

NAMIWAWA ZONE MOCK EXAMINATIONS BOARD

2019 PRIMARY SCHOOL LEAVING CERTIFICATE EXAMINATION

PRIMARY SCIENCE

(100 Marks)

8:30 – 10:30am

Time allowed: 2 hours

P163

Date: 22nd February 2019

Name of Candidate: _____
(Surname first)

Name of School: _____

Instruction

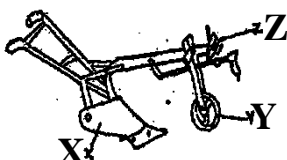
1. This paper contains 4 pages. Please check
2. Answer **all** questions. In section **A**, encircle the letter representing the right answer to each question. In section **B**, write your answers in the spaces provided under each question.

SECTION A (40 Marks)

Agriculture

1. Which of the following crops belong to agronomy?
A. blue gum C. groundnuts
B. goats D. oranges
2. Which of the following is not a common weed in flower gardens?
A. Galisoga C. stargrass
B. Blackjack D. witchweed
3. Which of the following marketing functions helps farmers to know what they want to buy?
A. Selling C. processing
B. grading D. advertising
4. Why is sun drying of fish important to a farmer?
A. To sell the fish quickly
B. To cook the fish easily
C. To share the fish easily
D. To improve quality of the fish.
5. Which of the following factors should be considered when choosing a site for a vegetable garden?
A. Water supply C. price of vegetable
B. Slope of the land D. size of the seed
6. Which of the following conditions is not necessary for seed germination?
A. Temperature C. water
B. Air D. soil

Figure 1 is a diagram of a farm implement. Study it and answer questions 7, 8 and 9.

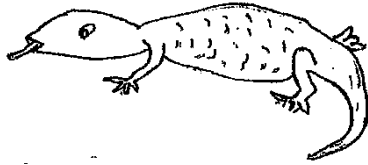


7. The part marked *x* is called _____
A. hake C. mouldboard
B. depth wheel D. share
8. What is the function of part labelled *Y*?
A. Holds all parts of the implement
B. Cut the soil into thin layer
C. Pushes the soil to each side.
D. Helps to move the implement and maintain depth.
9. State the main reason for painting the implement?
A. To prevent spoiling the threads on the nuts and bolts.
B. To prevent friction between movable parts
C. To prevent rusting
D. To make it work properly.
10. Which of the following is not an aim of agriculture as a business.
A. Increasing yield per unit area
B. Growing of crops mainly for sale
C. Reducing cost per unit area
D. Maximising profits
11. Which of the following is a step in the procedure for grafting?
A. Join the shoot to the root stock
B. Plant both the shoot and root stock
C. Plant a cutting which has nodes
D. Make a T-shit on the stem
12. Which of the following layers of soil has most living organisms?
A. Sub soil C. parent rock
B. Top soil D. Weathered rock
13. Why is rotation in vegetables important?
A. It reduces pests and diseases
B. It speeds up maturity

- C. It reduces vegetable production
- D. It increases soil micro-organisms

14. Which of the following is the characteristic of a good cock for breeding?
- A. Blunt beak
 - B. Strong body
 - C. roomy body
 - D. wide moist vent

Figure 2 is a diagram of a fish predator. Use it to answer questions 15 and 16.



15. What is the name of the predator?
- A. Monitor lizard
 - B. chameleon
 - C. otter
 - D. gecko
16. Which of the following ways can control the predator?
- A. Scaring and trapping
 - B. Trapping and killing
 - C. Draining ponds and scaring
 - D. Draining ponds and killing
17. Why is pruning done in trees?
- A. To reduce competition for food
 - B. To improve the growth of trees
 - C. To control growth of weeds
 - D. To reduce termites attack
18. Which of the following is a deficiency sign of phosphorus in plants?
- A. Yellow leaves
 - B. Poor root development
 - C. Immature fruit fall
 - D. Stunted growth

19. Which of the following is a minor plant nutrient?
- A. Potassium
 - B. chlorine
 - C. nitrogen
 - D. phosphorus

20. Why is vegetative cover important in crop production?
- A. It provides firewood
 - B. It reduces pests
 - C. It provides timber
 - D. It conserves soil

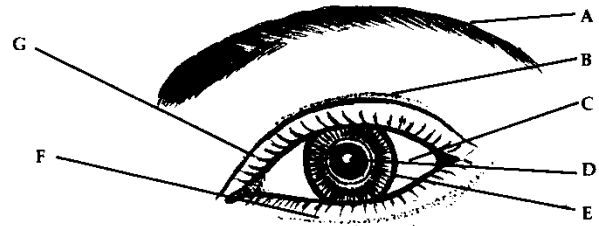
SCIENCE AND TECHNOLOGY

21. Which of the following is the function of hairs and mucus in nostrils.
- A. Sneezing
 - B. Smelling
 - C. protecting nose
 - D. trap dust and germs
22. Rickets can be prevented by eating foods rich in
- A. Vitamin D
 - B. Vitamin C
 - C. Iodine
 - D. Vitamin A

