



Examination No: \_\_\_\_\_

# NORTHERN EDUCATION DIVISION

## 2024 PSLCE PRE - MOCK EXAMINATION

### PRIMARY SCIENCE

(100 marks)

Date .....

Subject number: P163

Time Allowed: 2 hours

08:00 – 10:00 am

Name of Candidate: \_\_\_\_\_  
(Surname First)

Name of School: \_\_\_\_\_ Zone: \_\_\_\_\_ District: \_\_\_\_\_

#### Instructions

- This paper contains 11 pages. Please check.**
- This paper has two sections **A** and **B**. Section **A** consists of 40 multiple choice questions carrying 1 mark each. Section **B** has 10 structured questions. Write answers to this section in the space provided.
- Answer all questions.
- In the table provided on this page, tick against question number you have answered.
- IMPORTANT**
  - Please make sure you have written your **name, school name and examination number** on the spaces provided
  - Hand in your question paper to the invigilator when time is called to stop writing.

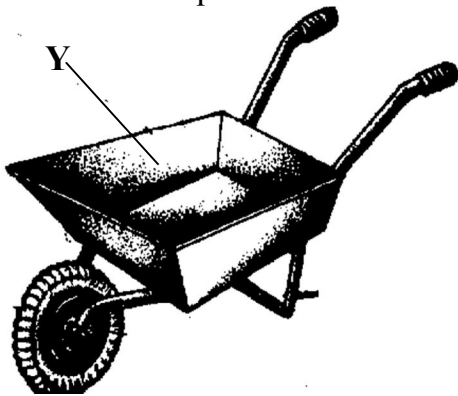
Question number	Tick Qs 51-60 if answered	Do not write in these columns	
1-40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			

## SECTION A (40 MARKS)

### AGRICULTURE

- Which principle of farm business help the farmer by reducing cost?
  - demand
  - supply
  - substitution of inputs
  - comparative advantage
- The following are ways of improving soil fertility **except** \_\_\_\_
  - Practicing mixed cropping
  - agroforestry
  - applying manure
  - avoid overgrazing
- Which of the following indigenous farm technologies is used for reducing size of legumes?
  - mortar
  - maize Sheller
  - querns
  - leaf bag

**Figure 1** is a diagram of a farm implement. Use it to answer questions 3 and 4.



- Identify the farm implement.
  - an oxcart
  - wheelbarrow
  - rake
  - cart body

- What is the name of the part labelled Y?
  - body
  - barrow
  - carrying body
  - bearing

**Figure 2** is an animal husbandry practice. Use it to answer questions 9.

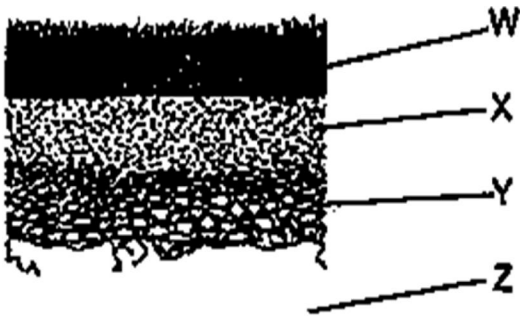


- Which animal husbandry practice is being done?
  - drenching
  - feeding
  - vaccination
  - castration
- Which of the following is a reason for trimming flowers?
  - maintaining flowers
  - reducing pest
  - improving quality of flowers
  - making a desirable shape
- Which of the following is not a major factor of production?
  - land
  - fertility
  - labour
  - capital
- If all the fish in a pond weigh 50kg. What would be the daily amount of fish feed?
  - 1000kg

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- D. 500kg
- E. 10kg
- F. 2.5kg

