

# **PRIMARY SCIENCES**

(100 MARKS)

Subject Number: P163

Time Allowed: 2hours 8:00 – 10:00 am

Do not write in

Friday 23<sup>rd</sup> July

Name of school: \_\_\_\_\_

#### Instructions

- 1. This paper contains 7 printed pages. Please check.
- This paper has two sections A and B. section A consist of 40 multiple choice questions Carrying 1 mark each. Encircle a letter of your choice representing the right answer to each question. Section B has 10 structured questions. Write your answers to this section on the question paper in the spaces provided. The maximum number of max for each answer is indicated against the question.
- 3. Answer all questions.
- 4. In the table provided on this page, **tick** against the question number you have answered.

#### 5. IMPORTANT

- Please make sure you have written your **name** on top of the question paper in the spaces provided.
- Hand in your question paper to the invigilator when time is called to stop writing.

# Number 41-50 if answered these columns 1—40 — — 41 — — 42 — — 43 — — 44 — — 45 — — 46 — — 47 — — 48 — — 49 — — 50 — —

Tick

Ouestions

Ouestion

**2021 MAZEB** 

Turn over

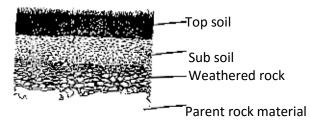
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# **SECTION A (40 marks)**

# AGRICULTURE

- **1.** Which of the following crops belong to silviculture?
  - A. Rape
  - B. Pumpkin
  - C. Marigold
  - D. Blue gum
- 2. The following are local varieties of cassava except
  - A. Takoma
  - B. Mbundumali
  - C. Gomani
  - D. chitembwe
- **3.** which part of the plough cuts the soil into thin layer?
  - A. Depth wheel
  - B. Hitch
  - C. Hake
  - D. Share
- 4. What is the use of querns on the farm?
  - A. For measuring planting stations
  - B. Controlling weevils
  - C. Keeping preserved vegetables
  - D. For grinding grains

Figure 1 below shows soil profile. Use it to answer questions 5 and 6



- 5. Which layer in the soil profile above is for crop production?
  - A. Parent rock
  - B. Top soil
  - C. Weathered rock
  - D. Sub soil
- **6.** What term refers to the going down of nutrients from top soil down the sub soil?

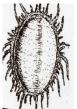
- A. Weathering
- B. Soil erosion
- C. Leaching
- D. Soil degradation
- **7.** A farmer bought ten bags of fertilizer at K14750.00 each. After harvesting he sold produce and got K115,000.00. find the loss he made.
  - A. K147,000.00
  - B. 32,500.00
  - C. K115,000.00
  - D. K13,500.00
- 8. The practice of growing crops together with trees on the same piece of land is known as
  - A. Agronomy
  - B. Agroforestry
  - C. Forestry
  - D. Game reserve
- **9.** Which of the following is the importance of sunlight in agricultural environment?
  - A. Helps to increase egg production
  - B. Helps to dry up rivers
  - C. Brings rainfall
  - D. Causes different diseases
- **10.** Which of the following crops can be propagated by cuttings?
  - A. Banana and sweet potatoes
  - B. Irish potatoes and carrots
  - C. Cassava and sweet potatoes
  - D. Cassava and bananas
- **11.** A fish farmer noted that there was a large amount of uneaten food in the pond. Why is this dangerous?
  - A. It causes parasites to multiply
  - B. It makes the pond to produce bad smell
  - C. It attracts fish predators
  - D. It results in lack of oxygen
- **12.** Which of the following statement best define the term stocking?
  - A. A method of harvesting fish
  - B. A method of feeding fish
  - C. A method of constructing a fish pond

## Name of candidate: \_

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- D. Putting a live fish in a pond
- **13.** Which of the following is the characteristic of clay soil?
  - A. Large particles
  - B. Medium air spaces
  - C. Small particles
  - D. Large air spaces
- **14.** Which of the following animal feeds are concentrates?
  - A. Maize bran and cotton seed cake
  - B. Maize meal and sorghum stalks
  - C. Meat meal and green grass
  - D. Bone meal and rice straw
- **15.** Why is hardening off important before transplanting?
  - A. To control diseases
  - B. To withstand field conditions
  - C. To control pests
  - D. To reduce soil erosion
- **16.** Which of the following structures can conserve water for use on the farm?
  - A. Terraces
  - B. Dams
  - C. Graded bunds
  - D. Storm drains
- **17.** The following are characteristics of land that affect agricultural production <u>except?</u>
  - A. Size
  - B. Fertility
  - C. Capital
  - D. slope
- **18.** how can a farmer control dumping off in a vegetable garden?
  - A. Uprooting disease plants
  - B. Correct spacing
  - C. Light hoeing
  - D. Regular weeding

Figure 2 below shows a pest of flowers. Use it to answer questions 19 and 20



- **19.** Name the pest shown above
  - A. Slug
  - B. Mealybug
  - C. Spider mite
  - D. White fly
- **20.** What damage does the pest cause to flowers?
  - A. It sucks juices
  - B. It cuts stems
  - C. It eats flowers
  - D. It eats roots

# SCIENCE AND TECHNOLOGY

- **21.** Which of the following is the function of the human skeleton?
  - A. Manufacturing nutrients
  - B. Holding the skin
  - C. Controlling sense organs
  - D. Giving shape to the body
- **22.** Which of the following are factors that would affect results of investigation?
  - A. Hypothesis
  - B. Planning stage
  - C. Variables
  - D. Data presentation
- **23.** Which of the following groups of invertebrates has jointed legs?
  - A. Molluscs
  - B. Protozoa
  - C. Worms
  - D. Arthropods
- 24. What do insects benefit from flowers?
  - A. Nectar
  - B. Colours
  - C. Scent
  - D. Honey
- **25.** Why is an image upside down in a pinhole camera?
  - A. Light travels in straight line
  - B. Light has mass
  - C. Light does not produce sound
  - D. Light is not allowed in cameras
- 26. Which type of root system does onion have?

