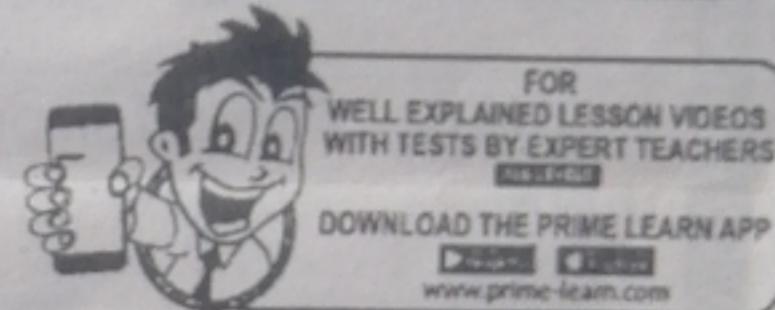




THE PRIME EXAMINATIONS 2024

P.6 BEGINNING OF TERM II INTEGRATED SCIENCE

Time allocated 2 hours 15 minutes



WARNING: Not to be reproduced electronically!!!.

Name:

Signature:

School:

District Name:

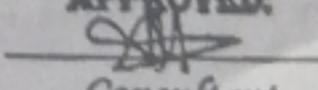
READ THE FOLLOWING INSTRUCTIONS CAREFULLY

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		
TOTAL		

APPROVED:


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.

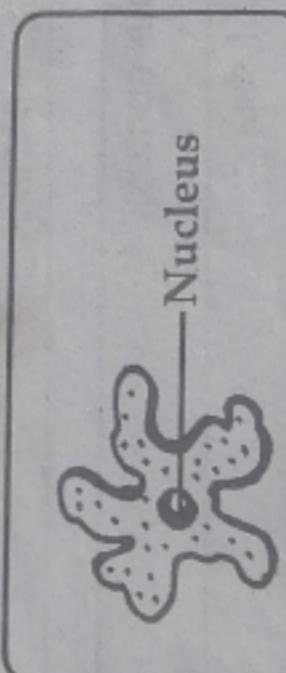
WARNING: Not to be reproduced electronically!!!.

- Section A (40 Marks)**
- Name any one example of scavenger birds.
 - Give any one way in which planting of grass in the compound controls soil erosion.
 - Mention any one example of a biological change that occurs in plants.
 - State the reason for proper tightening of the strings of a guitar before strumming them.
 - Which method of heat transfer helps crop farmers to dry their harvested legumes using heat from the sun?
- The diagram below shows a mode of reproduction in living organisms. Study and use it to answer questions 6 and 7.
-
- Which mode of reproduction is shown above?
 - Identify one living organism in the environment which reproduces as shown above.
 - Name the blood vessel that collects blood from different body organs to the heart.
 - Give any one similarity between *rusting* and *germination*.
 - State any one way of saving heat energy at our home.
 - Give any one piece of advice you can give to a parent whose children are suffering from marasmus.
 - State any one life skill that can safeguard school going children from alcoholism.

© Prime Educational Consult 2024. TEL: 0752 999554, 0772 058141 Page | 1
THE PRIME P6 INTEGRATED SCIENCE BEGINNING OF TERM II EXAMINATIONS 2024,
FOR ACADEMIC EXCELLENCE, ALWAYS USE THE PRIME; SCHEMING FRAMEWORKS, HOLIDAY PACKAGES, LEARNING GAMES,
LESSON COURSE BOOKS AND PUPILS' WORKBOOKS.
Visit "www.prime-learn.com" for Online Video lessons, Exercises and Trial tests with Marking guides.

13. Give any one industrial use of wool obtained from merino sheep.
14. Name the digestive disorder prevented by eating food stuffs rich in roughages.
15. *Apart from seed selection*, mention any one other practice done during the planting of crops.
16. State any one sign of poor sanitation in a class.
- WARNING: Not to be reproduced electronically!**
17. Name the property of air shown in the diagram above.
18. *Apart from the above*, mention any one other property of air.
19. State any one importance of reptiles in the environment.
20. Give one way of preventing malaria in our homes.
21. State any one factor that affects speed of sound.
22. *Apart from death of the queen bee*, give any one other condition that can lead to swarming in bees.
23. State any one principle of Primary Health Care.
24. Give the use of canine teeth to human beings during digestion.
25. Give a reason why people are advised to cut long fingernails short.
26. Apart from having jointed legs, mention any one other characteristic of arthropods.
- WARNING: Not to be reproduced electronically!**

