

10 <sup>th</sup> CBSE Batch :	<b>MAHESH TUTORIALS</b> <b>SUBJECT : SCIENCE &amp; TECHNOLOGY</b> <b>Chapter : 1, 2, 3, 6, 7 [Upto Plants],</b> <b>12, 13, 14 OR 10</b> <b>Question Paper</b>	<b>Test -</b> Date: Marks : 60 Time: 2 Hrs
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<b>Q : 1</b>	<b>Answer the following questions : [1 Marks]</b> 1. The electrode connected to the positive end of the battery is called as ..... and the electrode connected to the negative end of the battery is called as ..... 2. What are autotrophs ? Give one Example. 3. The SI unit of resistance is : (a) Newton      (b) Ohm      (c) Watt      (d) Joule 4. What does the degree of closeness of magnetic field lines signify? 5. Name the constituents of biogas. <p style="text-align: center;"><b>OR</b></p> 5. Which lens has : (a) a real focus (b) a virtual focus	<b>05</b>
<b>Q : 2</b>	<b>Answer the following questions : [2 Marks]</b> 6. Write differences between combination and decomposition reaction ? 7. What are the differences between aerobic and anaerobic respiration ? Name some organisms that use the anaerobic mode of respiration. 8. Why do Mimosa pudica (touch-me-not) leaves droop down when touched? 9. Distinguish between ammeter and voltmeter. 10. How is the power of an electric motor enhanced? 11. State the advantages of hydroelectricity. <p style="text-align: center;"><b>OR</b></p> 11. Explain, with the help of a diagram, why a convex lens is called as a converging lens.	<b>12</b>
<b>Q : 3</b>	<b>Answer the following questions : [3 Marks]</b> 12. Give scientific reason for the following. a. We apply paint on iron articles. b. Oil and fat containing food items are flushed with nitrogen. 13. State the colour change, if a few drops of dilute sulphuric acid are added to the weak alkaline solutions of the following indicators : i) Methyl orange      ii) Phenolphthalein iii) Litmus solution 14. Aluminium is a highly reactive metal, still it is used to make utensils for cooking. Give reason. 15. What are the components of transport system in human being ? What are the functions of these components ? 16. Differentiate between tropic and nastic movements.	<b>18</b>

17. A current of magnitude 0.56 A is drawn by a filament of an electric bulb for 20 minutes. