

CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC)
NORTHERN ZONE JOINT EXAMINATIONS SYNDICATE (NZ-JES)



FORM SIX PRE – NATIONAL EXAMINATION 2026

134/1

AGRICULTURE 1

Time: 3 Hours

Thursday, 26th February 2026p.m

Instructions

1. This paper consists of **ten (10)** questions.
2. Answer **all** questions.
3. Each question carries **ten (10)** marks.
4. Cellular phones and any unauthorized materials are **not** allowed in the examination room.
5. Write your **Examination number** on every page of your answer booklet(s).

QUESTIONS

1. (a) The amount of individual soil separates is determined by performing particle size analysis.
Explain how particle size is analyzed. **(05 marks)**
(b) Both environment and soil can contribute about the change of soil temperature. Elaborate any other **five (5)** factors that contribute to the changes of soil temperature. **(05 marks)**
2. (a) Imagine you are working as an extension officer in the village of Mwanalugali and the farmers need to establish surface irrigation. Suggest **five (5)** conditions necessary for surface irrigation. **(05 marks)**
(b) State **five (5)** field conditions under which a disc plough is preferred to a moldboard plough. **(05 marks)**
3. (a) When working in the farm workshop with sharp edged tools, safety precaution must be taken. Describe **five (05)** safety precautions. **(05 marks)**
(b) Production Master at Kibaha Village wants to establish the poultry house. By using the knowledge of farm structure explain **five (5)** core features of the suitable poultry house. **(05marks)**
4. (a) In order to obtain maximum power output from draught animals, animals must be well managed. Point out **six** factors to be considered to obtain maximum power output from animals. **(06 Marks)**
(b) Running an engine too hot is detrimental. Suggest four reasons which make engine run hot. **(04 Marks)**
5. (a) Control method is among the method that lead to the development of salt-affected soil. Explain **five (5)** ways this method can be done **(05marks)**
(b) (i) Salt affected soil differ considerably depending upon the conditions and processes conducive to their development. Classify three distinct categories on the basis of electrical conductivity, percentage exchangeable sodium and soil pH. **(3 marks)**
(ii) Salt affected soil develop on different conditional process. Explain two processes **(2 marks)**
6. (a) Mr. Juma was given a soil sample in the bucket. At an observation for the first time he thought that the soil is a single constituent. By using the knowledge of soil science you learned in class, briefly explain to Mr. Juma that soil is not a single constituent. **(05 marks)**
(b) In **five (5)** points briefly explain how chemistry is involved in soil formation. **(05 marks)**
7. (a) Briefly explain **four** measures that the government of Tanzania should take to encourage farmers to continue with production of the crop which their world market price has fallen in the last season. **(6 Marks)**
(b) Use cobweb theorem to explain the following phenomenon: “producers of cowpeas have produced crops this season as a result of low market price for the crop in the last season”. **(04 marks)**
8. (a) What would have happened in the absence of international commodity agreements?
Give **four** points. **(6 marks)**
(b) Briefly explain the meaning of the following terms as applied in the international trade;
(i) Terms of trade (ii) Foreign reserve (iii) Balance of payment (iv) Quota share
9. (a) With illustrations state three ways in which production function can be expressed **(06 marks)**
(b) Given, $Y = 3x + 2x^2$, $P_y = 20/=$, $P_x = 100/=$. Determine the optimum level of using input X. **(04 marks)**
10. Farm management is concerned with making decisions that affect the profitability of the farm business. Every farmer is faced with the management problem of trying to answer several questions in decision making. As an entrepreneur, explain **five (5)** questions which you have to answer when making decisions. **(10 marks).**