© Prime Educational Consult 2024. TEL: 0752 999554, 0772 058141 Page | 2
THE PRIME P6 INTEGRATED SCIENCE BEGINNING OF TERM II EXAMINATIONS 2024, P TO
FOR ACADEMIC EXCELLENCE, ALWAYS USE THE PRIME; SCHEMING FRAMEWORKS, HOLIDAY PACKAGES, LEARNING GAMES,
LESSON COURSE BOOKS AND PUPILS' WORKBOOKS.
Visit "www.prime-learn.com" for Online Video lessons, Exercises and Trial tests with Marking guides.

27. Name any one example of a percussion musical instrument.
28. Why do some plants shed their leaves during the dry season?
29. Apart from **coco yams**, name any one other example of stem tubers.
30. Name one body organ affected by excessive use of alcohol.
31. Why is it not advisable to carry out transplanting of seedlings in the afternoon?
32. How does hanging of green vegetables in a poultry house help to prevent poultry diseases?
33. Identify any one disease that can destroy the red blood cells.
34. State what would be observed when a panga is left outside the house for two nights.
- The diagram below shows a component of blood. Study and use it to answer questions 35 and 36.
- 
35. Name the blood cell shown in the diagram above.
36. State the function of the above blood cell in the body.
37. Give a reason why a bat is called a mammal but not a bird.
38. Which type of fertilization is found in fish?
39. Why does water go through sand soil very fast?
40. Mention any one disease spread through 4Fs germ path.

- WARNING:** Not to be reproduced electronically.
41. (a) Mention any two conditions, needed for photosynthesis to take place.
 (i) _____
 (ii) _____
- (b) Which component of air is increased in the environment during photosynthesis?

- (c) How is the process of photosynthesis important to plants?

42. (a) Apart from **notation method**, mention any one other method of storing sound.

- (b) Give any two devices used to reproduce sound stored by notation method.
 (i) _____
 (ii) _____
- (c) Give any one way of reducing echoes in cinema halls.

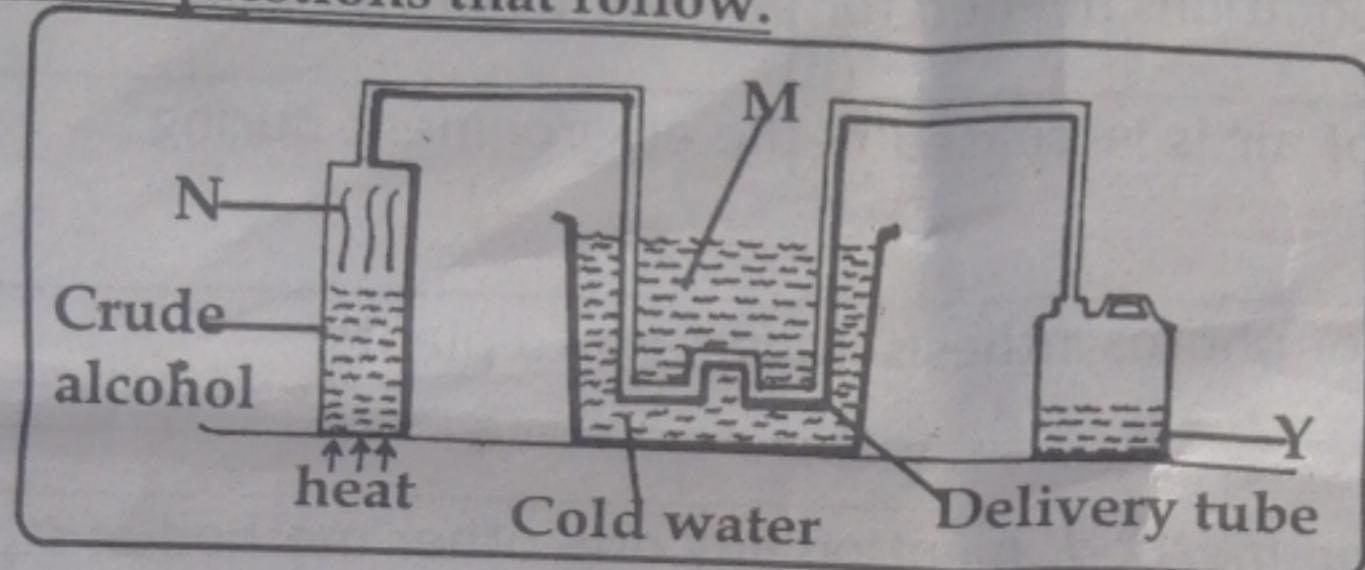
43. The table below shows food stuffs that were included in the diet of children at Olea Academy throughout the week. Study and use it to answer the questions that follow.
- | Day | Food stuffs |
|-----------|--|
| Monday | Fried cassava + G nuts +milk |
| Tuesday | Posho + Irish potato + chicken + Liver |
| Wednesday | Beans + matooke + turnips + green leafy vegetables |
| Thursday | Meat + sweet potato + Liver + matooke |
- (a) Name any two food stuffs from the table above that increase volume of blood in the body.
 (i) _____
 (ii) _____
- (b) State any one importance of feeding children on such a diet at school.

