



UNEB BLUE PRINT 2023

INTEGRATED SCIENCE (SET THREE)

Time allowed: 2 Hours 15 Minutes

Index no:

Random No					Personal No		

Candidate's name:

Candidate's signature:

School:

District :

Read the following instructions carefully

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **40** questions (**40 marks**).
3. Section **B** has **16** questions (**60 marks**).
4. Answer ALL questions in both sections **A** and **B**.
5. All answers **MUST** be written in the space provided
In blue or black ball point pens or ink. All diagrams
Should be in pencil.
6. Unnecessary crossing of answers will lead to loss of
Marks.
7. Poor hand writing which cannot be easily read,
May lead to loss of marks.

FOR EXAMINERS' USE ONLY

Qn. No	MARKS	SIGN
1 – 10		
11– 20		
21 – 30		
31– 40		
44 – 46		
47 – 48		
49 - 51		
52 - 53		
54 - 55		
TOTAL		

SECTION A (40MKS)

1. Give one example of a pouched mammal.

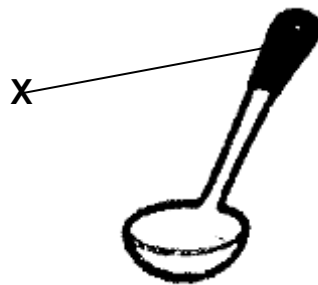
2. Mention any one substance transported by plasma around the body.

3. Give one way in which a mushroom is different from a bean plant.

4. Name the group of birds to which a flamingo belongs.

5. How does sound move from a drum reach the ears of a listener standing 50 meters away?

Below is a device found at home. Study it carefully to answer questions 6 and 7.



6. Name the material from which part labelled X is made.

7. How important is part X to the person preparing food in the kitchen?

8. Why is an ovipositor important to a queen bee?

9. State one advantage of proper crop spacing.

10. By what process does heat travel through a nail?

11. Name any one substance that prevent constant rubbing of bones at a joint.

12. State one characteristic that enables a chameleon to catch its prey easily.

13. Mention the process of soil formation which involves the action of bacteria.

14. Of what importance is chlorophyll during the process of photosynthesis?

15. How can a farmer prevent his garden tools from rusting?

16. Why are rodents regarded as blocks in a village food paths?

17. Which main food value does one gets from eating beans?



18. What type of leaf venation is illustrated in the diagram shown above?

19. Give one crop with the same leaf venation in 18 above.

20. Give one way in which alcohol can be dangerous to a person.

21. Write down the meaning of smoking.

22. Why is electricity regarded as a form of energy?

23. Name the gas that is commonly used in fire extinguishers.

24. Why can't sound move through a vacuum?

25. In which way is the adult stage a butterfly important to farmers?

26. What name is given to the three small bones found in the ear?

27. Name one product from poultry that is used to prevent kwashiorkor in children.

28. What shows that metal rails of the railway line that expand on hot days?

29. Which immunisable disease can be prevented using DPT vaccine in babies?

30. Write one advantage of free range system of keeping poultry.

31. Name the fungus used in the process of producing alcohol by fermentation.

32. How are earth worms in the soil able to get oxygen after it has rained.

33. Apart from abstaining from sex, how else can a Primary School child protect her/himself against contracting HIV/AIDS?

34. State the type of blood that is carried by most blood vessels with valves.

35. Why is it not good to share a living house with potted plants?

Use the diagram below of a tooth to answer questions 36 and 37.



36. What do human beings use the above tooth for?

37. Which group of mammals have well developed teeth like the one drawn above?

38. Give one characteristic of objects which float on water.

39. How are feelers important to an insect?

40. Name the part of the human lungs where gaseous exchange takes place.

SECTION B (60 Marks)

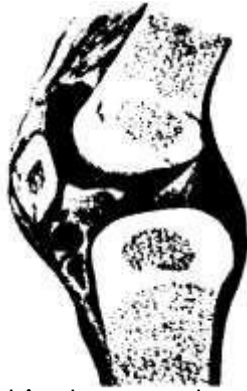
41. In the table below part A shows classes of invertebrates and B has the examples but in wrong order.

