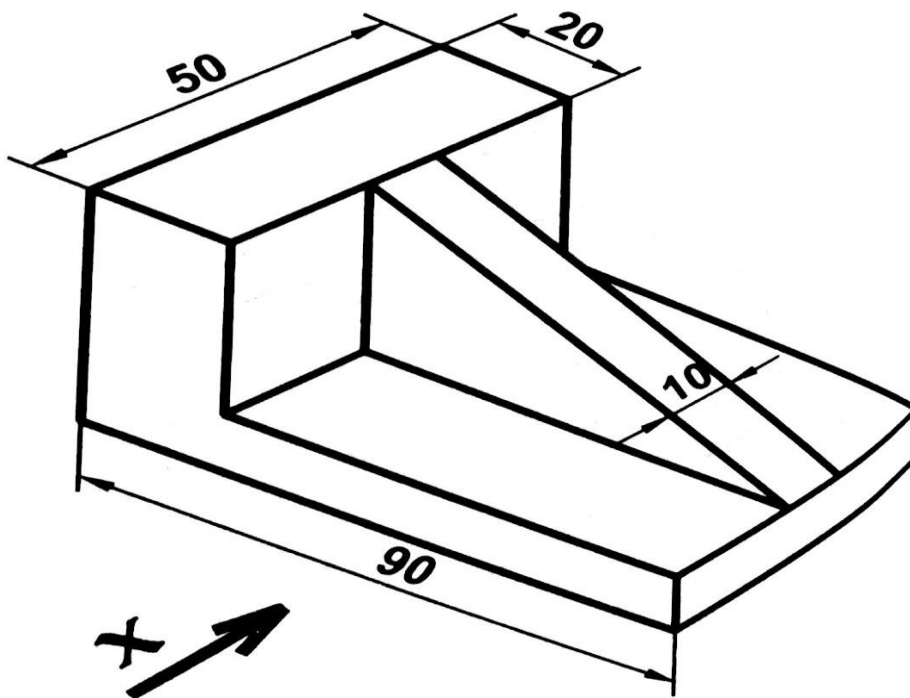
**QUESTION 1**

- a). Define measurement in technical drawing
- b). Explain two systems used in measurements
- c). Mention five (5) engineering drawing equipment
- d). What are the most important guidelines for dimensioning

(20)

**QUESTION 1**

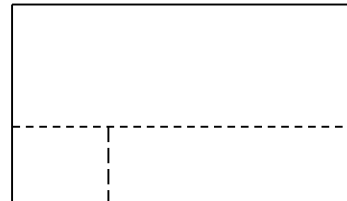
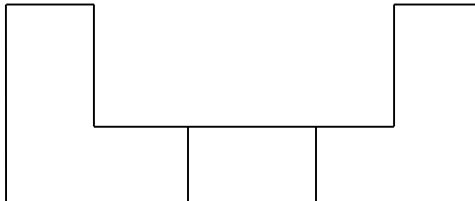
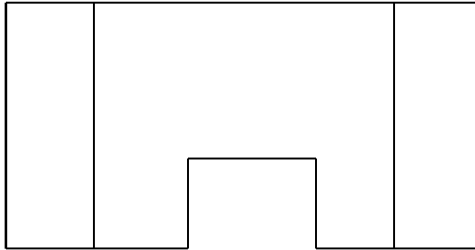
Draw the orthographic view of the diagram below (ignore the measurements):



(20)

**QUESTION 2**

Draw the isometric view of the diagram below:



**(20)**

**QUESTION 3**

The following message was sent to you as extension personnel by a farmer:

*“I wish to plan a farmstead where I will carry on farming activities; I request assistance as to how I should **plan** the farmstead. I am going to engage in the production of fruits and vegetable; livestock (piggery, poultry; dairy cows) and off course also I will stay on the farmstead”.*

You are to outline all issues this farmer should take into consideration when planning his farmstead. And also provide him with a model farmstead sketch which can give him an idea as to how it should look like.

**(20)**

**QUESTION 4**

Mention 4 different types of roofs for farm structures and provide the advantages and disadvantages of each type.

**(20)**