23. Which of the following is the characteristic of seed dispersed by animals?
- A. They have pods
 - B. They have hook-like features
 - C. They are light
 - D. They are denser than water

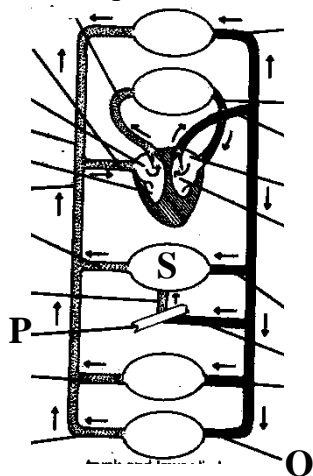
24. The following are examples of laundry materials except:
- A. bathtub
 - B. bleaches
 - C. soap
 - D. water

Figure below is a diagram of the eye. Use it to answer questions 25 and 26.



25. The part labelled E is called _____
- A. Eyelid
 - B. Eye brow
 - C. eye lashes
 - D. iris
26. What is the function of the part labelled G
- A. To control the size of the pupil
 - B. To allow more light to get in.
 - C. To protect the eye from dust and other particles.
 - D. To decorate the eye.
27. Which of the following is an example of ball-and-socket joint?
- A. Hip
 - B. Joints of the neck
 - C. elbow
 - D. knee
28. The process whereby green plants make their own food because of light is called _____
- A. Photography
 - B. hypothesis
 - C. photosynthesis
 - D. pollination
29. Which of the following is not an example of direct sources of light?
- A. moon
 - B. neon worms
 - C. stars
 - D. fireflies
30. The leaves allow air and water to pass in and out of the plant through small openings called
- A. Alveoli
 - B. Lamina
 - C. petiole
 - D. stomates
31. The following are examples of arthropods except:
- A. Grasshopper
 - B. Octopus
 - C. crab
 - D. insects
32. A sudden change of direction of light as it moves from one medium to a different medium is called _____
- A. reflection
 - B. reflector
 - C. refraction
 - D. refractor

Figure below is a diagram of the human circulatory system. Use it to answer questions 33 and 34

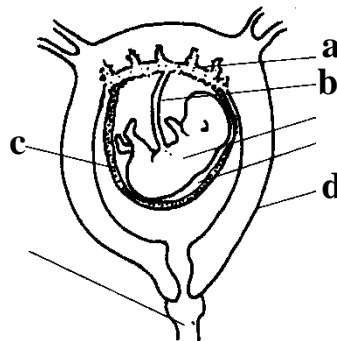


33. What name is given to part labelled P?
 A. liver
 B. Gut
 C. Valve
 D. hepatic portal vein
34. What is the function of part labelled S?
 A. To regulate temperature
 B. To pump blood
 C. To store excess food
 D. To excrete waste products
35. Which of the following is an example of mineral fibres?
 A. asbestos C. silk
 B. acetate D. rayon
36. A method used to separate liquid mixtures with components of different boiling points is called _____
 A. Distillation C. filtration
 B. Evaporation D. sieving

37. When you throw a stone upwards, it returns to the ground. Which of the following forces causes the stone to return to the ground?
 A. Frictional force C. electric force
 B. Electrostatic force D. gravitational force

38. Keeping the shape and size of things is called
 A. turgidity C. freezer
 B. solid D. sublimation

Figure below is a diagram of the growth and development of the baby, Use it to answer question 39 and 40.



39. Name the part labelled a.
 A. Uterus C. placenta
 B. Amnion D. cervix
40. Which of the following is a part that attaches the foetus to a mother?
 A. a B. c C. b D. e

SECTION B AGRICULTURE

41. (a) Define the term 'farm records' (1 mark)
-
- (b) State any two ways in which records are important on a farm? (2 marks)
-
- (c) Name any two factors of production? (2 mark)
-
42. a) Give two examples of improved broiler chicken breeds kept in Malawi? (2 marks)
-
- b) Give any reasons why it is important to improve crop production on the farm? (2 marks)
-
- c) Explain any one way in which HIV and Aids would affect the production of food at national level?
-
- d) Sate any three disadvantages of free range system of keeping poultry? (3 marks)
-
43. a) Define the term irrigation? (1 mark)
-
- (b) List any three indigenous farm machinery and technologies? (3 marks)
-

c) Explain any two ways how permaculture improves agricultural production? **(2 marks)**

(d) Give any two functions of potassium? **(2 marks)**

44. a) Give any one reason why people raise fish in ponds? **(1 mark)**

b) State any two reasons why Makumba and Mphande are suitable for fish farming? **(2 marks)**

(c) What are roughages? **(1 mark)**

d) Explain any one reason why concentrates are given to dairy and beef cattle? **(2 marks)**

SECTION B: SCIENCE & TECHNOLOGY

45. a) Give any two reasons for cleaning the home? **(2 marks)**

b) State any two ways of cleaning the home? **(2 marks)**

46. a) Give any two uses of sound energy? **(2 marks)**

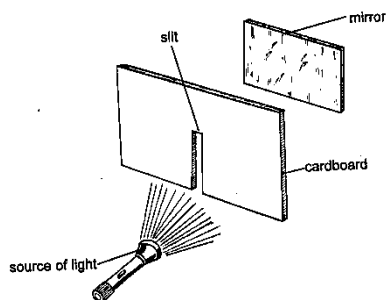
b) How does a drum produce sound? **(1 mark)**

47. a) Describe any two signs and symptoms of pregnancy? **(2 marks)**

b) Explain any two importance of under-five clinics? **(2 marks)**

c) What name is given to a surgical operation in which the man's sperm ducts are cut and the ends sealed or tied? **(1 mark)**

Figure below is a diagram showing an investigation on properties of light. Use it to answer questions 48 (a) and (b)?