- (c) Identify one food stuff from the table above rich in fats and oil.

44. (a) Mention the two groups of warm-blooded vertebrates.
 (i) _____
 (ii) _____
- (b) What do tadpoles use for breathing?

- (c) Give any one factor considered before classifying animals.

45. **WARNING: Not to be reproduced electronically!!** The diagram below shows a method of making alcohol. Study and use it to answer questions that follow.



- (a) Name the physical processes at point N and M
 (i) N _____ (ii) M _____
- (b) What name is given to substance marked Y above?
- (c) Identify the method of making alcohol shown above.
46. (a) Mention any two dangerous substances found in tobacco.
 (i) _____ (ii) _____
 (b) Give any two dangers of smoking to a pregnant mother.
 (i) _____
 (ii) _____
47. (a) What is meant by the term **germination**?

- (b) Mention any two conditions needed for germination to take place.
 (i) _____ (ii) _____
 (c) Name any one plant that undergoes hypogea germination.
48. (a) Give any one way how soil is formed.

- (b) Which type of soil is best for;
 (i) Growing rice _____
 (ii) Making ceramics _____
 (c) Mention any one animal that uses soil as its habitat.

49. **WARNING: Not to be reproduced electronically!!** The table blow shows the dentition of permanent set of teeth. Study and complete it correctly.

Type of teeth	Upper jaw	Lower jaw	Total
i) Incisors	4		8
ii) Canines		2	4
iii) Premolars	4	4	
iv) Molars	6		12

50. What is meant by the following terms as used in sound energy?

(i) pitch

(ii) Echo

(b) Name the part of the ear that traps sound waves from the environment.

(c) How do people produce sound?

51. (a) Name the weather instrument used for measuring the amount of rainfall received in an area.

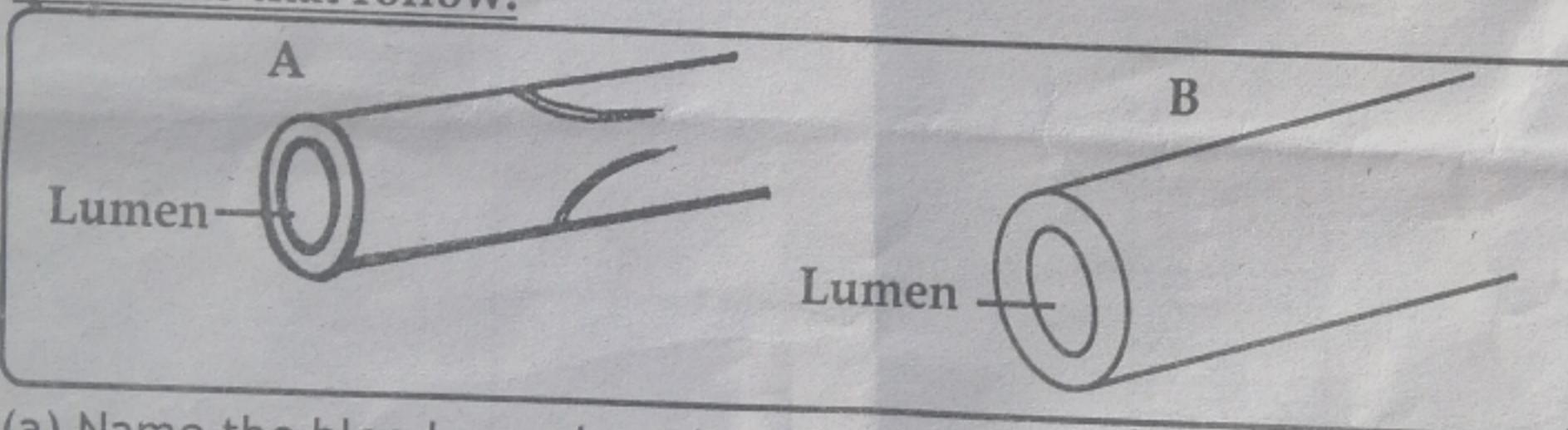
(b) State the importance of the sun in the rain cycle.