A: Class	B: Example
Mollusc	Liver fluke
Arthropods	Praying mantis
Coelenterates	Squid
Worms	Jelly fish

Pick an organism from **B** to match the class of vertebrates written below.

- a). molluscs _____
- b). Arthropods _____
- c). coelenterates _____
- d). worms _____

42. Use the type of movable joint below to answer questions that follow.



a). What type of movable joint is shown above?

b). Where in the body is the joint shown above found?

c). Give two ways how the joint shown above can overcome friction.

i) _____

ii) _____

43.a). Apart from hearing, state one other function of the ear?

b). Why is it not advisable to remove wax from the ear using sharp objects?

c). Which part of the ear helps a hunting dog to collect sound waves from the environment?

d). Give one example of ear defects.

44.a). Name one organ of the circulatory system.

b). Which component of blood looks like water in terms of molecular structure?

c). What happens to blood as it passes through the kidney?

d). Mention one disease that attacks the red blood cells.

45.a). State one way in which a poisonous snake benefits from its;

i) hollow fangs _____

ii) forked tongue _____

b). Give any two examples of poisonous snakes.

i) _____

ii) _____

46. a) Identify one part in the alimentary canal where digested food mixes with bile juice.

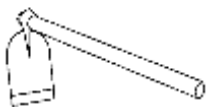
b). State two things that happen to food in the ileum of the human body.

i) _____

ii) _____

c). What role does colon play in the process of water absorption in the human body?

47. **Below are garden tools. Study them and use them to answer questions that follow.**



R



S



T

a). Give the uses of the garden tools labelled R and S.

i) R _____

ii) S _____

b). Name the garden tool labelled T.

c). How can the above garden tools be kept safely without rusting?

48.a). How are bees important to crop farmers?

b). Write one item collected by bees in a bee hive.

c). What role is played by a drone bee in a bee hive?

d). Give a reason why a worker bee die after stinging.

49. a). What type of soil is used for making roofing tiles?

b). Write two causes of soil erosion.

i) _____

ii) _____

c). How does mulching control soil erosion?

50. a). Why is maize called an annual crop?

b). What type of germination do monocotyledonous seeds undergo?

c). Write down any two conditions necessary for a seed to germinate.

i) _____ (ii) _____

51. **A P.4 learner got a lump of soil, a glass vessel and water, then poured the soil into the glass vessel and then mixed it with heater.**

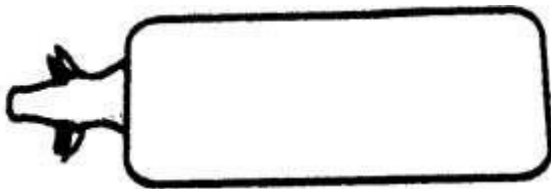
a). Give any one observation the learner made during the experiment.

b) Which component of soil is the above experiment about?

c). Which type of soil allows water to pass through it easily?

d). State any one use of the type of soil named in (c) above in our environment.

52. **Below is a shape of a certain type of cattle. Study it to answer questions that follow.**



a). What type of cattle is shown above?

b). Write down two characteristics of the type of cattle shown above.

i) _____

ii) _____

c). Mention any one breed of cattle that belong to the type of cattle named in (a) above.

53.a). Write the meaning of the term pollination.

b). Give one characteristic of the insect pollinated flowers.

c). What happens to pollen grains when they land on the stigma?

d). What does the ovary become after fertilization in flowers?

54.a) Give any two signs of the deficiency disease caused by lack of vitamin A in one's diet.

i) _____

ii) _____

b). Give two examples of food stuffs that prevent the deficiency disease with signs shown in (a) above.

i) _____

ii) _____

55. a). State any two features used to classify birds.

i) _____

ii) _____

b) In which way are birds;

i). useful to people?

ii). harmful to people?
