



K.P.C PUBLIC SCHOOL, KHARGHAR
ASSESSMENT II - 2023-24

GRADE: VII
SUBJECT: SCIENCE

MARKS :100
TIME: 3 HRS

General Instructions: This question paper comprises five sections A , B , C , D and E.
All questions are compulsory.

SECTION – A

(This section carries 1 mark each and comprises of :

A) Tick the correct answer

B) Fill in the blanks

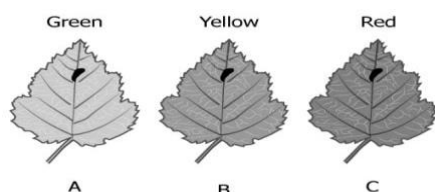
C) True or false

D) Match the following

A) Tick (✓) the correct answer:

(1 x 12=12)

1. The image shows the different coloured leaves.



A student claimed that leaves other than green show less photosynthetic activity. Is the claim made by the student right?

- (a) No, as other leaves also have chlorophyll to perform the same level of photosynthesis.
- (b) Yes, as only green coloured leaves have chlorophyll to perform more photosynthesis.
- (c) No, as other leaves can also perform photosynthesis even in the absence of chlorophyll.
- (d) Yes, as only green coloured leaves can absorb energy from the sunlight to perform photosynthesis.

2. Assertion- Dark coloured objects absorb more heat than the light coloured object.

Reason- We feel more comfortable in light coloured clothes in the summer.

- (a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- (b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- (c) Assertion is correct statement but reason is wrong statement.
- (d) Assertion is wrong statement but reason is correct statement.

3. A student took a half-filled test tube with dilute hydrochloric acid and a few drops of phenolphthalein in the solution. As he put a few drops of sodium hydroxide into the solution, it turns to light pink. Further, he put a few extra drops of the acid and observes that the colour disappears. What caused the colour to disappear from the solution?

- (a) The volume of the solution increased
- (b) Turning of the mixture into a neutral solution
- (c) Decrease in the amount of acid in the solution
- (d) An increase in the amount of base in the solution

4. Sometimes when we do heavy exercise, anaerobic respiration takes place in our muscle cells. What is produced during this process?

- (a) alcohol and lactic acid (b) alcohol and CO₂
- (c) lactic acid and CO₂ (d) lactic acid only

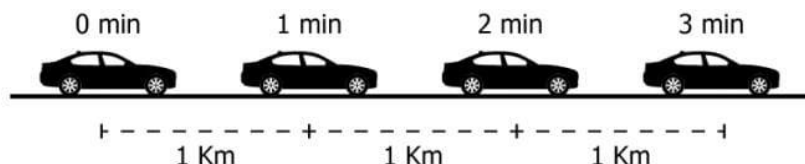
5. The acid present in the stomach:

- (a) kills the harmful bacteria that may enter along with the food.
- (b) protects the stomach lining from harmful substances.
- (c) digests starch into simpler sugars.
- (d) makes the medium alkaline.

6. The correct symbol to represent the speed of an object is:

- (a) 5 m/s (b) 5 mp (c) 5 m/s¹ (d) 5 s/m

7. The time and position of a moving car covering a distance of 3 km is shown in the image.



What can be concluded from the position of the car?

- (a) It was moving at a uniform speed of 60 km/hr
- (b) It was moving at a non-uniform speed of 60 km/hr
- (c) It was moving at uniform speed as it covered 3 km in 3 min
- (d) It was moving at non-uniform speed as it covers 3 km in 3 min

8. The muscular tube through which stored urine is passed out of the body is called

- (a) kidney (b) ureter (c) urethra (d) urinary bladder

9. In a tall tree, which force is responsible for pulling water and minerals from the soil?

- (a) Gravitational force (b) Transportation force (c) Suction force (d) Conduction force