(c) Give two uses of rain water to man.

(i)

(ii)

52. The diagrams below shows blood vessels. Study and use it to answer the questions that follow.



(a) Name the blood vessel marked A.

(b) Which kind of blood is carried by blood vessel A and B from the diagram above?

(i) A _____

(ii) B _____

(c) State any one structural difference between blood vessel A and B.

53. (a) Write PHC in full.

(b) Mention any two elements of PHC.

(i) _____

(ii) _____

(c) State any one role played by an individual in promoting PHC.

54. The lists below show different organisms. Study and use it to answer questions that follow.

List A	List B
Frogs	Crocodiles
Toads	Lizards
Caecilians	Snakes

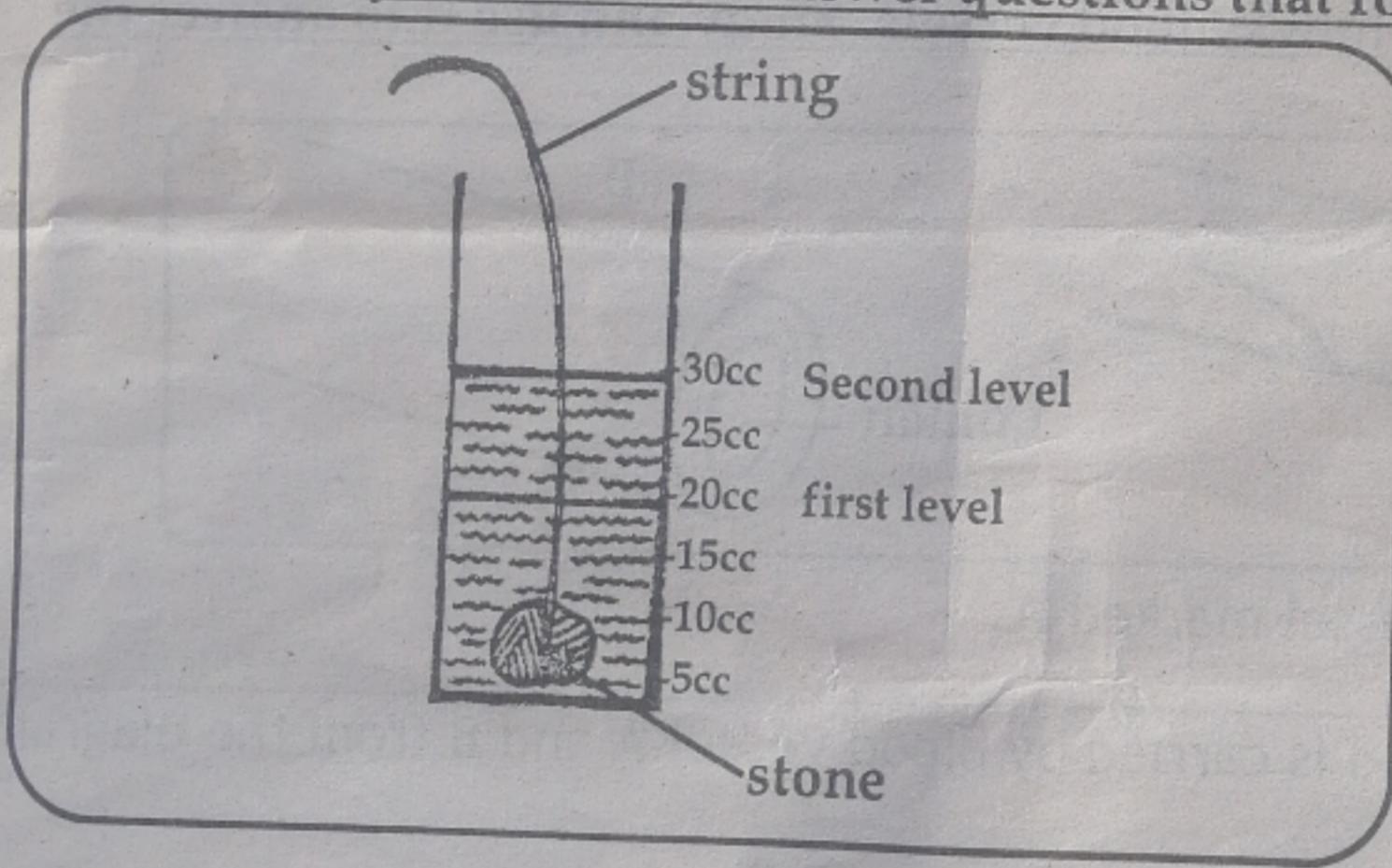
(a) Name the group of vertebrates in List A.

