

SECTION A (40 Marks)

NO	ANSWER
1.	- Plant material, food peelings, cow dung, urine, food leftover, municipal waste, sugar cane bagasse, plant leaves.
2.	- Lice, mites, fleas, bedbugs.
3.	- Caudal fin, tail fin.
4.	- Place letter G on that part.
5.	- Drinking clean boiled water regularly, doing regular physical exercises, seeking medical attention, feeding on a balanced diet, a void drinking alcohol, having enough rest.
6.	- To prevent the splashing of rainwater.
7.	- Providing enough feeds, providing protection to birds and animals, sheltering the birds and animals, providing water to birds and animals, regular vaccination, feeding them on a balanced diet.
8.	- We get money after selling honey, we get revenue collection after selling candle wax.
9.	- To dissolve food stored in the cotyledon or endosperm for the embryo to feed on.
10.	- Viscosity friction.
11.	- Lack of water for flushing, blockage of pipes due to use of hard papers, easy spread of germs when pipes break, require lot of water to function well, they require regular emptying.
12.	- Molluscs/mollusks.
13.	- Poor feeding, childhood immunisable diseases, poor health services, failure of mothers to go for antenatal care.
14.	- To produce children, to cook food, to look after children, to keep the home safely, to take children for immunisation.
15.	- Both a lobster and a cockroach have jointed legs, segmented bodies, exoskeleton.
16.	- By cooking food for them, by washing clothings for them, by serving food to them in time, by comforting them when they are sick, by ironing clothes for them, by fetching water.
17.	- To prevent dampness, to prevent rain water from reaching the harvested stored crops, to prevent rotting of the stored crops.
18.	- By deciding one day never to take alcohol, joining good social groups with good people, learning more dangers and facts about alcohol, avoid joining bad peer groups.
19.	- The image is diminished, the image is smaller than the object, the image is real.
20.	- Capital, labour, marketing, management, water source.
21.	- By removing moisture from them.
22.	- Opportunistic infections are secondary infections that occur more often or more severe in people with weakened immune systems.
23.	- To conserve heat, for faster cooking to save fuel.
24.	- Switch.
25.	- Chemical energy changes to electric energy.
26.	- Malaria, bilharziasis, elephantiasis, river blindness, yellow fever, dengue fever.
27.	- By crop rotation, by use of scare crow, by use of local traps, by handpicking pests, by beating and hooking pests, by shaking and gnawing.
28.	- The splint holds the broken bones in one position, to keep the broken bones in one position.
29.	- They have a black lining inside them for absorbing heat from the sun.
30.	- To dry up the faeces, to drain moisture from faeces.
31.	- Liver fluke, hookworm, tapeworm, eelworms, pin-worms, thread worms, bristle worm and leeches..
32.	- Ear ossicles.
33.	- They get food, they get learners, they can get learners, they can get water, they get electricity, they get workers.
34.	- Part X - kink/constriction/bend.
35.	$C^{\circ} = \frac{5}{9}(F^{\circ} - 32)$ $C^{\circ} = \frac{5}{9} \times 18^{\circ}$ $C^{\circ} = 5 \times 2$ $C^{\circ} = 10$ <p>Therefore $50^{\circ}\text{F} = 10^{\circ}\text{C}$</p>
36.	$C = 10$ Clay soil.
37.	To produce a lot of breast milk for the baby.
38.	Bees pollinates plants.
39.	Fungi reproduce by means of spores while bacteria reproduce by means binary fission.
40.	Ammonia, urea and uric acid.



Section B (60 Marks)