48. a) What property is being investigated from an experiment? **(1 mark)**

b) Describe any two properties of light? **(2 marks)**

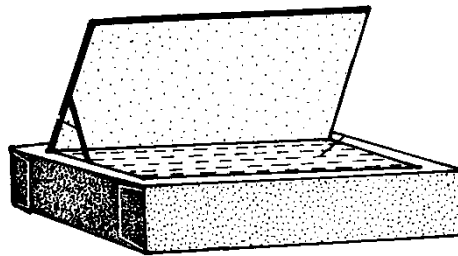
49. Describe any three problems in form of questions that can be investigated? **(3 marks)**

50. Explain any two ways of controlling bleeding? **(2 marks)**

51. What happens to the diaphragm during expiration? **(2 marks)**

52. Give any two ways of improving the nutritional value of food? **(2 marks)**

Figure below is a diagram that shows a technology for conserving the environment. Use it to answer question 53 (a) and (b)



53. a) Name the device? _____ **(1 marks)**

b) What is the use of the technological device? **(1 marks)**

54. Describe the relationship among family size, income and food supply? **(3 marks)**

55. Define a stain? **(1 mark)**

END OF QUESTION PAPER

PROVISIONAL MARKING SCHEME FOR 2019 MOCK PRIMARY SCIENCE

SECTION A

1. A	9. C	17. B	25. D	33. B
2. D	10. C	18. B	26. C	34. C
3. D	11. A	19. B	27. A	35. A
4. D	12. B	20. D	28. C	36. A
5. A	13. A	21. D	29. A	37. D
6. D	14. B	22. A	30. D	38. A
7. C	15. A	23. B	31. B	39. C
8. D	16. B	24. A	32. D	40. C

SECTION B

41. a) Farm records are written information that farmers keep on different activities carried out on a farm.
b) i) calculate profit/loss
ii) organize farming activities
iii) making important decision
iv) select parents for the next generations.
c) Capital, Land, Labour, management.
42. a) Starbro, Indian river, Ross.
b) i) food will be enough for the family.
ii) Farmers will improve their standards of living.
iii) Farmers will get more income
iv) farmers health will be improved.
c) i) sick people do not participate in agricultural production hence reducing food production.
ii) Resources meant for food production are spent on the sick people.
iii) time is wasted on caring for the sick instead of carrying out farming activities.
iv) Productive people die thereby reducing labour.
d) i) Predators can easily catch the chickens.
ii) Difficult to collect eggs
iii) Difficult to control breeding
iv) Chickens can catch diseases easily.
43. a) irrigation is supplying water into the field to enable crops to grow.
b) i) leaf bag, ii) planting frame iii) ground iv) soot v) winnower vi) ash
c) i) increases production since from the same piece of land there will be a variety of products.
ii) reduces cost of buying inputs hence the saved money can be used to buy other things.
d) i) Development of strong stems.
ii) formation of high quality fruits.
44. a) i) source of food ii) source of income iii) source of raw materials.
b) i) they grow fast
ii) they produce under pond condition
iii) are resistant to parasites and diseases.
iv) feed on locally available and cheap feeds.
c) Roughages are feeds with high fibres
d) Concentrates have high nutrient content which helps cattle to produce more milk and meat.

45. a) Promoting the physical and mental health of individuals.
Providing comfort to the occupants of the home.
Keeping the original appearance of surfaces in the home
b) Sweeping, brushing, mopping
46. a) communication, entertainment, giving warning signals, telling time
b) by hitting or beating it
47. a) morning sickness, menstruation stops to occur, changing moods. etc
b) - routine check-up on the health of children.
- routine monitoring of the weight of children.
- provision of vitamin A etc
c) vasectomy
48. a) light travels in a straight line.
b) light has speed, light can be reflected, light can be refracted.
49. What is the speed of sound in air?
How long does it take for a maize seed to germinate?
How can the components of given mixture be separated?
50. Applying direct pressure on the injured part of the body.
Raising the injured part so as to reduce the amount of blood flowing to it.
51. It relaxes and moves upwards into the thorax, forming a dome shape.
52. Combining several foods when cooking.
Adding enriching food to dishes
Using one pot meals
53. a) Solar heater/cooker
b) for heating/cooking
54. family size determines the amount of food to be available to family members for consumption.
The amount of food available to a family depends on the amount of money available for buying....
55. A stain is a discoloured mark caused by spilling of foods and liquids on garments and articles.