(b) State the mode of reproduction of organisms in List B.

(c) State any one similarity between organisms in List A and B.

(d) Name any one organism missing in List A.

55. The diagram below shows a method of measuring the volume of irregular objects. Study and use it to answer questions that follow.



(a) Name the method of finding the volume of a stone shown above.

(b) Calculate the volume of a stone.

(03 Marks)

THE PRIME P.6 INTEGRATED SCIENCE BEGINNING OF TERM II MARKING GUIDE 2024.

No	Answers	Competence	Section A (40 Marks)				
			Topic/Sub-topic: Curr Pg	Life skills	Values	Class	Level
1.	* Vulture/ crows/ Marabou storks.	Identifies examples of scavenger birds.	Classification of animals. (P.59) Soil (P.37)	Critical thinking Problem solving	Appreciation Care	P.5 P.5	K C
2.	* Grass helps to reduce speed of flowing water/ grass roots bind soil particles together/ grass prevents rain drops from hitting the soil directly.	Discusses ways how grass help to control soil erosion.					
3.	* Growth/ germination/flowering/ shedding of leaves/ fertilisation in flowers/ripening of fruits/wilting of plants.	Names examples of biological changes in plants.	Types of changes in the environment. (P.49) Sound energy (P.50)	Environmental awareness Creative thinking	Logic Concern	P.5 P.6	A C
4.	* To enable the strings to produce high pitched sound.	Discusses the reason for tightening guitar strings.					
5.	* Radiation.	Mentions the method of heat transfer that helps in drying of harvested legumes.	Heat energy. (P.40)	Critical thinking	Appreciation	P.5	C
6.	* Cell division/binary fission.	Identifies the mode of reproduction in the diagram.	Bacteria and fungi (P.46)	Environmental awareness	Concern	P.5	A
7.	* Bacteria/ Amoeba/ some viruses/ algae.	Gives one organism that reproduces as shown in the diagram.	Bacteria and Fungi. (P.46)	Effective communication	Logic	P.5	K
8.	* Vena cava.	Names the blood vessel that collects blood from different organs to the heart.	Circulatory system. (P.67)	Critical thinking	Appreciation	P.6	K
9.	* Both rusting and germination need oxygen to take place/ both rusting and germination need water to occur.	Gives similarities between rusting-and germination.	Types of changes in the environment. (P.49)	Environmental awareness	Logic	P.5	C
10.	* By switching off lights/ bulbs when not in use/ by switching off fridges/TVs/radios/phones when not in use.	Gives ways of saving heat energy at home.	Saving energy at home	Decision making	Concern	P.3	C
11.	* I advise them to feed them on food rich in carbohydrates/energy giving foods.	Mentions advice about controlling marasmus among children.	Our food. (P.74)	Self awareness	Concern	P.4	C
12.	* Assertiveness/self - awareness/copying with stress/decision making.	Mentions life skills that safeguard one from alcoholism.	Alcohol, smoking and drugs in society. (P.72)	Problem solving	Care	P.6	C
13.	* Wool is used for making woolen items.	Gives the industrial use of wool.	Keeping goat, sheep and pigs. (P.50)	Creative thinking	Care	P.5	C
14.	* Constipation.	Mentions the digestive disorder caused due to lack of roughages.	Our food. (P.9)	Self awareness	Concern	P.4	K
15.	* Digging/ sowing/ gap filling/ dusting seeds/ soaking seeds.	Gives the practice done during planting of crops.	Crop growing (P.3)	Responsibility	Care	P.4	K
16.	* Presence of rubbish/ presence of houseflies/ bad smell in the class/ dusty classroom.	Gives one sign of poor sanitation in a class.	Sanitation (P.15)	Critical observation	Concern	P.4	C
17.	* Air has weight.	Names the property of air drawn above.	Air and the sun. (P.22)	Critical thinking	Logic	P.3	K
18.	* Air exerts pressure/ air can be compressed/ Air occupies space.	Mentions the other property of air.	Air and the sun (P.22)	Effective communication.	Logic	P.3	A
19.	* They are sources of hides/ they control vectors/ they are sources of foreign income/ they are source of food.	Gives the importance of reptiles in the environment.	Classification of animals. (P.44)	Critical thinking	Observation	P.6	C
20.	* By sleeping under treated mosquito nets/ by rearing fish in water ponds/ by planting lemon grass in the compound/ by closing doors and windows early in the evening.	Gives the way of preventing malaria at home.	Diseases spread by vectors. (P.48)	Critical thinking	Care	P.4	C
21.	* Altitude/ heat/ wind/ temperature.	Gives the factor that affects speed of sound.	Sound energy. (P.50)	Critical thinking	Logic	P.6	C

