



Delhi Public School, Howrah

PERIODIC ASSESSMENT- I (2024-2025)
CLASS-VII

Care must be taken not to write anything on the question paper. All the questions must be attempted in the correct sequence.

SUBJECT- SCIENCE

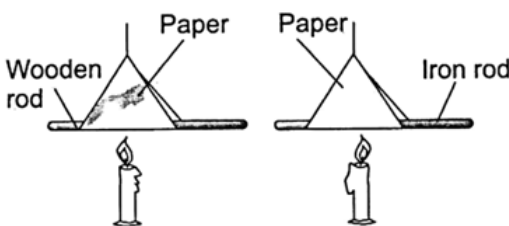
TIME- 1 HOUR 30 MINUTES

F.M.- 40

GENERAL INSTRUCTIONS:

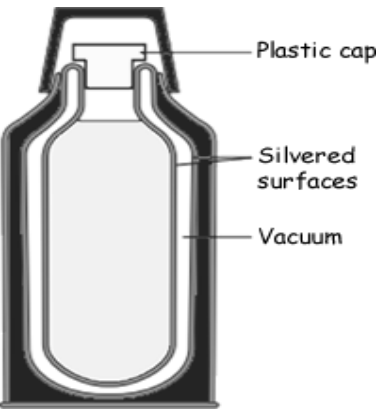
- There are three sections in the question paper. Section A consists of PHYSICS, section B has CHEMISTRY, section C has BIOLOGY.
- All questions are compulsory.

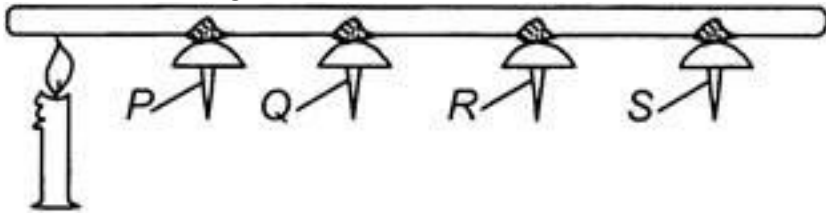
SECTION A: PHYSICS (13 MARKS)

1.	Choose the correct option for the following questions.	2
i.	In which mode of transfer of heat, molecules pass on heat energy to neighboring molecules without actually moving from their positions? (a) Conduction (b) Radiation (c) Convection (d) None of these	0.5
ii.	Observe the image and identify the phenomenon which is occurring inside the pot. (a) Convection (b) Conduction (c) Radiation (d) Evaporation	0.5
iii.	A student took an iron rod and a wooden rod and wrapped each of them in a piece of paper. These were then heated as shown. It was found that the paper around the iron rod does not burn whereas the one around the wooden rod catches fire.  It is because – (a) Candle, in case of iron rod, is nearer to the paper (b) Wood being a bad conductor of heat, takes away all the heat (c) Iron being a good conductor of heat, conducts away the heat given to the paper (d) Paper, in first case, is thicker	0.5
iv.	At the campsite there are tents of three different shades made up of black, white and green fabric respectively. Which of the three tents will you prefer for resting on a hot summer afternoon? (a) Black fabric (b) White fabric (c) Green fabric	0.5

	(d) None of the above	
2.	Fill in the blanks.	(0.5×6=3)
i.	A near the bulb of a clinical thermometer prevents..... level from falling on its own.	
ii.	In coastal areasair flows in the day from sea to land. It is called	
iii. energy flows from one body to another if there is a difference in between the two bodies.	


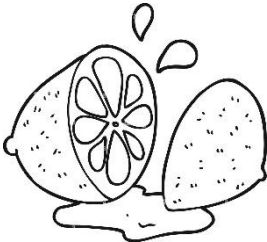
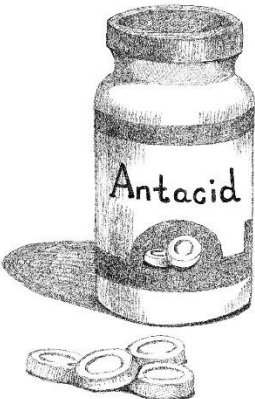