10. Which one is filled in the bulb of a thermometer?

- (a) Mercury (b) Lead (c) Copper (d) Silver

11. The raw materials for photosynthesis are

- (a) CO₂, water (b) CO₂, O₂, H₂, (c) N₂, water (d) O₂, water

12. Which of the following set of substances contain acids?

- (a) Grapes, lime water (b) Vinegar, soap (c) Curd, milk of magnesia (d) Curd, vinegar

B] Fill in the blanks:

(1 x 6 = 6)

13. Arteries and veins are joined by a network of _____.

14. In a simple pendulum, the metallic ball suspended by thread is called its _____.

15. The food synthesised by plants is stored as _____.

16. The largest gland in the human body is _____.

17. The chemical formula for Sulphuric acid is _____.

18. A cold steel spoon is dipped in a cup of hot milk. Heat is transferred to its other end by the process of _____.

C] True or False:

(1 x 6 = 6)

19. Our sense of touch about hotness or coldness is not always reliable.
20. Sodium hydroxide turns blue litmus red.
21. Plants which synthesise their food are called saprotrophs.
22. During heavy exercise the breathing rate of a person slows down.
23. Amoeba is a many celled animal.
24. Partition between the chambers of heart avoid mixing up of blood rich in oxygen with the blood rich in carbon dioxide.

D] Match the following:

(1 x 6 = 6)

COLUMN 'A'	COLUMN 'B'
25. Earthworm , Leech	a. Changes red litmus blue
26. Rectum	b. Birds , snakes , lizards
27. Heterotroph	c. Periodic motion
28. Uric acid	d. Storage of undigested food
29. Motion of a pendulum	e. Skin
30. Milk of magnesia	f. Man

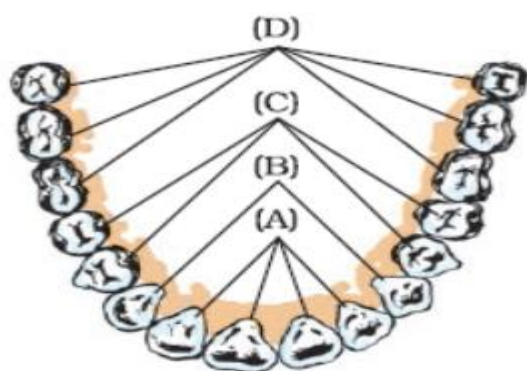
SECTION - B

(This section comprises of Short Answer Type Question carrying 2 marks each.)

(2x 10 =20)

31. Name two bases used in the laboratory. Write their formulae.
32. What is the limitation of clinical thermometer?(Any two)
33. Name various modes of nutrition. (Any four)
34. Label the different types of teeth :

(1+1)
2
2
 $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$



A : _____ B: _____ C: _____ D: _____

35. Name the four organs involved in formation of excretory system in humans. 2
36. A simple pendulum takes 32 sec. to complete 20 oscillations. What is the time period of the pendulum? 1+1
37. What is motion? Name two types of motion. 1+1
38. Explain only by equations: 1+1
 - (i) Aerobic respiration
 - (ii) Anaerobic respiration in yeast
39. What do you understand by a parasite? Give examples. 2
40. What are natural indicators? Give an example. 2

SECTION – C

(This section comprises of Short Answer Type Question carrying 3 marks each.)

(3 X 6 =18)

41. Salma takes 20 minutes from her house to reach her school on a bicycle. If the bicycle has a speed of 4 m/s, calculate the distance between her house and the school. 3

42. Name the only artery that carries carbon-dioxide – rich blood. What is the difference between arteries and veins? (Write any two differences)

1+2

43. What are respiratory organs in different organisms? 3

OR

43. Pick the odd one out from each of the groups given below on the basis of respiratory organs. 1+1+1

Give reasons for your answer.

