



All the questions are compulsory.

GROUP 'A' [10×1=10]

Multiple Choice Questions (MCQ):

1. Write the correct answer in your answer copy of the following questions.
 - a. Which type of the mirror is used to look at our faces in daily life?
 - i) plane mirror
 - ii) concave mirror
 - iii) convex mirror
 - iv) spherical mirror
 - b. Microsoft word is an example of
 - i) word processing software
 - ii) spreadsheet software
 - iii) DBMS software
 - iv) graphic software
 - c. Which of the following is a correct statement about plant and animal cells?
 - i) both plant and animal cells have a cell wall
 - ii) plant cells have chloroplast, but animal cells do not
 - iii) both plant and animal cells have the same shape and size
 - iv) animal cells have a large central vacuole like plant cells
 - d. If all insects suddenly disappeared from the environment, which effect would most likely be seen first?
 - i) increasing in oxygen level
 - ii) reduction in flowering plant reproduction
 - iii) increasing in forest cover
 - iv) decreasing in soil erosion
 - e. Which of the following waste is an example of biodegradable waste?
 - i) plastic bags
 - ii) glass bottles
 - iii) fruit and vegetable peels
 - iv) metal cans
 - f. Earthworms breathe through
 - i) moist skin
 - ii) gills
 - iii) lungs
 - iv) trachea
 - g. A moving ball finally comes to rest after rolling on the ground. The force responsible for stopping it is
 - i) magnetic force
 - ii) gravitational force
 - iii) frictional force
 - iv) muscular force
 - h. Two students lift the same box to the same height. Student A takes 5 seconds, and student B takes 10 seconds. Which statement is correct?
 - i) student B does more work
 - ii) student A has greater power
 - iii) student B has greater power
 - iv) both have different work and but same power
 - i. In bituminous, the percentage of carbon is
 - i) 60
 - ii) 80
 - iii) 70
 - iv) 90
 - j. Which of the following is a molecule?
 - i) H
 - ii) Ca
 - iii) CO₂
 - iv) Mg

GROUP 'B' [8×1=8]

1. Write any two precautions that should be adopted while doing practical works in science.
2. Write down one advantage and one disadvantage of social media.
3. What are microorganisms and name any one type of microorganism.
4. Why is biodiversity important for maintaining the stability of ecosystems?
5. If the velocity of a moving object changes with time, what can you say about its acceleration?
6. Why does heat always flow from a hotter body to a colder body?
7. What is meant by the periodic classification of elements?
8. pH value of rain water of different cities is given in the table.

City A	City B	City C	City D
2.1	3.5	4.3	6.2

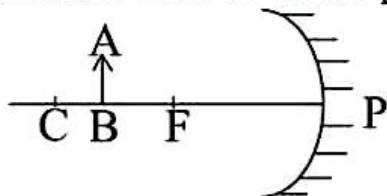
Which is the least polluted city based on data given in the table.

GROUP 'C' [8×2=16]

1. There were problems in the tap water, such as washing clothes not foaming well and dirt not being removed and hair becoming rough while washing it. Write any two measures that you will use to solve this problem.
2. Write any two differences between external fertilization and internal fertilization.
3. Why public participation is important in conservation of biodiversity?
4. What is greenhouse effect? Write an application of greenhouse effect.
5. Draw an electronic configuration of a potassium atom.
6. The frequency and wavelength of a sound wave are 100Hz and 3.3m respectively. Calculate the speed of the sound wave.
7. Atomic weight and atomic number of an element are 35 and 17 respectively, find out the number of neutrons and protons.
8. Describe the method of vegetative propagation through layering with a neat diagram.

GROUP 'D' [4×4=16]

1. Complete the given diagram and write down the properties of the image formed.



2. Write down the method of writing a balanced chemical equation with example.
3. Write down nebular hypothesis or Kant Laplace nebular hypothesis.
4. Prepare a list showing the effect of various indicators in acid, base and salt.

****Best of Luck****