



# ITL PUBLIC SCHOOL

## PRE-MIDTERM EXAMINATION (2024-25)


### ENVIRONMENTAL STUDIES


DATE: .09.24

**ANSWER KEY**

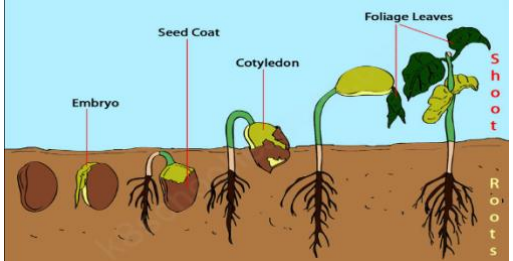

CLASS: V Sec:

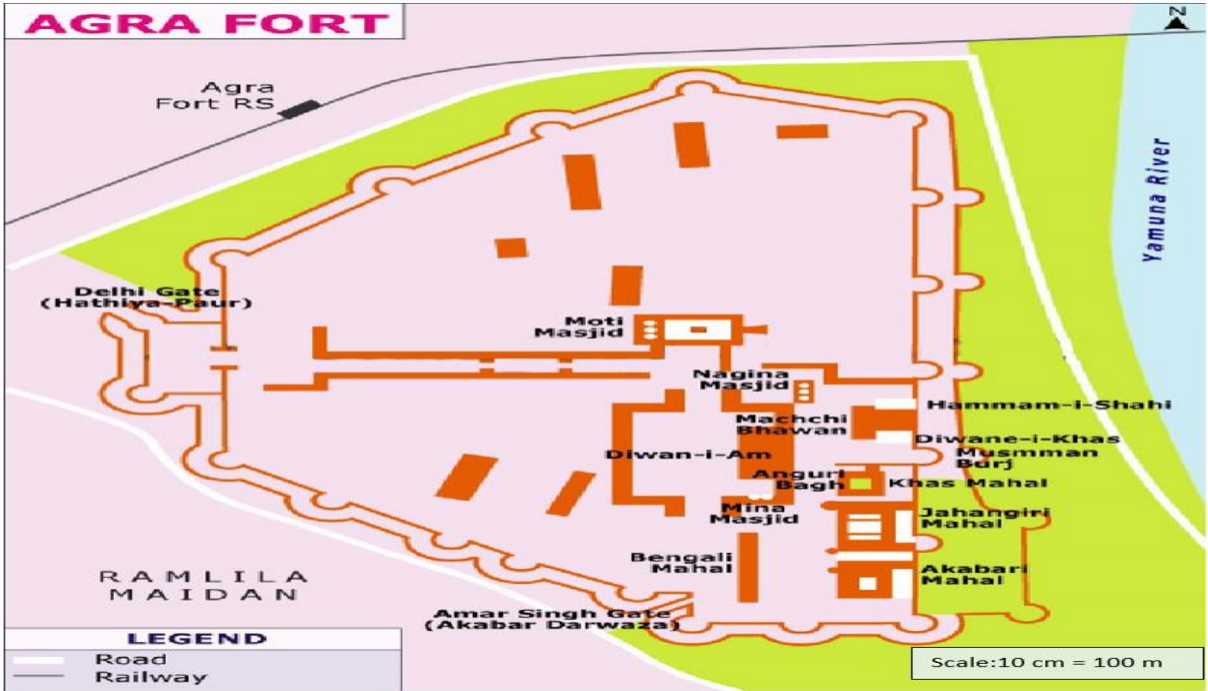
#### SECTION A (20 Marks)

