

**PRESIDENTS OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT
KARATU SECONDARY SCHOOL
FORM FIVE & SIX CBA - AGRICULTURE ONE**

**COVID-19 PANDEMIC HOLIDAY
ASSIGNMENT**

NB: THIS ASSIGNMENT SHOULD BE SUBMITTED SOON AFTER OPENING THE SCHOOL

1. (a) Complete the table below which show classification of soil according to diameter

Name of particle	Diameter of particle (mm)
Clay	
Silt	
Fine sand	
Course sand	
Fine gravel	

(b) You are provided with the sample soil with 100g. After passing through the sieve apparatus, the samples were weighed as follows:

Sample A contain 40g of soil

Sample B contain 20g of soil

Sample C contain 40g of soil

Sample A was mixed with water and then rubbed between thumb and fingers, sample B the same apply, sample A gives a Gritty feel, sample B gives a slightly plastic and sample C gives a plastic feel and exhibit stickness. After such analysis now answer the questions below:

- i. Identify sample A, B, C
- ii. Sample B give a feel of slightly plastic when wet, suppose water is not added to the sample, what is the feel?
- iii. Give 4 properties of soil sample A
- iv. When sample A is mixed with sample B then sample D is obtained. What is the name of that sample D. give the characteristics of sample D.

(c) Explain the following factors which lead to the soil structure formation.

(i) Adsorbed cation

(ii) Organic matter

(iii) Climate

(iv) Soil amendments

2. (a) Soil is made up of five components, give short explanation of each component.
(b) Enumerate 4 importance of soil profile to crop production.
(c) With the help of diagram, explain the categories of soil structure.

3. (a) Give four functions of soil colloids.
(b) Distinguish white alkali from black alkali
(c) Explain three methods of managing salt affected soil.
(d) i. Explain four factors affecting farm yard manure.
ii. Suppose you are required to apply 60 kg Nitrogen (N) per hectare and fertilizer available in the godown is KNO_3 . Determine the amount of fertilizer (N) to be applied in kg. how many bags of fertilizer are supposed to be if one bag contain 50 kg?
4. (a) With the help chemical equation, show how Nitrosomonas bacteria are important in nitrogen fixation.
(b) Distinguish active acidity from potential acidity.
(c) For the following plant symptoms state the deficient nutrient in each case
 - i. Purplish colouration of foliage
 - ii. Chlorosis of foliage
 - iii. Abnormally dark green foliage and pre mature shedding of blossom and buds.
 - iv. Poor grain, fruit and seed development.
5. (a) With 4 points to differentiate soil fertility from productivity.
(b) A sample of soil was taken from Kigonjera area in Peramiho-Ruvuma region and analysis showed that sample contain pH of 5.5. What is the description of this pH, Crop suited for the pH? Suppose you want to change the crop which need pH of 7.5 advise the farmer the significance of material that convert pH of soil from 5.5 to 7.5.
6. (a) What is the situations which necessitate Irrigation. Give five points.
(b) The suitability of the various methods depends mainly on several factors. State those factors.
(c) State 4 conditions necessary for surface irrigation methods.
(d) What are the four basic condition to practice Sub-surface irrigation
7. (a) Briefly explain four importances of farm buildings.
(b) Sketch the following roof shapes of farm building
 - i. gable
 - ii. Gambrel
 - iii. Gothic
(c) i. Outline 8 qualities of a good storage structure.
ii. Account for the three conditions to be observed when planning for construction of a farm structure.
8. (a) What do you understand by the term farm structure?
(b) i. Outline at least 4 types of fences in the farm.
ii. What are the problems associated with the use of hedge as fences
(c) Differentiate between the following structures
 - i. Mechanical spray race and manual spray race
 - ii. Crush and Dips
9. (a) i. State COBWEB theorem
ii. Explain 4 causes of price fluctuation.
(b) i. What is black market? And give features of a black market (at least two)
(c) i. Distinguish marketing cost from marketing margin
ii. Give 5 factors which influence the marketing cost
10. (a) i. Explain one member one vote as the principle of co-operation
ii. Give 4 basic functions of a primary co-operative society.

(b) Explain the following terminologies as used in price

- i. Shadow price
- ii. Farm gate price
- iii. Price at factor price

“Happy Crunchy, we are just opening the Curtain”.

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