

=====

Note : 1) All questions are compulsory.

2) The number to the right of the questions indicates marks.

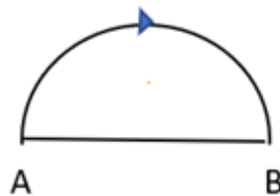
3) Draw the exact, well labeled diagrams wherever necessary.

4) For each multiple choice question, only the correct option number should be written.

Q. 1) Solve the following questions. (Any Three)

2 Marks each

1) Every morning Swarali walks around the edge of a semicircular field having a radius of 'r' m. As shown in figure if she starts from point A and ends at point B what is the ratio of the distance she walked and her displacement?



2) Give scientific reason.

Valency is always a whole number.

3) Classify the following acids into weak acids and strong acids.

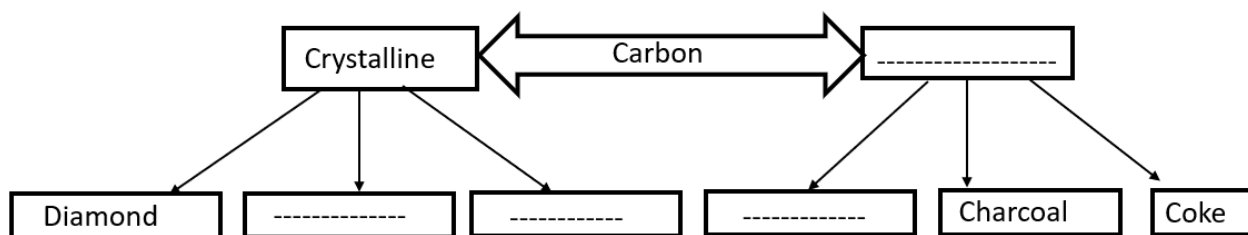
H_2CO_3 , HNO_3 , HCl , CH_3COOH .

4) If the mirrors are kept parallel to each other, how many images will be found in the mirror?

$$n = \frac{\square}{\square} - 1$$

$$n = \square$$

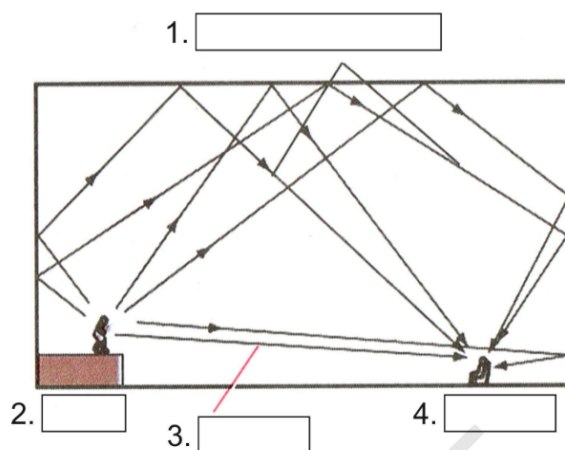
5) Complete the following flow chart.



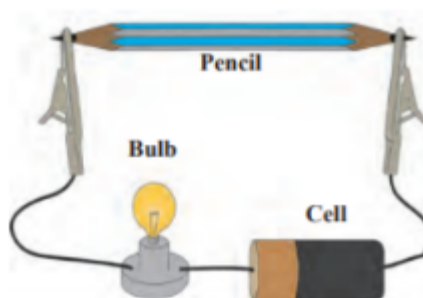
Q. 2) Answer the following questions. (Any Two)

3 Marks each

1) Identify the following picture and label the numbered part.



2) What will happen if an electric current is flown in the circuit in the given experiment? Which material is present in the pencil? Which property of the material is found in the experiment?



3) What is meant by water of crystallization? Give examples of salts with water of crystallization, and their uses.

4) Draw symbols of the following components and write their uses.

Components	symbols	Uses
1) Resistance	-----	-----
2) Voltmeter	-----	-----
3) Electric bulb	-----	-----

5) Explain in which of the following cases the work done by the force is positive work, negative work or zero work.

1. Pushing a stalled vehicle
2. Tying a stone to one end of a string and swinging it round and round by the other end of the string.
3. Catching a ball thrown by a friend.

SCERT Maharashtra

Class : X

Marks : 13

Based on Std-IX syllabus

Time: 30 Mins

=====

Note : 1) All questions are compulsory.

2) The number to the right of the questions indicates marks.

3) Draw the exact, well labeled diagrams wherever necessary.

4) For each multiple choice question, only the correct option number should be written.

Q. 1. Solve the following sub questions.

3

1. Fill in the blanks.

Chromosomes are mainly made up of nucleic acid and

2. Pick odd man out: Frog, Owl, Fox, Humans.

3. Match the following:

'A' Column	'B' Column
1. Simple tissue	a. Xylem
2. Complex tissue	b. Amoeba
	c. Meristematic tissue

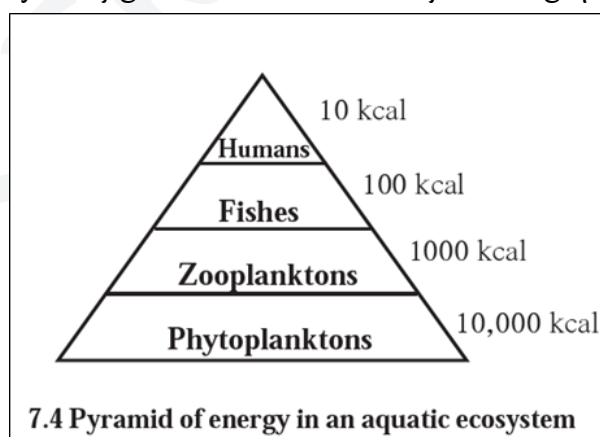
Q. 2. A) Write the short answer (Any one)

2

1. Why are naphthalene balls kept with clothes to be put away?

2. Write difference between: Hardware and Software

3. Study the figure and answer the following questions.



i. What is the most important source of energy in any ecosystem?

ii. What is your opinion about the direction of energy flow in the pyramid of energy?

Q. 3. Explain the following questions in detail. (Any one)

3

1. Sketch and label the figure of Spirogyra and write its characteristics.
2. Write the name and function of growth hormones in plants.
3. What is chromosome?
4. Write the name of various types of chromosomes.

Q. 4. Answer the following question. (Any one)

5

1. Write any five "Principles of solid waste management" in detail.
2. Write the name of following tissues:
 1. Tissue lining inner surface of mouth.
 2. Tissue joining muscles and bones.
 3. Tissue responsible for increasing height of plants.
 4. Tissue responsible for increasing girth of plants.
 5. Tissue conducting water and minerals.