1	<p><b>Answer the following in one word or one line:</b></p> <p>i) Define ‘food preservation’.</p> <p><b>The methods adopted to prevent the spoilage of food by germs for a long period of time.</b></p> <p>ii) Pinky has weak bones and bow shaped legs. Which disease she might be suffering from? Mention its cause.</p> <p><b>Rickets- Vitamin D deficiency</b></p> <p>iii) Identify the mountaineering gear shown below- <b>Snow boot</b></p> <div style="text-align: center;">  </div> <p>iv) How did George Mestral get inspiration to create velcro?</p> <p><b>By observing the hooked seeds stuck in the fur of his dog.</b></p> <p>v) Carrot can reproduce by vegetative propagation. Justify your answer.</p> <p><b>Top head of the carrot root can be cut and placed in soil to get a new plant.</b></p> <p>vi) Define viscosity.</p> <p><b>The property of resistance to flow in any material with fluid properties.</b></p> <p>vii) An acoustic effect can be experienced at Fateh Darwaza. Justify.</p> <p><b>If you stand at Fateh Darwaza, whatever you speak can be heard far away at the king’s palace.</b></p> <p>viii) What is a mehrab?</p> <p><b>A niche in the wall or a room of a mosque that indicates the direction of Mecca.</b></p> <p>ix)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Assertion (A)</b></td> <td>A lemon floats in salty water.</td> </tr> <tr> <td><b>Reason (R)</b></td> <td>An iron ship floats on water whereas an iron nail sinks in water.</td> </tr> </table> <p><b>b) Both A and R are true, but R is not the correct explanation of the assertion.</b></p> <p>x)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Assertion (A)</b></td> <td>Personal and community hygiene is important.</td> </tr> <tr> <td><b>Reason (R)</b></td> <td>Cleanliness helps in preventing the spread of germs and hence diseases.</td> </tr> </table> <p><b>a) Both A and R are true, and R is correct explanation of the assertion.</b></p>	<b>Assertion (A)</b>	A lemon floats in salty water.	<b>Reason (R)</b>	An iron ship floats on water whereas an iron nail sinks in water.	<b>Assertion (A)</b>	Personal and community hygiene is important.	<b>Reason (R)</b>	Cleanliness helps in preventing the spread of germs and hence diseases.	10
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2	<p><b>Read the given text and answer the questions that follow-</b></p> <p><i>“Keep your body at an angle of 90° while climbing,” I heard. “Keep your back straight. Do not bend.” Keeping this in mind, I imagined the rock as flat ground and started to climb up. Again, while coming down, we had to use the rope, in a special way called ‘rapling.’.” (Source: NCERT textbook)</i></p> <p><b>a) Who is giving instructions in the above lines. Why?</b></p> <p><b>Colonel Ram Singh as he is the instructor at the Nehru Institute of Mountaineering.</b></p> <p>b) What do you mean by rapling?</p>	2								

	<b>The act or method of moving down a steep incline by means of a double rope.</b>	
3	<p><b>Read the given text and answer the questions that follow-</b></p> <p><i>“After seeing Golconda, the children also went to a museum in Hyderabad. Many old items are kept there. Many things were found when the place around Golconda was dug – like pots, jewellery, swords, etc.” (Source: NCERT textbook)</i></p> <p>a) Where did children go after seeing Golconda fort?  <b>A museum in Hyderabad</b></p> <p>b) Many old items were kept in the museum. Why?  <b>As they help us to know how people of those times lived, what they used and what things they made.</b></p>	2
4	<p><b>Read the following and answer the questions that follow-</b></p> <p><i>“Tanish and Aarav went for a cricket match in the sport complex. When they started sharing their food with other team members, Aarav warned Tanish to check the expiry date of the cake packet he had brought.”</i></p> <p>a) Why did Aarav warn Tanish to check the expiry date of the cake packet?  <b>As all food items have a shelf life after which they should not be consumed. It also creates awareness so that the seller does not dupe the consumers.</b></p> <p>b) What changes can you see in spoiled food?  <b>Change in smell, colour, taste or texture.</b></p>	2
5	<p><b>Read the given text and answer the questions that follow-</b></p> <p><i>Ayesha watched as her mother rolled out the puri and put it in the hot oil. She saw that at first the puri sank to the bottom of the pan. As it puffed up, the puri came up and started floating on the oil. (Source: NCERT textbook)</i></p>  <p>a) “Buoyancy decides whether an object will sink or float in water”. What are the factors that decide the buoyancy of an object?  <b>Buoyancy depends upon the weight, fluid displacement, shape and density.</b></p> <p>b) Why did the puri float in oil? Will it behave the same way if Ayesha puts the puri in water?  <b>As the puffed puri gets filled with air which makes it light in weight than the oil. A puffed puri will float on water too.</b></p>	2
6	<p>Read the given text and answer the questions that follow-</p> <p><i>“Rajat is back at school today. He had been absent for many days. “How are you now?” asked Aarti. “I’m alright,” Rajat replied softly. Jaskirat: You must have played a lot while you were at home. Rajat: Who wants to play when you have fever! On top of it I had to take a bitter medicine! I even had a blood test.” (Source NCERT Book)</i></p> <p>a) Why had Rajat been absent for many days?  <b>As he was having high fever/malaria.</b></p> <p>b) Why did he have a blood test?  <b>To diagnose the cause of his fever.</b></p>	2
<b>SECTION B (10 Marks)</b>		
7	<p><b>Name the following:</b></p> <p>a) A condition in which a part or the whole body does not function effectively - <b>Disease</b></p> <p>b) The tiny living things that can be seen under the microscope- <b>Microbes</b></p> <p>c) The process by which the seeds are scattered away from the mother plant – <b>Seed dispersal</b></p> <p>d) Nehru Institute of Mountaineering is situated in - <b>Uttarkashi</b></p> <p>e) The liquids which do not dissolve in water- <b>Immiscible liquids</b></p>	5

