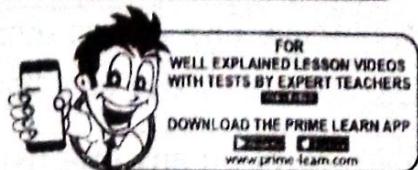


**Prime Consult** THE PRIME EXAMINATIONS 2023

**PRIMARY SIX MID TERM II**

**INTEGRATED SCIENCE**

**Time allocated 2 hours 15 minutes**



Name: .....

Signature: .....

School: .....

District Name: .....

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY**

1. This paper has **two** sections: **A** and **B**. Section **A** has **40** questions (**40 Marks**) and Section **B** has **15** questions. (**60 Marks**)
2. Answer **ALL** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. All answers **must** be written using a **blue or black ball point pen or ink**. Any work written in pencil will **not** be marked.
4. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
5. Do not fill anything in the table indicated

**"FOR EXAMINERS' USE ONLY"**

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		
<b>TOTAL</b>		

APPROVED:

*[Signature]*  
Consultant  
Integrated Science Department (PEC)

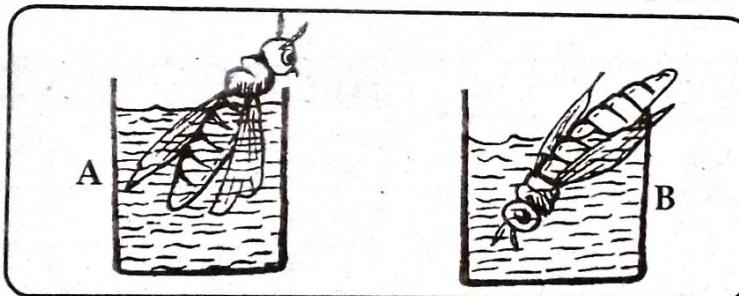
PUBLISHERS OF:-

THE PRIME; SCHEMING FRAME WORKS, PUPIL'S WORKBOOKS, LESSON COURSE BOOKS, HOLIDAY PACKAGES LEARNING GAMES, REVISION BOOKS, PLE ANALYSIS REPORTS AND MANY MORE.

### Section A. (40 Marks)

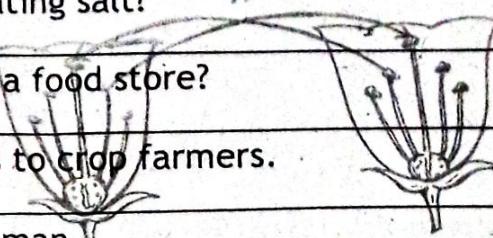
1. Name the *part of a root* that protects the growing tip from damage.  
\_\_\_\_\_
2. Mention one equipment in a home that needs electricity to work.  
\_\_\_\_\_
3. Why are houseflies regarded as disease vectors?  
\_\_\_\_\_
4. Give one importance of rocks to people.  
\_\_\_\_\_
5. Mention any one living renewable resource in the environment.  
\_\_\_\_\_
6. How are *beans* different from *ferns* in their way of reproduction?  
\_\_\_\_\_

The diagram below shows two bees partly immersed in different containers full of water. Study it carefully and answer questions 7 and 8.



7. Which of the two bees will die after sometime?  
\_\_\_\_\_
8. Give a reason to support your answer in (7) above.  
\_\_\_\_\_
9. Mention any one group of vertebrate which produce by laying eggs.  
\_\_\_\_\_
10. Why should fruits be included in our diet?  
\_\_\_\_\_
11. Given the following lists of organisms; *millipede, spider and mosquito*, which of the above organisms is an arachnid?  
\_\_\_\_\_
12. Why do mosquitoes lay eggs on stagnant water?  
\_\_\_\_\_

36. How do feathers keep the bird's body warm? (4)
37. Which food value do we get from eating salt? (4)
38. How can dampness be prevented in a food store? (4)
39. Write down one importance of bees to crop farmers. (4)
40. State the importance of incisors to man. (4)



(a) Name the type of pollination shown in the diagram above.