22	▪ Lack of nectary flowers around/ bad smell/ attacks from enemies/ when a new queen is born/ noise/ leaking hives.	Gives other conditions that can lead to swarming.	Keeping poultry and bees. (P.29)	Effective communication	Concern	P.5	C
23	▪ Full participation of community members/ All health services be available/ accessible/affordable/ different approaches must be used in PHC activities.	Gives the principal of PHC	PHC (P.56)	Self awareness	Acceptance	P.5	K
24	▪ Canine teeth are used for tearing food.	States the use of canine teeth.	The teeth. (P.13)	Critical thinking	Care	P.4	C
25	▪ To remove hiding places for germs.	Gives the reason for grooming long finger nails short.	Personal hygiene. (P.7)	Problem solving	Care	P.4	C
26	They have segmented bodies/ they have exo skeleton.	Mentions other characteristics of arthropods.	Classification of animals (P.44)	Critical thinking	Concern	P.6	C
27	▪ Drum/ bell/ cymbal/ xylophone.	Identifies examples of percussion instruments.	Sound energy. (P.62)	Environmental awareness	Appreciation	P.6	K
28	To reduce the rate of transpiration.	Gives a reason why some plant shed leaves.	Plant life. (P.1)	Effective communication	Logic	P.4	C
29	▪ Irish potatoes.	Names the examples of stem tubers.	Crop growing. (P.37)	Critical thinking	Logic	P.5	K
30	▪ Brain/ Liver.	Names one body organ affected by alcohol.	Alcohol, smoking and drugs in the society.	Critical thinking	Responsibility	P.6	A
31	To prevent wilting of seedlings/ to prevent drying of seedlings.	Identifies reasons for not transplanting seedlings in the afternoon.	Plant life. (P.53)	Problem solving	Care	P.4	C
32	▪ It breaks boredom in the poultry house/ it makes birds busy.	Mentions reasons why green vegetables are hanged in a poultry house.	Keeping poultry and bees. (P.53)	Creative thinking	Concern	P.5	C
33	▪ Malaria/ sickle cell anaemia.	Gives one disease that destroys red blood cells.	Circulatory system (P.6)	Creative thinking	Love	P.6	A
34	▪ It would rust/ a brownish coating on it.	States what will be observed when a panga is left outside at night.	Types of changes in the environment.	Decision making	Concern	P.5	C
35	▪ White blood cell.						
36	▪ It produces antibodies to fight germs/infections/ it has an irregular shape to engulf germs(infections).	States the function of the above blood cell.	Circulatory system (P.67)	Critical observation	Love	P.6	C
37	▪ It has mammary glands/ it produces alive young ones/ it has fur on its body/ it breastfeeds its young ones.	Gives a reason why a bat is called a mammal but not a bird.	Classification of animals.	Creative thinking	Responsibility	P.5	C
38	External fertilisation.	Gives the type of fertilisation in fish.	Classification of animals (P.73)	Decision making	Concern	P.6	K
39	▪ The particles of sand have big pores/ large air spaces in them.	Gives a reason why water goes through sand soil very fast.	Soil (P.37)	Critical observation	Logic	P.5	C
40	▪ Diarrhoea/dysentery/ typhoid/cholera.	Mentions one disease spread through 4Fs.	Vectors and diseases. (P.80)	Self awareness	Care	P.4	K