Figure 3 is a diagram of layers of soil. Use it to answer questions 10 and 11

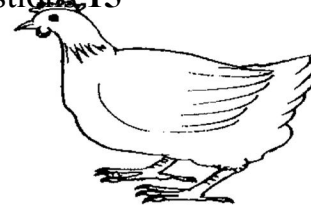


10. Identify the diagram above.
  - A. soil profile
  - B. soil structure
  - C. soil texture
  - D. srumb soil
11. On which layer of soil are most living organism found?
  - A. X
  - B. Y
  - C. W
  - D. Z
12. A record which shows the amount of produce harvested on a farm is called \_\_\_\_\_.
  - A. layers record
  - B. labour record
  - C. crop record
  - D. yield record
13. Which of the following is not a common weed for groundnuts?
  - A. denje

- B. khovani
- C. rosette
- D. chisoso

14. Which of the following is a sub-branch of apiculture under animal production?
  - A. agronomy
  - B. apiculture
  - C. olericulture
  - D. silviculture

Figure 4 is a diagram of animal. Use it to answer questions 15



15. Why is the animal important to crops?
  - A. source of meat
  - B. source of manure
  - C. source of employment
  - D. source of food
16. Which chemical can be used to control the pest?
  - E. caebaryl
  - F. dipterex
  - G. actelic dust
  - H. ash
17. Which of the following is not a type of agroforestry?
  - A. silvo arable
  - B. silvo pasture
  - C. forest farming
  - D. folder banks

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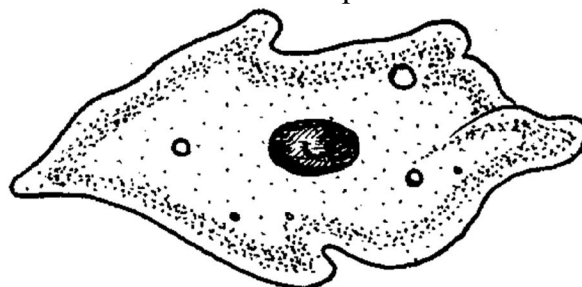
18. Which of the following are ways of keeping water is **not** safe
- boiling
  - adding medicine
  - filtering
  - adding chemicals
19. Why do fish come close to the surface of water in a pond?
- to gasp for air
  - to eat food
  - to gasp for good water
  - to play
20. Which of the following fruit disease attack mangoes?
- rusts
  - moth
  - anthracnose
  - white fly

**SCIENCE AND TECHNOLOGY**

21. The heart pumps blood to the lungs through
- 
- venacava
  - aorta
  - pulmonary veins
  - pulmonary artery
22. Why do invalids require little carbohydrates and fats?
- they are fat
  - they have damaged tissues
  - they use less energy
  - they have weak bodies
23. what does the term decoding mean ?
- inputting a message

- sending messages
  - receiving messages
  - interpreting messages
24. Which of the following is a sign of night blindness in a person?
- tiredness
  - pale hands
  - bleeding of gums
  - dry and rough skin
25. Which of the following parts of an electric circuit controls the flow of electricity.
- cell
  - bulb
  - switch
  - fuse
26. Which of the following foods provide the body with energy?
- fish
  - pumpkin leaves
  - honey
  - beans

**Figure 5** is a diagram of an invertebrates animals. Use it to answer questions **27** and **28**.



27. Identify the invertebrate
- amoeba
  - trypanosome
  - arthropods
  - bacteria

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28. To which group of invertebrates does the organism belong?

- A. protozoa
- B. plasmodia
- C. worm
- D. insects

29. Which part of the human brain controls digestion?

- A. cerebellum
- B. cerebrum
- C. spinal cord
- D. medulla oblongata

30. Which of the following methods can separate a mixture of iron filings and flour?

- A. filtration
- B. distillation
- C. magnetism
- D. winnowing

31. Which of the following would increase the mechanical advantage of a pulley?

- A. greasing the pulley
- B. increasing the number of pulleys
- C. using longer rope
- D. changing direction of effort