(a) Cockroach, grasshopper, snail, ant

(b) Crocodile, whale, dolphin, fish

(c) Snake, tadpole, crow, goat

44. Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also. 1+2

45. Factory waste is neutralised before disposing it into the water bodies. Explain why? 3

46. Distinguish between autotrophs and heterotrophs.(Any three) 3

SECTION – D

(This section comprises of Long Answer Type Question carrying 5 marks each.)

(4 x 5 = 20)

47. List any five differences between aerobic and anaerobic respiration. 5

48. (a)Construct a distance- time graph using the data given in the following table. 3+2

Time	Distance
0	0
1 min	1 km
2 min	2 km
3 min	3 km
4 min	4 km
5 min	5 km

(b) The distance between two stations is 350 km. A train takes 5 hours to cover this distance. Calculate the speed of the train.

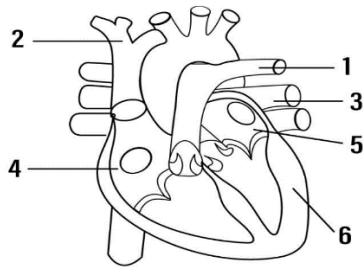
49. Describe various types of blood cells. Also discuss their functions. 5

50. Draw a neat labelled diagram of human digestive system.(Label any 6 parts) 5

OR

50. (a)Describe any two functions of the heart. 2+3

(b)Label the section of human heart shown in the figure below.



SECTION – E

(This section comprises of case study based / data based questions carrying 1 marks each.) (1x12= 12)

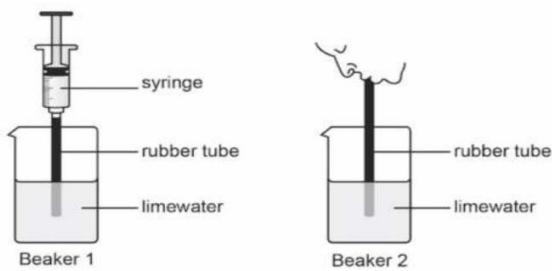
51. Read the following passage and answer the questions:

The walls of the chambers of the heart are made up of muscles. These muscles contract and relax rhythmically. This rhythmic contraction followed by its relaxation constitute a heartbeat. Remember that heartbeats continue every moment of our life. If you place your hand on the left side of the chest, one can feel his or her heartbeat. The doctor feels your heartbeats with the help of an instrument called a stethoscope. A doctor uses the stethoscope as advice to amplify the sound of the heart. It consists of a chest piece that carries sensitive diaphragm, two ear pieces and a tube joining the parts. Doctors can get clues about the condition of heart by listening through a stethoscope.

- 1) The walls of the chambers ofare made up of 1
 (a) Heart, muscles (b) Lungs, muscles (c) Kidney, fibres (d) Heart, fibres
- 2) Which instrument is used by a doctor to listen or amplify the sound of heart? 1
 (a) MRI (b)Stethoscope (c) BP machine (d) None
- 3) What constitute a heartbeat? 1
- 4) How can a doctor judge condition of heart? 1

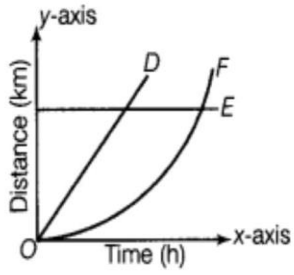
52. Observe the given figure below and answer the questions .

Asha pumps natural air into the lime water in Beaker 1. She blows air from her mouth into the lime water in Beaker 2.



- 1. Which beaker containing lime water takes more time to turn milky. 1
- 2. Is there a change in the appearance of lime water in beaker 2? If yes, what change will be observed in beaker 2? 2
- 3. State the significance of this activity. 1

53. The following distance-time graph of three objects (D, E and F) are given. Answer the following questions by observing the graph.



1. What can you say about the motion of the object D ? 1
2. The distance – time graph of the object E is parallel to x – axis , therefore object E is at rest.
True/False 1
3. What is uniform motion? 1
4. Draw a distance-time graph of the object which is moving with a non- uniform speed. 1