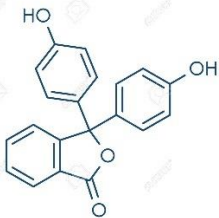
	3. Match the following.	(0.5x4=2)												
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">COLUMN A</th> <th style="width: 50%;">COLUMN B</th> </tr> </thead> <tbody> <tr> <td>(a) Radiation</td> <td>(i) Mercury</td> </tr> <tr> <td>(b) Dark coloured surfaces</td> <td>(ii) 0°C to 100°C</td> </tr> <tr> <td>(c) Conductor</td> <td>(iii) Vacuum</td> </tr> <tr> <td>(d) Clinical thermometer</td> <td>(iv) Good absorbers of heat</td> </tr> <tr> <td></td> <td>(v) 35°C to 42°C</td> </tr> </tbody> </table>	COLUMN A	COLUMN B	(a) Radiation	(i) Mercury	(b) Dark coloured surfaces	(ii) 0°C to 100°C	(c) Conductor	(iii) Vacuum	(d) Clinical thermometer	(iv) Good absorbers of heat		(v) 35°C to 42°C	
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4.	Answer the following questions:	
i.	Observe the picture given below.  <p>(a) Identify the device shown in the above picture. (b) What is the working principle of the device?</p>	(1+1)

ii.	(a) Convert 50°F into Celsius. (b) Using two thin blankets rather than one thick blanket is preferred in cold weather. Explain.	(1+1)
iii.	Distinguish between conductors and insulators.	1
iv.	Some pins are stuck to a metal rod with wax and a lighted candle is kept at one end of the rod as shown in the diagram below:  <p>Which one of the pins will fall off the metal rod at the end? Give reason in support of your answer.</p>	1

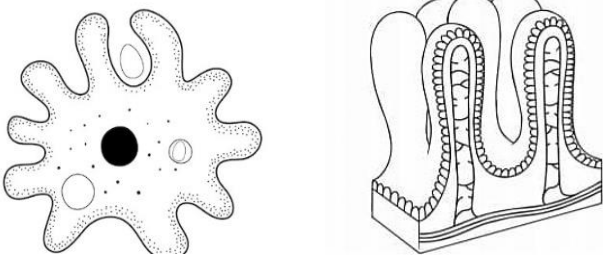
SECTION B: CHEMISTRY (13 MARKS)

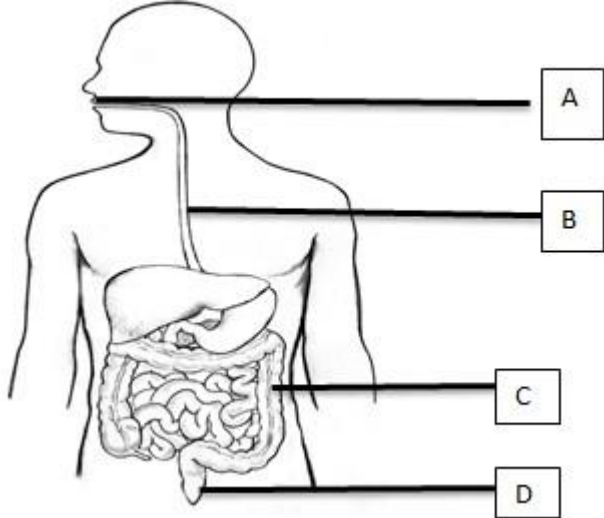
1.	Select the correct option.	(0.5x4=2)
i.	The taste of a base is: a) Sour b) Bitter	