41. (a) Ball and socket joint.
 (b) **M**
- (c) It contain synovial fluid which reduces friction, the bones at **joint X** are covered with cartilage at their ends to reduce friction.
42. (a) Small prunings, plant leaves, banana peelings, weeds, grasses, rice straws, saw dust, egg shells, coffee swippings.
 (b) (i) To speed up the rotting process.
 (ii) To prevent direct sunrays and rain.
43. (a) Short sightedness/ myopia.
 (b) Too large or elongated eyeball, too thick eye lens, eye diseases.
 (c) Washing the eyes with plenty of water and sheep, avoid looking into the sun directly, a void writing and reading under dim light, wiping the eyes with plenty of clean water, eating food rich in vitamin (A), using soft materials when cleaning the eyes, avoid staying in dusty places.
44. (a) First aid kit are the items used in giving first aid while first aid box is a container used in keeping first tools.
 (b) **R:** Rest the injured part. **I:** icing the injured part. **C:** Compress the injured part. **E:** Elevation of the injured part.
 (c) To save life, to promote quick recovery, to prevent further injuries, to stop bleeding, to reduce severe pain
45. (i) **Tongue:** tasting.
 (ii) **Nose:** smelling.
 (iii) **Ear:** hearing.
 (iv) **Skin:** feeling
46. (a) Filtration/ filtering method.
 (b) Filtrate.
 (c) It still contains germs, filtering alone does not kill germs.
 (d) For washing clothes, for cooking food, for mopping houses, for scrubbing latrines/ toilets.
47. (a) Red cross club, Young farmers club, Science contest, science exhibitions, science quizzes, science projects.
 (b) Help in protecting the environment, help to conserve environment, help to teach or sensitize others to protect & conserve the environment
 (c) To maintain a tree nursery in schools, to establish wood/ tree projects, to monitor wildlife abusers eg poachers.
48. (a) Plants provide timber sold for money, plants provide fruit sold for money, plants provide wood fuel which is a source of income.
 (b) By afforestation/planting trees, by re-afforestation, by agroforestry, by using other alternative sources of energy to cook food instead of wood fuel.
49. (a) Melting, freezing, evaporation, condensation, faulting, landslides, Earthquakes, changes in weather.
 (b) There is no new substance formed, the changes are reversible, the mass of the substance remains the same, no heat or light is given out, there is no change in weight.
50. (a) To know the income and expenditure and avoid losses, to know whether they are making profits or losses, to identify areas of development and investment, to budget for the farm.
 (b) Production records, Health records, Breeding records, Feeding records.
51. (a) It represents child to child program/ it is a symbol of child to child program.
 (b) Older children teaching young children how to maintain personal hygiene, helping the disabled children in washing their clothes, teaching young children toilet habits, caring for other children who are sick, older children can play with the young ones.
52. (a) Grazing is the feeding of animals on pasture.
 (b) It helps to break the lifecycle of animal pests and diseases.
 (c) Zero grazing, herding grazing, strip grazing, tethering grazing.
53. (a) Heat energy, light energy.
 (b) Oxygen.
 (c) Biological change, chemical change.
54. (a) They are used in drilling machines, they are used to join two pieces of wood or metal together, they are used for covering bottles and jar lids, they are used to make bolts that work with nuts, they are used when lifting heavy things.
 (b) Vice clamps, drilling machines screw type, car jack, electric appliances, geometrical compasses.
55. (a) Family planning.
 (b) Condom use prevent the penis from getting in direct contact with the vaginal fluid of an infected woman.
 (c) Abstinence from sex, withdrawal method, prolonged breastfeeding.





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Prime THE PRIME EXAMINATIONS 2022

R·7 PRE – PLE

INTEGRATED SCIENCE (Abridged Curriculum)

Time allowed 2 hours 15 minutes

INDEX NO:	Random No.	Personal No.



Candidate's Name:

Candidate's Signature:

School Random No.

District ID:

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- Do not write your school or district name anywhere on this paper.
- This paper has **two** sections: **A** and **B** Section **A** has **40** questions and section **B** has **15** questions.
- Answer all questions. All answers to both sections **A** and **B** must be written in the spaces provided.
- All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil other than graphs and diagrams **will not** be marked.
- Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to **loss of marks**.
- Do not fill anything in the table indicated "For Examiners' use only", and those boxes inside the question paper.

FOR EXAMINERS' USE ONLY

QUESTION NUMBER	MARKS ATTAINED	INITIALS
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

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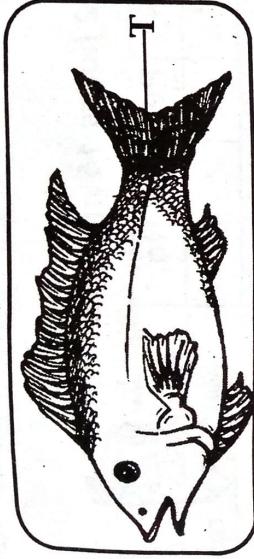
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Turn Over

Section A. (40 Marks)

1. Name one material which is used in the production of biogas.
2. Mention one vector that lives in clothes due to poor hygiene.

The diagram below shows a fish. Study and use it to answer questions 3 and 4.



3. Name the part marked T.
4. Use letter G to show the part that helps a fish to detect sound waves in water.
5. State any one health habit that helps to keep the excretory system in a good working condition.
6. Why is a rain gauge placed at least 30cm above the ground?
7. State one way of caring for domestic birds and animals.
8. Give one economic reason why farmers carryout apiculture.
9. State the importance of water to a germinating seed.
10. Name the type of friction that exists in liquids and gases.
11. Give any one disadvantage of using flush toilets.
12. To which group of invertebrates does the water snail belong?
13. Give any one cause of infant mortality rate.
14. State one role of a mother at home.
15. In which one way is a lobster similar to a cockroach?
16. Give one way of caring for people with special needs.