### Section B. (60 Marks)

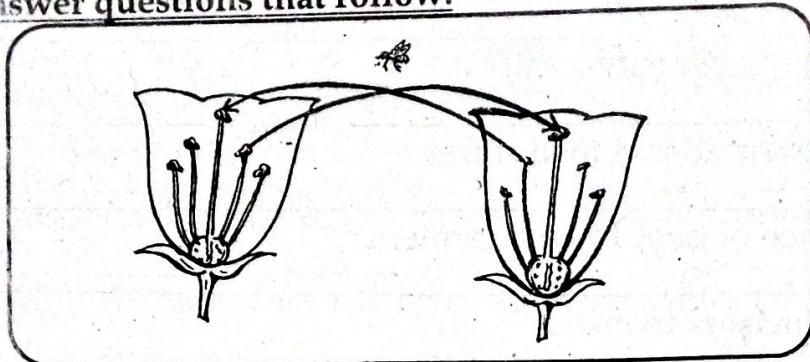
41. (a) Give two ways how plants are useful as resources in the environment. (6)
- (i) \_\_\_\_\_  
 (ii) \_\_\_\_\_
- (c) State any one characteristic of flowers pollinated by the agent mentioned. (6)
- (i) \_\_\_\_\_  
 (ii) \_\_\_\_\_
- (b) State any two ways of conserving plants in the environment. (6)
- (i) \_\_\_\_\_  
 (ii) \_\_\_\_\_
- (d) Give any one importance of pollination in the environment. (6)

42. Study the parts of a flower below in A and their meanings in B. Match them correctly.

A	B
(i) Ovules	Male reproductive cells of a plant.
(ii) Pollen grains	Female reproductive cells of a plant.
(iii) Stamen	Female part of a flower.
(iv) Pistil	Male part of a flower.

43. (a) State the meaning of the term *propagation* as used in plants. (6)
- Roots \_\_\_\_\_  
 (i) \_\_\_\_\_  
 (ii) \_\_\_\_\_
- (b) How do the following crops propagate; (6)
- (i) banana plant \_\_\_\_\_  
 (ii) Irish potato \_\_\_\_\_  
 (iii) \_\_\_\_\_  
 (iv) \_\_\_\_\_
- (c) State any one way we can care for plants in a garden. (6)
- (i) \_\_\_\_\_  
 (ii) \_\_\_\_\_  
 (iii) \_\_\_\_\_  
 (iv) \_\_\_\_\_

44. The diagram below shows a type of pollination in flowers. Study and use it to answer questions that follow.



- (a) Name the **type of pollination** shown in the diagram above.
- (b) Which agent of pollination is being involved in the above diagram?
- (c) State any **one** characteristic of flowers pollinated by the agent mentioned above.
- (d) Give any **one** importance of pollination in the environment.
- 
45. (a) Mention the type of chicken kept for egg production.
- (b) In which **one** way is poultry keeping important to crop farmers?
- (c) State any **one** condition that may fail fertilized eggs from hatching.
- (d) How can a farmer improve egg production on his farm?

46. The table below shows diseases immunized and the part of the body they affect. Study and use it to complete the table correctly.

Disease	Parts affected
(i) Measles	
(ii)	Bones
(iii) T.B	
(iv) Hepatitis B	

47. Mention any **two** examples of;

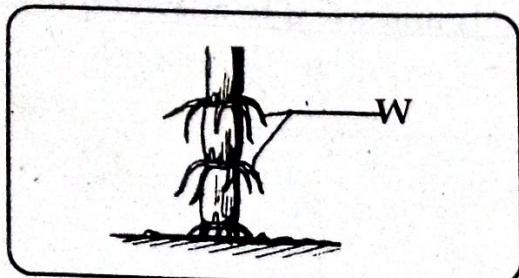
- (a) **Plant fibres**

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

- (b) **Wood fuel**

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

The diagram below is part of a plant. Study and use it to answer questions 13 and 14.