Section B (60 Marks)

41.	(a) Sunlight/ chlorophyll. (b) Oxygen. (c) It helps plants to obtain food / It helps plants to get oxygen.	Describes photosynthesis.	Plant life (P.53)	Environmental awareness	Care	P.4	C
42	(a) Recording method. (b) Piano/keyboards/ guitars/ recorders/bow harp/ xylophone. (c) By putting thick blankets in halls/ by putting soft porous materials in halls/ by putting curtains.	Mentions methods of storing and reproducing sound.	Sound energy. (P.50)	Critical thinking	Care	P.6	C
43	(a) Liver/turnips/green leafy vegetables. (b) To prevent deficiency disease/ to grow healthy. (c) Chicken/g nuts/ liver.	Describes food stuffs and their values in the body.	Our food. (P.74)	Effective communication	Concern	P.4	A

44	(a) birds/ mammals. (b) gills. (c) Mode of reproduction/ number of legs/ hooves/ types of food/ mode of movement/ type of skeleton/ habitats.	Discusses warm blood animals and cold blooded animals.	Classification of animals (P.73)	Critical thinking	Care	P.6	K
45	(a) (i) N - Evaporation (ii) M - Condensation (b) distillate. (c) distillation method.	Discusses distillation method of making alcohol.	Alcohol, smoking and drugs in the society. (P.72)	Self awareness	Concern	P.6	A
46	(a) Nicotine/tar. (b) It leads to miscarriage/ low birth weights/ still birth/ premature birth.	Discusses smoking and its dangers.	Alcohol, smoking and drugs in the society. (P.72)	Critical thinking	Care	P.6	C
47	(a) Germination is the growing of a seed into a seedling. (b) Warmth/ oxygen/ water/moisture. (c) Maize/ peas/ sorghum/ rice/ wheat.	Discusses the process of germination in plants.	Plant life (P.53)	Effective communication	Care	P.4	C
48	(a) Weathering of rocks/ decomposition of organic matter. (b) (i) growing rice - clay-soil. (ii) making ceramics - clay soil. (c) earthworm/ termites/ants/rats/squirrels/porcupines.	Discusses ways how soil is formed.	Environment in our sub - county.	Critical thinking	Care Love	P.3	K
49	(i) 4 (ii) 2 (iii) 8 (iv) 6	Describes human dentition.	The teeth. (P.15)	Critical observation	Logic	P.4	A
50	(a)(i) Pitch - Is highness or lowness of sound. (ii) Echo - Is reflected sound. (b) Pinna. (c) By vibration of the vocal cords.	Discusses pitch and echo.	Sound energy.	Critical thinking	Care	P.6	C
51	(a) Rain gauge. (b) The sun heats waterbodies to cause evaporation/ the sun heats plants to cause transpiration. (c) It supports crop growth/ it helps in irrigation of plants.	Discusses rain cycle and weather instrument for rainfall.	Weather changes around us. (P.64)	Environmental awareness	Logic Love	P.4	K
52	(a) A - Vein. (b) (i) A - deoxygenated blood (ii) B - oxygenated blood. (c) Blood vessel B has no valves while A has valves/ Blood vessel A has thin walls while B has thick walls.	Discusses arteries and veins and their functions.	Circulatory system (P.67)	Critical thinking	Care	P.6	C
53	(a) Primary Health Care. (b) Immunisation/ family planning/oral and dental health water and sanitation/food and nutrition/first aid. (c) Bathing daily/ washing hands before eating food/ ironing clothes/ brushing teeth/cutting finger nails short/ washing clothes.	Mentions elements of PHC	PHC (P.70)	Critical thinking	Care	P.5	C
54	(a) Amphibians. (b) Sexual reproduction. (c) Both lay eggs/ have back bones/both are cold blooded. (d) Salamanders/newts.	Discusses groups of vertebrates.	Classification of animals. (P.43)	Effective communication	Care	P.6	K
55	(a) Displacement method. (b) Volume = 2nd level - 1st level = 30cc - 20cc Volume = 10cc	Describes displacement method.	Measurements (P.58)	Critical thinking	Logic	P.5	A