**Figure 5** is a diagram of a laundry process.

Use it to answer questions **32**



32. Identify the laundry process.

- A. drying
- B. airing
- C. line
- D. sun drying

33. Which of the following state of matter process helps in laundry?

- A. evaporation
- B. freezing
- C. condensation
- D. melting

34. Which of the following sense organ is used for touching?

- A. nose
- B. skin
- C. tongue
- D. ear

35. Which of the following technologies can help conserve the environment?

- A. mortar
- B. canoe
- C. bow and arrow
- D. solar panel

36. Which of the following is a procedure in processing maize?

- A. washing
- B. pounding
- C. chopping
- D. salting

37. Which of the following groups of people is likely affected by rickets?

- A. pregnant people
- B. sedentary workers
- C. elderly people

D. young children

A. adolescence

B. maturity

C. old age

D. puberty

38. Which of the following is not a composition of blood?

A. plasma

B. veins

C. platelets

D. red blood cells

40. Which of the following is a modern preservation technology

A. sun drying

B. canning

C. salting

D. smoking

39. The period when boys and girls are changing from childhood to adulthood is called \_\_\_\_

**SECTION B (60 MARKS)**  
**AGRICULTURE**

41.(a) Define soil erosion

\_\_\_\_\_  
\_\_\_\_\_  
(1 mark)

(b) State any two reasons for controlling soil erosion

\_\_\_\_\_  
\_\_\_\_\_  
(2 marks)

(c) List down any two major elements of the agricultural environment

i. \_\_\_\_\_ (1 mark)

ii. \_\_\_\_\_ (1 mark)

**Figure 6** is a a diagram of land preparation for growing crops. Use it to answer question **42 (a) i** and **ii**.



42.(a) i. Identify the method of controlling runoff water

\_\_\_\_\_  
(1 mark)

ii. State any two importance of the method shown above.

\_\_\_\_\_  
\_\_\_\_\_  
(2 marks)

(b) Give any two examples of fruits which can be used as medicines.

i. \_\_\_\_\_ (1 mark)

ii. \_\_\_\_\_ (1 mark)

43. (a) Define irrigation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(1 mark)

(b) Explain how sprinkler irrigation works

\_\_\_\_\_  
\_\_\_\_\_  
(1 mark)

(c) State any two ways in which irrigation is important to a farmer.

i) \_\_\_\_\_ (1 mark)

ii) \_\_\_\_\_ (1 mark)

**Figure 7** is a diagram of a marketing function. Use it to answer question 44 (a) i and ii.



44.(a) i. Identify the marketing function.

\_\_\_\_\_  
(1 mark)

ii. Explain the importance of this marketing function to a farmer

\_\_\_\_\_  
(2 marks)

(b) Give any two ways of coping with risks in a farm business.

\_\_\_\_\_  
\_\_\_\_\_  
(2 marks)

45.(a) i. State any two ways of maintaining a motorized pump.

\_\_\_\_\_  
(1 mark)

ii. Why is greasing the hub of an farm cart important?

\_\_\_\_\_  
(2 marks)

(b) Give any two use of a gourd.

\_\_\_\_\_  
(2 marks)

46.(a) State any two effects of lice in goats.

i. \_\_\_\_\_ (1 mark)

\_\_\_\_\_ (1 mark)

ii.

(b) Explain one way of controlling lice in goats

\_\_\_\_\_  
(1 mark)

(c) **Figure 6** is a diagram showing one of the risk associated with farm business.



a. Identify the risk shown in the diagram above

\_\_\_\_\_  
(1 mark)