	<p>c) Salty d) Bitter and sour</p>													
ii.	<p>Neutralisation is a reaction between: a) An acid and a base b) Two acids c) Two bases d) None of these</p>													
iii.	<p>Which of the following substances has base?</p> <p>a) </p> <p>b) </p> <p>c) </p> <p>d) </p>													
iv.	<p>The following compound shows which colour change in alkaline solution?</p> <div style="text-align: center;">  <p>phenolphthalein</p> </div> <p>a) Colourless to yellow b) Yellow to colourless c) Pink to colourless d) Colourless to pink</p>													
B.	Fill in the blanks:	(0.5x4=2)												
i.	A substance that turns _____ methyl orange paper red is called an acid.													
ii.	_____ is an example of a base.													
iii.	The pH value of water is _____.													
iv.	Dilute acid has _____ amount of acid than that of water.													
C	Match the Following:	(0.5x4=2)												
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D	<p>Study the picture & guess what has happened to Rangan. How can his friend Arna help him to get rid of this?</p> 	2.5
E	<p>On a good summer day, students of DPS Howrah were baking a cake as a part of skill education class. They required baking soda to prepare the batter. While adding baking soda paste to the mixture, a few amount of accidentally spilled on Deeksha's hands. She was shouting fearing danger but nothing had happened to her. Her instructor told her to quickly wash hands with water and there is nothing to worry about it. Remembering this incident, write the answer of the following questions.</p>	
i.	What is the nature of the aqueous solution of baking soda? How can you confirm it?	2
ii.	Explain why Deeksha did not experience a stinging sensation when the paste of baking soda spilled on her hands. Would she have felt the same if vinegar had fallen on her hand? Why?	(2.5)

SECTION C: BIOLOGY (14 marks)

1.	Choose the correct option:	0.5×4=2
i.	<p>Which of the following statement is NOT true?</p> <p>(a) Saprophytes are green. (b) Dodder is an example of parasite. (c) Heterotrophs depend on producer. (d) Rhizobium can be found in pulses.</p>	
ii.	<p>The enzymes present in the saliva convert</p> <p>(a) Fats into fatty acids and glycerol. (b) Starch into simple sugars. (c) Proteins into amino acids. (d) Complex sugars into simple sugars.</p>	
iii.	<p>Photosynthesis occurs in the coloured leaves of croton plant as</p> <p>(a) Yellow and red pigment help photosynthesis. (b) Chlorophyll is not needed. (c) Chlorophyll is embedded below these pigments of yellow and red (d) Less light is required by yellow leaves for photosynthesis.</p>	
iv.	<p>Given below are the finger like projections in Amoeba and human beings respectively. Choose the correct option that states their function in Amoeba and human beings.</p> 	

	(a) Amoeba- Digestion of food, Human- Digestion of food. (b) Amoeba- Ingestion of food, Human- Excretion of food. (c) Amoeba- Ingestion of food, Human- Absorption of nutrients. (d) Amoeba- Egestion of food, Human- Absorption of nutrients.	
2.	Fill in the blanks:	0.5×4=2
i.	_____ is the organ of digestive system that helps in killing of bacteria.	
ii.	Teeth are rooted in separate _____ in between the _____.	
iii.	Digestion of proteins begins in the _____.	
3.	Label the parts A, B, C, D and state the function of each part.	2
		
4.	Read the paragraph given below and answer the following questions.	1X2=2
	Carnivorous plant is especially adapted for capturing and digesting insects and other animals by means of ingenious pitfalls and traps. There are more than 600 known species of carnivorous plants. The apparent trapping mechanism, which is always a modified leaf is a distinctive feature to these plants. The pitcher plant is an example of a carnivorous plant. The leaf of the Pitcher plant is modified into pitcher like structure to trap the insects. The apex of the leaf acts like a lid which can open and close the mouth of the pitcher.	
i.	Carnivorous plants possess chlorophyll though they feed upon insects. Give reasons.	
ii.	State the feeding mechanism of carnivorous plants.	
5.	Mark the statements True or False. If false, rewrite the false statements correctly.	0.5×2=2
i.	Cow swallows and stores the grass in the small intestine and finally digests the glucose present in them.	
ii.	During starch test, the leaves are boiled in the test tube containing iodine solution.	
6.	Give reasons for the following.	1X4=4
i.	A goat eats away all the leaves of a small plant (balsam). However, the plant survived for few days without the leaves and new leaves could be seen sprouting in the plant again.	
ii.	The acidic food from stomach passes to small intestine. Unlike stomach, small intestine lacks mucus to give protection, still the lining of small intestine doesn't burn out.	
iii.	In rainy season Anil was using a leather bag that he has recently bought. After some days he noticed white patches on the bag. Why?	
iv.	A piece of bread tastes sweet on chewing.	