11 Why should a granary be leak proof?

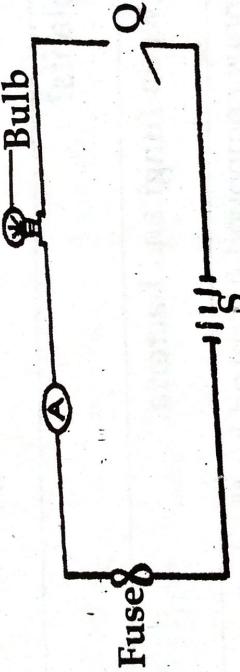
15 State any one life skill a school going child should acquire to avoid alcoholism and other drugs of dependency.

Give one characteristic of images formed by a pin-hole camera.

Apart from land, name one factor to consider before starting a cattle farming project.

21. How is sun drying an important process in preserving harvested maize and rice?
22. What is meant by the term **opportunistic infections**?
23. Give a reason why people cover food in a saucépan with banana leaves while cooking.

Study the diagram of an electric circuit below and use it to answer the questions 24 and 25.



24. Name the part marked Q from the diagram above.
25. State the energy change that takes place in part S when part Q is closed.
26. Write down any one example of a water habitat vector disease.
27. Give one way of controlling pests and diseases in crops without using drugs.
28. Why do first aiders tie splints around the fractured part of the casualty?
29. How are solar dryers able to dry food substances?
30. Why is ash or sand poured on faeces in an ECOSAN toilet after defecation?

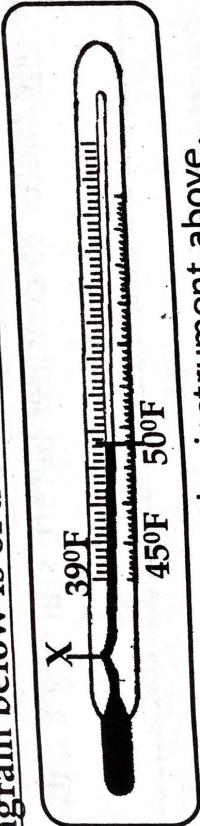


Mention any one example of internal parasites in rabbits.

31. What name is given to the three small bones of the ear?

In which one way do schools benefit the neighbouring communities?

The diagram below is of a clinical thermometer. Use it to answer questions 34 and 35.



34. Name part marked X on the instrument above.

35. Convert 50°F into degrees centigrade as shown on the above instrument.

36. Which type of soil has the highest capillarity?

37. Why are breastfeeding mothers advised to take plenty of drinks?

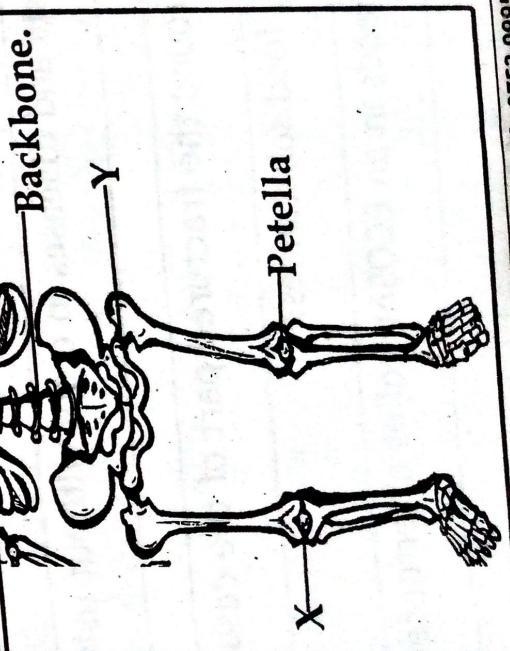
38. How are bees useful to plants?

39. State one difference between fungi and bacteria.

40. Name one major nitrogenous compound excreted by the human kidneys.

Section B. (60 Marks)

41. The diagram below shows a part of a human skeleton. Use it to answer questions that follow.



(a) Name the type of movable joint marked with letter Y.

(b) Use letter M and an arrow to show the longest bone in the human skeleton.
(c) Give two adaptations that enable joint X to move with reduced friction.

(i)

(ii)

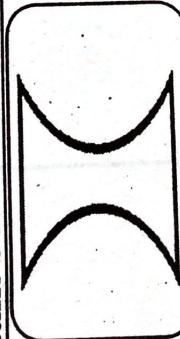
(a) Write down two materials used when making compost manure.

(i) _____
(ii) _____

(b) Give a reason for;
(i) adding water in compost manure.

(ii) covering the heap of compost manure.

43. The diagram below shows a type of lens. Use it to answer questions that follow.



(a) Which eye defect can be corrected using the type of lens above?

(b) Give any one cause of the eye defect named in (a) above.