b. Mention **one** way of managing the risk



**SCIENCE AND TECHNOLOGY**

47. Explain how each of the following indigenous technologies could be improved

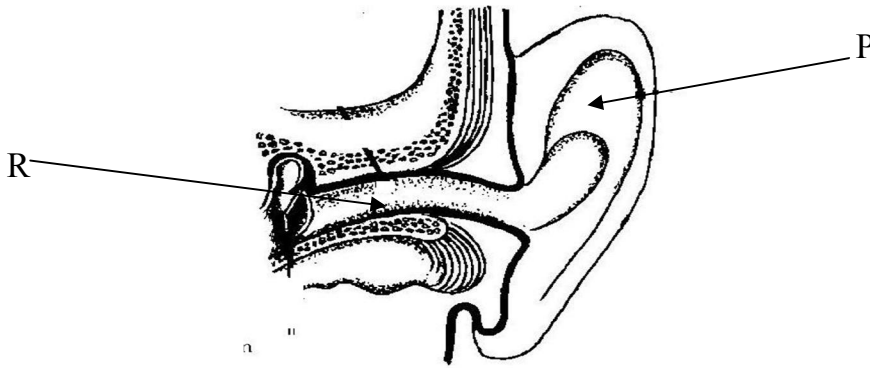
- i. An arrow \_\_\_\_\_ (1 mark)
- ii. pestle \_\_\_\_\_ (1 mark)

48. The table below shows how a learner classified different food items.

Protective foods	Energy giving foods	Body building foods
Potatoes Bonongwe	Paw paw Mice	Grasshoppers

- i. Name any one food item which was wrongly classified \_\_\_\_\_ (1 mark)
- ii. Classify the food items correctly
  - Protective : \_\_\_\_\_ (2 marks)
  - Energy giving: \_\_\_\_\_ (1 mark)
  - Body building: \_\_\_\_\_ (2 marks)

Figure 8 is a diagram of human ear. Use it to answer questions that follow.



49.(a) Name the parts labelled P and R.

P \_\_\_\_\_ R \_\_\_\_\_ (2 marks)

(b) What is the function of the part labelled P \_\_\_\_\_ (1 mark)

(c) State any two ways of caring for the ear.

i. \_\_\_\_\_ (1 mark)

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ii. \_\_\_\_\_ (1 mark)  
\_\_\_\_\_ (1 mark)

50. (a) Give two examples of information and communication technologies

\_\_\_\_\_  
\_\_\_\_\_ (2 marks)

(b) State two importance of information and communication technologies

\_\_\_\_\_ (1 mark)

\_\_\_\_\_ (1 mark)

(c) Identify the third step involved in designing information and communication technologies.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2 marks)

51. (a) State any one problem of each of the following technologies

i. hoe  
\_\_\_\_\_  
\_\_\_\_\_ (1 mark)

ii. fishing net  
\_\_\_\_\_

(b) Explain how farmers can solve each of the following problems of marketing.

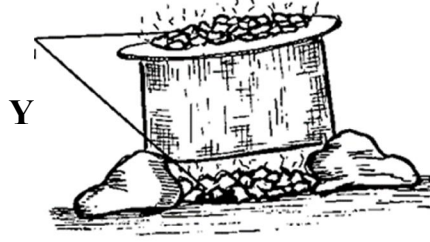
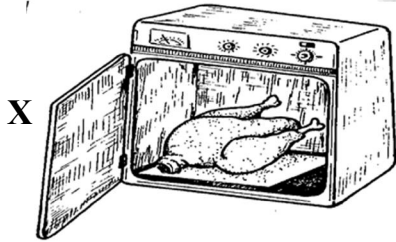
i. Lack of direct access to buyers  
\_\_\_\_\_ (1 mark)

ii) High transport cost  
\_\_\_\_\_ (1 mark)

(c) Define the term marketing.

\_\_\_\_\_  
\_\_\_\_\_ (2 mark)

Figure 9 is a diagram showing methods of cooking. Use it to answer questions that follow



52. (a) Identify the cooking methods labelled X and Y

X \_\_\_\_\_ Y \_\_\_\_\_  
(2 marks)

(b) Give any two advantages of the cooking method labelled Y

i. \_\_\_\_\_  
(1 mark)

ii. \_\_\_\_\_  
(1 mark)

(c) give any one resource that learners can use when conducting a scientific investigation

\_\_\_\_\_  
(1 marks)

***END OF QUESTION PAPER***