8	<p><b>Fill in the blanks:</b></p> <p>a) Very small green plants that mainly grow near ponds or other water bodies are called <u>algae</u>.</p> <p>b) A tiny hole in the seed coat that allows water and air to enter inside is called <u>micropyle</u>.</p> <p>c) Molecules move <u>closer</u> to each other on cooling.</p> <p>d) The Golconda fort was the capital city of <u>Qutub Shahi Sultans</u>.</p> <p>e) A <u>piton</u> is a peg or spike driven into a rock to support a climber.</p>	5
<b>SECTION C (20 Marks)</b>		
9	<p><b>Give reason:</b></p> <p>a) The level of the water decreases in the glass on keeping it in the sunlight. <u>Due to evaporation by sun's heat.</u></p> <p>b) Children should not suffer from anaemia. <u>As it affects their physical and mental growth. They do not grow well and feel tiredness.</u></p> <p>c) Even after 21 days of staying together, Sangeeta could not speak to Khondonbi. <u>As Khondonbi spoke only Mizo, they did not understand each other's language.</u></p> <p>d) Sangeeta screamed in pain when she put her foot down in the morning. <u>As she had walked for 26 km with heavy rucksack on her back over the steep and narrow rough path.</u></p> <p>e) The bastions on the fort walls had big holes in them. <u>To increase the viewing area and for better vigilance by the soldiers.</u></p>	5
10	<p>a) How does the pitcher plant or venus flytrap attract insects? <u>Its special smell and bright colours help to attract insects which get trapped in its pitcher shaped leaf.</u></p> <p>b) Where are the pitcher plants found? <u>It is found in Australia, Indonesia and Meghalaya in India.</u></p>	2
11	<p>How does the heating a substance affect the movement of molecules in it? Explain with a neat diagram.</p> <p><u>On heating, the molecules of a solid or liquid start vibrating faster and break away from rigid pattern. The molecules move away from each other and the space between the molecules increase and thus the change of states take place.</u></p> <div data-bbox="165 1429 603 1666" style="text-align: center;"> <p>Particles before heat      Particles after heat</p> </div>	2
12	<p>Name the agents that help in the spread of communicable diseases from one person to another. Also give one example of each.</p> <p><u>a) Through Air- common cold, cough</u>  <u>b) Through contaminated food and water- typhoid, jaundice</u>  <u>c) Through insects and animals- Malaria, dengue, plague, rabies</u>  <u>d) Through direct contact- chicken pox, ringworm etc.</u></p>	2
13	<p>Draw and explain different stages of seed germination.</p>	3

	<p>a) The seed <u>absorbs water and air</u> through micropyle. This <u>softens</u> the seed coat and the food inside.</p> <p>b) The seed coat splits and a white structure called <u>radicle</u> comes out and grows into root. It fixes the plant in the soil.</p> <p>c) The embryo then develops <u>plumule</u> (future shoot) in upward direction.</p> <p>d) Soon the leaves develop and cotyledons dry up and fall off. <u>The young plant is known as seedling.</u></p>	
14	<p>a) Why do we make pickles, papads, chutneys etc. of various fruits and vegetables?  <u>Pickle is prepared at home to preserve the fruit or vegetable for a longer time and consume it throughout the year.</u></p> <p>b) Write the steps to make mango pickle.</p> <p>a) <u>First the fruit or vegetable of which pickle is to be made is cut and dried up thoroughly in the sun.</u></p> <p>b) <u>Then it is mixed with many spices like chilli powder, turmeric powder, ginger, aniseed, methi, salt and oil.</u></p> <p>c) <u>Finally, it is kept in a dry glass jar and left undisturbed for a few weeks, until it is ready.</u></p>	3
15	<p><b>Answer the following questions based on the map of Agra fort:</b></p> <p>a) How many masjids can you see on the map? Draw its symbol too.  <u>Three (Moti, Mina, Nagina)</u> </p> <p>b) If you are walking from Akbar Mahal to Diwane-i-Khas, which direction will you be moving in?  <u>From South to North direction</u></p> <p>c) On the map the distance between Delhi Gate and Moti Masjid is 6 cm. Find on ground distance between the two in metres. <u>As 10cm=100m; 6cm=60metres.</u></p>	3



Diagrams for practice-

1. *Bread Mould*
2. *Structure of a seed*
3. *Stages of seed germination*
4. *Molecular arrangement in three states of water*
5. *Change of state of matter on heating or cooling*
6. *Mountaineering gears*

Scale 1 cm = 110 metre