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

(i)

(ii)

44. (a) State the difference between a first aid kit and a first aid box.

44.

(b) Write "RICE" in full as related to first aid kit and accidents.

(i)

(ii)

(c) Give two reasons for giving first aid to accident victims.

(i)

(ii)

45.

Match the sense organs with their corresponding sensitivities correctly.

List A

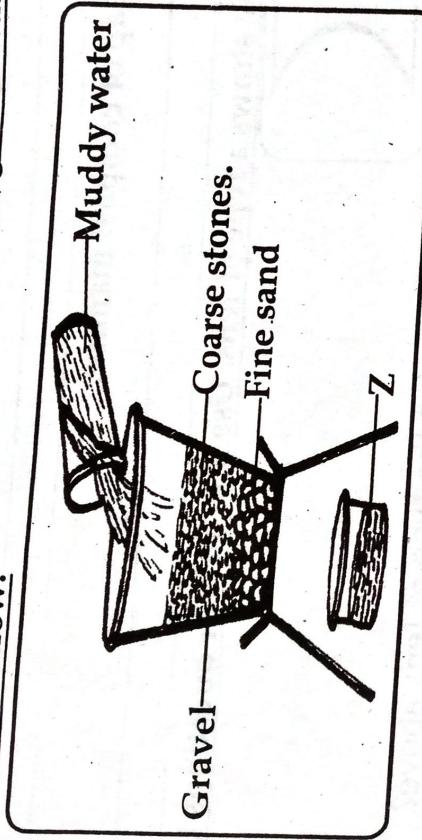
Tongue
Nose
Ear
Skin

- (a) Tongue : _____
(b) Nose : _____
(c) Ear : _____
(d) Skin : _____

<u>List B</u>	
hearing	
tasting	
feeling	
smelling	

46.

The diagram below is of a method of obtaining clean water. Use it to answer questions that follow.



- (a) Name the method of preparing clean water shown in the experiment above.
(b) What scientific name is given to substance marked Z in the experiment above?
(c) Why is water obtained through the above method not safe for drinking?
(d) Give any one use of water obtained using the above method.

47.

- (a) Apart from wildlife club, mention one other science oriented club in a school.
(b) Give one role played by wildlife clubs in schools.

(c) State any two activities done by the wildlife clubs in schools.

(i) _____

(ii) _____

48. (a) Give two importance of plants to people.

(i) _____

(ii) _____

(b) Write down two ways of conserving plants in the environment.

(i) _____

(ii) _____

49. (a) Mention any two examples of physical changes in the environment.

(i) _____

(ii) _____

(b) State any two characteristics of physical changes.

(i) _____

(ii) _____

50. (a) Give two importance of keeping records on a piggery farm.

(i) _____

(ii) _____

(b) Name two examples of records by a piggery farmer.

(i) _____

(ii) _____

51. The diagram below is of a symbol of a certain program carried out in children. Use it to answer questions that follow.



(a) What does the symbol in the diagram above represent?

(b) Mention any three activities carried out in the above program.

(i) _____

(ii) _____

(iii) _____

(a) What is meant by the term grazing as used in cattle keeping?

52. (b) In which way does the use of paddock grazing help to control parasites in cattle?

(c) Apart from paddock grazing, name any two methods of grazing cattle.

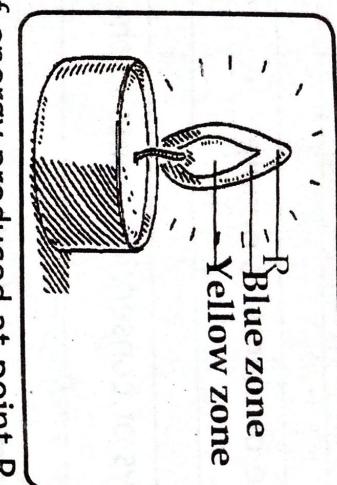
(i) _____

(ii) _____

(iii) _____

(iv) _____

53. The diagram below shows a burning candle. Use it to answer questions that follow.



- (a) Name two forms of energy produced at point R.
(i) _____
(ii) _____

(b) Which component of air enables the above experiment to occur?

(c) Apart from the type of change shown in the experiment above, write down one other type of change.

54. (a) Give two ways how screws are applied in our daily life.

- (i) _____
(ii) _____
(iii) _____

(b) Mention any two machines that use screws.
(i) _____
(ii) _____

55. (a) Which element of PHC is promoted by carrying out tubal ligation in females?

(b) How does condom use control STDs in males?

(c) Mention any two natural methods of family planning.
(i) _____
(ii) _____



Hidden Tip For Excellence in Integrated Science.

- Understand the Examiner's Learning Objectives from that given topic as outlined in the curriculum.

- This will give you an edge in conceptualising the relevant learning points.