13. Name the group of flowering plants with such kind of root system shown in the diagram above.

14. Give the importance of roots marked with letter W to a plant.

15. State any one way in which wind is useful to a crop farmer.

16. What is meant by the term *immunity*?

17. Name the best food for babies.

18. Give any one effect of heat gain or loss on matter.

19. In which one way can we control rubbish in a school compound?

20. How is clay soil important to people?

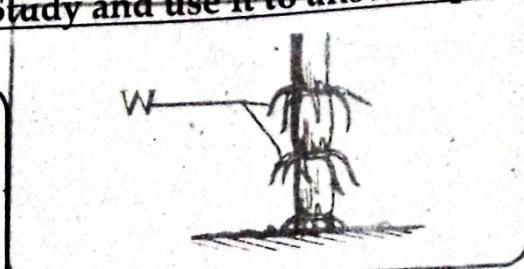
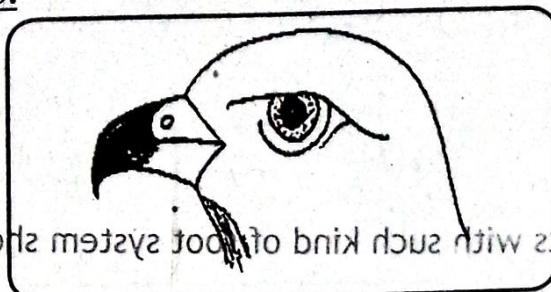
21. Give any one way in which *plants* are different from *animals*.

22. Why is it healthy to wear of gloves when administering first aid to a victim with cuts?

23. Mention any one example of non-renewable resources in the environment.

The diagram below is part of a plant. Study and use it to answer questions 13 and

The diagram below is of a beak of a bird. Study and use it to answer questions 24 and 25.



24. Name the group of birds with such kind of beak shown in the diagram above.

25. How is the beak shown in the diagram above adapted to its function? Give three functions of the beak.

26. Mention any one organism which helps in the decomposition of organic matter.

27. How are mangoes adapted to their mode of dispersal?

28. Name the liquid metal used in clinical thermometer.

29. State the use of a dustbin in a classroom. Name the best food for babies.

30. Which body organ is responsible for pumping blood to all parts of the body?

31. Why does blood go to the lungs before it is pumped to all parts of the body?

**The diagram below shows an item used to promote personal hygiene. Study and use it to answer questions 32 and 33.**



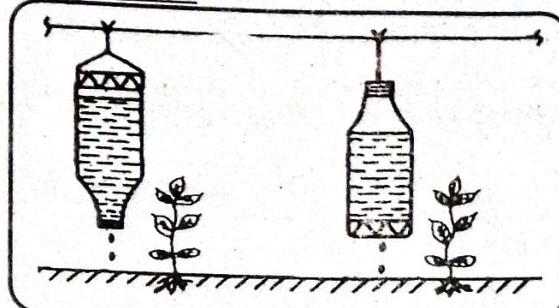
32. State the use of the item shown in the diagram above.

33. How does the use of the above item promote personal hygiene?

34. Give the importance of a ceiling in a living house.

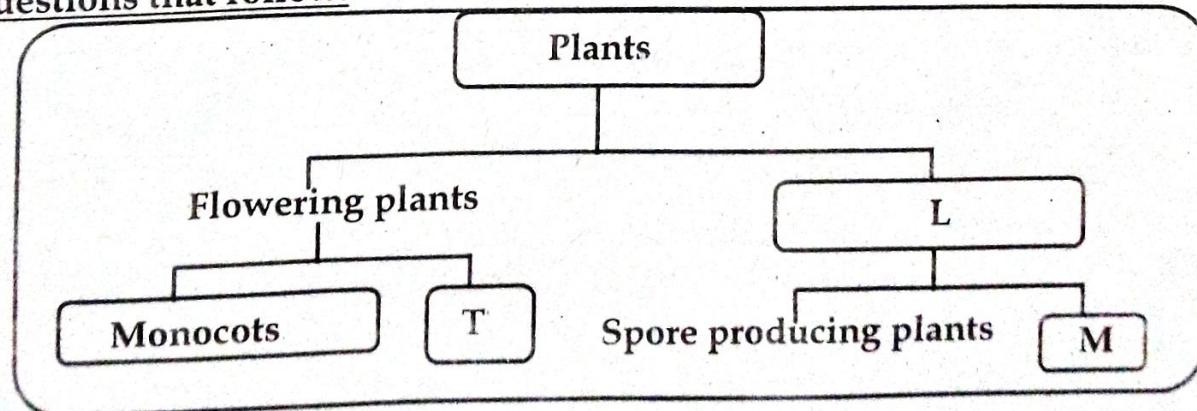
35. Name the main natural source of light in the environment.

