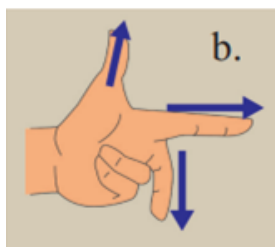


Chapter: 1 TO 10

- Q.1 Give scientific reasons(Any Two) 4**
- 1 Simple microscope is used for watch repairs.
 - 2 Many electrical appliances can not be use simultaneously.
 - 3 In cold regions in winter the rocks crack.
- Q.2 Write properties/characteristic/uses/advantages/effects.(Any One) 2**
- 1 What is meant by vinegar and gasohol ? what are their uses?
 - 2 State the limitation of Dobereiner's Law of Triad.
- Q.3 Write Short Notes(Any Two) 4**
- 1 Write note on Galvanizing
 - 2 Write short note on adaptation of eye.
 - 3 Dew point temperature
- Q.4 Chemical reactions with equations.(Any Two) 4**
- 1 Complete the following chemical reaction and balance it. Write the type of this reaction.
 $\text{NaOH(aq)} + \text{H}_2\text{SO}_4\text{(aq)} \rightarrow$
 - 2 Reaction of Calcium with water.
 - 3 Ethanol reaction with sodium.
- Q.5 Laws/define/principles(Any One) 2**
- 1 Define Radius of Curvature of lens.
 - 2 Explain Endothermic Reaction with example.
- Q.6 Distinguish between(Any Two) 4**
- 1 Metals and Non-metals
 - 2 AC generator and DC generator.
 - 3 s-block and p-block elements
- Q.7 Solve Numerical problems(Any Two) 6**
- 1 Two tungsten bulbs of wattage 100W and 60W power work on 220V potential difference. If they are connected in parallel, how much current will flow in the main conductor?
 - 2 The angle of incidence in air for a ray of light is 35° . If the ray travels through water of refractive index $\frac{4}{3}$, find the angle of refraction.
 - 3 The radius of planet A is half the radius of planet B. If the mass of A is M_A , what must be the mass of B so that the value of 'g' on B is half that of its value on A?
- Q.8 Write laws, theories and explain.(Any One) 3**
- 1 Write the methods to draw the structural formula (line structure) of ethene (C_2H_4).

2 Name the following diagrams and explain the concept behind them.



Q.9 Answer the following(Any Two)

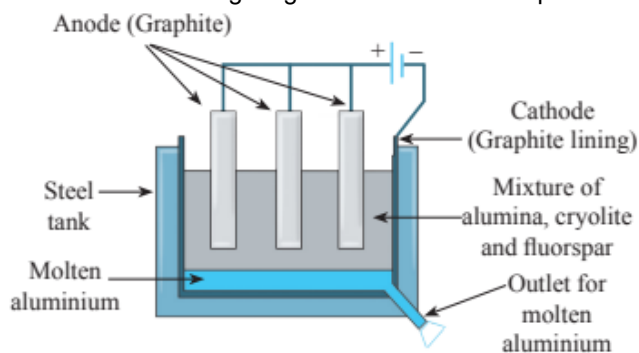
6

- 1 (1) Define – Dispersion.
(2) Draw a neat labelled diagram of dispersion of sunlight through a Glass Prism.
- 2 Coal burns in air to form carbon dioxide.
 - i. Write the equation for same.
 - ii. Which type of reaction is this.
 - iii. This reaction takes place by the action of which factor heat or light.
- 3 What is meant by space debris? How does it threaten the future of space missions?

Q.10 Answer the following in detail (Any One)

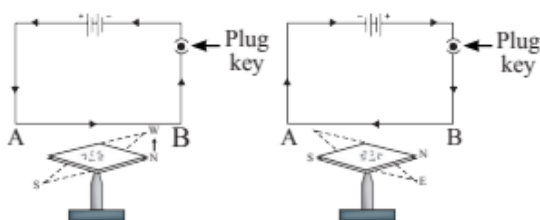
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- 1 Observe the following diagram and answer the questions.



- a. Write the name of the method.
- b. Name the cathode and the anode.
- c. What is the purpose of mixing cryolite and fluorspar with alumina in the electrolytic reduction of alumina? Write the molecular formula of cryolite.
- d. Write the anode and cathode reactions.

2



- a. Which effect of electric current is shown in the above figures?
- b. What will happen if the number of electric cells is increased on the magnetic needle?
- c. If the distance between the conductor and magnetic needle is increased, what will be the effect on the intensity of the magnetic field?
- d. If the ends of electric cell are interchanged, what will be the effect on the magnetic needle?
- e. Write the names of any two instruments which work on magnetic effect of electric current.