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- A. Tap root system
- B. Fibrous root system
- C. Adventitious root system
- D. Tuberous root system
- 27. The following are types of worms that infect people <u>except?</u>
  - A. Earth worm
  - B. Roundworm
  - C. Tape worm
  - D. Hook worm

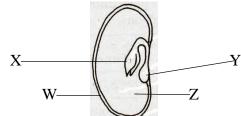
Study the food chain below and answer questions 28 and 29

Green plants  $\rightarrow$  grasshoppers  $\rightarrow$  birds  $\rightarrow$  \_\_\_\_\_

- **28.** Which of the following best completes the food chain?
  - A. Elephant
  - B. People
  - C. Goats
  - D. Cattle
- **29.** Why are green plants at the beginning of the food chain?
  - A. They do not move
  - B. They are eaten by grasshoppers
  - C. They produce food on their own
  - D. They are eaten while fresh
- **30.** What method would you use to separate water and paraffin mixture?
  - A. Decanting
  - B. Sieving
  - C. Filtration
  - D. Magnetism
- **31.** Which of the following tissues attach muscles to bones?
  - A. Ligaments
  - B. Nerves
  - C. Capillaries
  - D. Tendons
- **32.** A mushroom does not produce its own food because it has no
  - A. Roots
  - B. Leaves

- C. True stem
- D. Chlorophyll
- **33.** What is the purpose of carrying out scientific investigations?
  - A. Collecting data through experiments
  - B. Coming up with variables
  - C. Designing the experiments
  - D. Finding out the truth about something
- **34.** Which of the following plant leaves has parallel veins?
  - A. Guava leaves
  - B. Maize leaves
  - C. Pumpkin leaves
  - D. Tomato leaves

Figure below shows internal parts of a bean seed. Use it to answer questions 35 and 36.



- **35.** Name the part marked W?
  - A. Cotyledon
  - B. Plumule
  - C. Testa
  - D. Radicle
- **36.** Which parts form embryo of the bean seed?
  - A. X and W
  - $B. \ W \ and \ Z$
  - $C. \ W \ and \ Y$
  - $D. \ X \ and \ Y$
- **37.** Which of the following is a modern food preservation technology?
  - A. Bottling
  - B. Smoking
  - C. Sun drying
  - D. Salting
- **38.** The term decoding means\_\_\_\_
  - A. Inputting a message
  - B. Sending a message
  - C. Receiving information

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- D. Interpreting message
- **39.** Why is the vacuum flask painted silver inside?
  - A. To give heat
  - B. Radiate very little amount of heat
  - C. To give sound
  - D. To increase force

- **40.** Which of the following components of blood is used for blood clotting?
  - A. Plasma
  - B. Red blood cells
  - C. Platelets
  - D. White blood cells

#### SECTION B (60 MARKS)

Write your answers in the spaces provided

#### AGRICULTURE

#### 41.

a) Define farming calendar?

			(2 marks)
	b)	Why is the farming calendar different from one area to another?	
			(2 marks)
	c)	State two importance of having enough workers on the farm	
			(2 marks)
42.	a)	What happens to the price when demand for fish is high at the market?	
	,		(2 marks)
	b)	State two conditions for using substitution of inputs on the farm	
			(2 marks)
	c)	Mention three aims of agriculture as business	
43.			(3 marks)
	a)	Define a forest	
			(2 marks)
	b)	State any two ways of managing woodlot	
			(2 marks)
	c)	In an agroforestry, why are leguminous trees planted together with crops? Give one way	$(1 \text{ mod}_2)$
			(1  mark)

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44.			
	a)	State two characteristics of a good cock	
			(2 marks
	b)	Explain the difference between browsing and grazing	
	c)	State any two animal husbandry practices	
45.	Fig	gure below shows a farm machinery. Use it to answer questions that follow	
	a)	Name the farm machinery	
	h)	State the parts marked	(1 mar
	0)	X	
		Y	
		Z	(3 mark
	c)	State the use of the farm machinery on the farm	(1 mark)
		SCIENCE AND TECHNOLOGY	(1
46.			
	a)	State three types of food based on function	
			(3 marks)
	b)	Give any two reasons for preserving food	
	c)	Mention any one effect of malnutrition	(1 mark)
		ad the statement carefully to answer questions 47 a) and b)	
		uria mixed sugar and water for her breakfast.	
	a)	Identify the following	
		(i) Solute	
		(ii) Solvent	(2 marks)

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	b)	Give any three factors that would affect the solubility of sugar in water	(3 marks)
	c)	State two problems of the following classroom technologies         (i) Radio	_ (5 marks)
		(ii) Chalkboard	(2 marks)
48.	a)	State any three groups of animals	
	b)	Mention two characteristics of amphibians	(3 marks)
			(2 marks)
	c)	State two ways how fish protect themselves from enemies	
			(2 marks)
		gure below shows model of human breathing system, use it to answer questions that follows atmospheric pressure in the bottle of	
	a)	Name the parts marked Q and U	(2, 1)
	h)	QUUU	(2 marks)
	0)	(i) Q	(2 marks)
		(ii) U	(2 marks)
50.	a)	List any two nutritional deficiency diseases	
			(2 marks)
	b)	Explain any two importance of balanced meals to HIV patients	
			(2 marks)

THE END OF QUESTION PAPER