48. The diagram below shows a crop growing practice. Study and use it answer questions that follow.



- (a) Name the crop growing practice shown above.
- (b) Apart from the above practice in (a) mention any two other crop growing practices.  
(i) \_\_\_\_\_ (ii) \_\_\_\_\_
- (c) In which season do crop farmers normally practice the above method?
49. (a) What do we call the *general cleanliness of the environment*?  
(b) Which component of living houses helps man in proper disposal of human wastes?  
(c) State any two dangers of staying in a dirty environment.  
(i) \_\_\_\_\_  
(ii) \_\_\_\_\_
50. (a) Name any one example of a legume plant.  
(b) Give one way how legumes are useful to the soil.  
(c) How are beans dispersed?  
(d) State one advantage of fruit and seed dispersal.

51. The structure below shows classification of plants. Study it carefully and answer questions that follow.



(a) Name the group marked L and M on the diagram above.

(i) L \_\_\_\_\_ (ii) M \_\_\_\_\_

(b) Which **type of germination** do plants marked T undergo?

(c) How are flowering plants similar to group M in terms of production?  
\_\_\_\_\_

52. (a) Name the **two** types of germination.

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

(b) **Apart from warmth**, name **two** other conditions necessary for germination to take place.

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

53. (a) Mention any **one** raw material for photosynthesis.

(b) Give **one** importance of photosynthesis to;

(i) plants

(ii) animals

(c) Why are plants unable to make their food at night?  
\_\_\_\_\_

54. (a) Why do farmers carry out transplanting in evening?

(b) Which type of weather encourage farmers to put their planting materials in the soil?

(c) How is windy weather dangerous to people in a community?  
\_\_\_\_\_

(d) Why is it not advisable to have tall trees near a living house?  
\_\_\_\_\_

55. (a) Mention any **one** example of a non-flowering plant.

(b) How are **ferns** similar to **mushrooms**?  
\_\_\_\_\_

(c) Give **two** uses of roots to a plant .

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

# THE PRIME P.6 INTEGRATED SCIENCE MID TERM II MARKING GUIDE

## Section A (40 Marks)

N.O	Answer	Competence	Topic/Sub-topic Curry Pg	Life skills	Values	EL	EL
1.	▪ Root cap	Identifies the root part that protects the growing tip from damage	Classification of plants	Environmental awareness	Appreciation	P.6	K
2.	▪ Electric flat iron/ television/ fridges/ washing machines/ electric kettles	Identifies equipments that need electricity to work.	Electricity and magnetism	Critical thinking	Logic	P.6	K
3.	▪ Houseflies spread disease causing germs to people.	Describes why houseflies are regarded as disease vectors	Vectors and diseases	Critical observation	Concern	P.4	K
4.	▪ They provide minerals like building materials/ they are weathered to form soil.	Gives the importance of rocks to people	The soil	Critical thinking	Logic	P.5	C
5.	▪ Plants/ animals/ soil/ water/ the sun/ air/ wind	Identifies living renewable resources.	Resources in the environment	Environmental awareness	Care, love	P.6	K
6.	▪ Beans reproduce by means of seeds while ferns reproduce by means of spores.	Classifies modes of reproduction by different plants and characteristics.	Classification of plants	Environmental awareness	Care	P.6	C
7.	▪ Bee in container A	States the characteristics of Insects	Classification of animals	Critical thinking	Logic	P.3	A
8.	▪ Its spiracles have been blocked.	Names examples of vertebrates and invertebrates.	Classification of animals	Critical thinking	Logic	P.6	C
9.	▪ Reptiles/ Amphibians/ birds/ fish	Identifies classes of food and their values	Food and nutrition	Critical thinking	Love	P.6	K
10.	▪ To get vitamin C in our body.	Describes different classes of vertebrates and invertebrates.	Classification of animals	Critical thinking	Appreciation	P.6	A
11.	▪ Spider/ A spider	Identifies group of flowering plants with prop root system	Classification of plants	Environmental awareness	Care	P.6	C
12.	▪ For the mosquito larvae to feed on the dead decaying matter present in stagnant water.	States uses of wind	Classification of plants	Critical thinking	Love	P.6	C
13.	▪ Monocotyledonous plants/ monocots	Describes the term immunity	Immunisation	Creative thinking	Logic	P.6	K
14.	▪ Roots give extra support to a plant.	Identifies the best food for babies.	Breast feeding (food taboos and customs)	Critical thinking	Care	P.5	K
15.	▪ It is used for winnowing/ it is used for seed dispersal.	Describes the effects of heat on matter.	Heat energy	Creative thinking	Appreciation	P.5	K
16.	▪ Immunity is the ability of the body to fight against diseases.	Discusses ways of maintaining proper sanitation	The soil	Critical thinking	Love	P.4	C
17.	▪ Breast milk	Identifies different types of soil	Classification of plants	Environmental awareness	Care	P.6	A
18.	▪ It causes expansion/ it causes melting of metals	Describes characteristics of plants	Classification of plants	Critical thinking	Appreciation	P.6	A
19.	▪ By disposing rubbish in dust bins/ rubbish pits.	Describes the components of first aid kit and their uses.	Accidents, poisoning and first aid	Creative thinking	Love	P.4	C
20.	▪ Clay soil is used for making bricks/ pots/ items / ceramics	Describes renewable resources in the environment.	Resources in the environment	Critical thinking	Care	P.6	K
21.	▪ Plants have chlorophyll while animals do not have/ plants make their own food while animals feed on food made by plants.	Identifies group of birds with such beaks	Classification of birds	Critical thinking	Appreciation	P.6	K
22.	▪ To prevent easy spread of diseases through blood contact.	Identifies group of birds with such beaks	Classification of birds	Environmental awareness	Logic	P.6	A
23.	▪ Minerals/ crude oil (petroleum) coal						
24.	▪ Preying birds/ birds of prey.						
25.	▪ It is strong, sharp and hooked for tearing fresh flesh						

26	▪ Bacteria/ Earthworms	Describes components of soil	The soil	Critical thinking
27	▪ Mangoes have a bright pericarp/ mangoes are juicy or succulent.	Describes the mechanism of seed dispersal.	Classification of plants	Critical thinking
28	▪ Mercury	Describes liquids used in thermometers	Heat energy	Creative thinking
29	It is used to keep rubbish.	Describes the different ways of promoting sanitation	Sanitation	Problem solving
30	▪ Heart	Identifies body part responsible for pumping blood to all body parts.	The circulatory system	Environmental awareness
31	▪ To collect oxygen and release carbon dioxide.	Describes why blood go to lungs before it is pumped to all parts of the body	The circulatory system	Creative thinking
32	▪ It is used for cutting finger nails short.	Identifies the use of a nail cutter	Personal hygiene	Critical thinking
33	▪ By cutting our long finger nails short that hide germs.			Environmental awareness
34	▪ It control sound intensity in the house/ it cools the house	Identifies the different sources of heat.	Heat energy	Critical thinking
35	▪ The sun/ sun	States the natural source of light	Resources in the environment.	Creative thinking
36	▪ Feathers insulate the body of the bird.	Describes how feathers keep birds' body warm.	Heat energy	Critical thinking
37	▪ Mineral salts	Identifies classes of food and their values	Food and nutrition	Environmental awareness
38	▪ By keeping the food store dry/ by keeping food store on raised stands.	Describes ways of preserving food	Food and nutrition	Critical thinking
39	▪ Bees help to pollinate flowers	Identifies agents of pollination	Classification of plants.	Critical thinking
40	▪ Incisors are used for biting and cutting.	Describes the importance of teeth.	The teeth	Creative thinking

#### Section B (60 Marks)

41.	(a) Some plants are used as herbs/ plants are eaten as food/ plants provide oxygen to people/ plants give us natural plant fibre like cotton and sisal/ plants help in rain fall formation etc. (b) By afforestation/ by restricting bush burning/ through agroforestry/ through re-afforestation.	Explains the uses of resources in the environment.	Resources in the environment.	Critical thinking
42	(i) Ovules – female reproductive cells of a plant. (ii) Pollen grains – male reproductive cells of a plant. (iii) Stamen – male part of a flower. (iv) Pistil – female part of a flower.	Describes parts of a flower.	Classification of plants.	Critical thinking,
43	(a) Propagation is the way how living things increase in number. (b) (i) banana plant – suckers (ii) Irish potato – stem tubers. (c) By mulching/ by watering them/ by weeding/ by spraying them	Describes ways of propagating plants.	Classification of plants	Environmental awareness
44	(a) Cross pollination (b) Insect (c) They have scent/ they have bright coloured petals/ they have nectar. (d) It enables fertilization to take place/ it enables improve in crop yields.	Describes pollination agents and characteristics of flower pollinated by different agents.	Classification of plants	Critical observation, creative thinking
45	(a) layers (b) it provides manure to farmers. (c) Lack of enough warmth (d) Through proper feeding/ through giving them proper treatment/ through de-beaking	Identifies the different types of chicken	Keeping poultry and bees	Problem solving

46	(i) skin (ii) Polio (iii) Lungs (iv) Liver	Identifies the effects of different immunisable diseases.	Immunization	Critical thinking	Logic
47	(a) cotton, sisal, banana fibres, raffias, silk cotton, flax, hemp (b) firewood, charcoal, saw dust, wood shavings.	Mentions examples of material got from plant fibres and wood fuel.		Critical thinking	Care
48	(a) watering (b) transplanting/ clearing the land/ ploughing/ pruning/ weeding/ spraying/ thinning/ mulching/ harvesting. (c) during dry season	Demonstrates knowledge of practices of growing some crops.	Crop growing	Critical observation	Logic
49	(a) Sanitation (b) Latrine/ toilet (c) It leads to spread of diseases/ it leads to spread of germs/ it cause bad smell in the environment/ it leads to breeding of germs.	Describes dangers of staying a dirty environment.	Sanitation	Problem solving	Care
50	(a) beans/ peas/ g.nut/ soya beans (b) They have bacteria which fix nitrogen into the soil. (c) By animals. (d) It prevents competition for soil nutrients by crops.	Describes groups of flowering plants and their uses.	Classification of plants	Environmental awareness, creative thinking	Care
51	(a) (i) L – Non- flowering plants (ii) M – conifers (b) Epigeal germination (c) Both reproduce by means of seeds.	Gives examples of flowering and non flowering plants.	Classification of plants	Critical observation	Logic
52	(a) Epigeal germination, Hypogea germination (b) Oxygen, water/ moisture	Identifies types of germination	Plant life	Environmental awareness	Logic
53	(a) water, sunlight, carbon dioxide (b) (i) photosynthesis enables plants to make their own food. (ii) photosynthesis helps man to get food and oxygen. (c) Due to lack of sunlight energy at night/ absence of sunlight during the night.	Describes raw materials, importance of photosynthesis to plants and animals in the environment.	Plant life (classification of plants)	Critical thinking	Love,
54	(a) To prevent the wilting of seedlings through evaporation (b) Rainy weather (c) It destroys houses/ it destroys crops/ wind is an agent of soil erosion. (d) strong winds may blow them and fall on the house/ tall trees may break and hit the house.	Describes changes in weather	Plant life	Environmental awareness	Logic,
55	(a) mosses/ ferns/ liverworts (b) Both reproduce by means of spores. (c) Roots hold the plants firmly in the soil/ roots absorb water and dissolved minerals for the plants, some roots provide extra support to plants, some roots are used in vegetative propagation, some roots store food for the plant.	Describes characteristics of flowering plants and non flowering plants	Plant life	Environmental awareness	Logic care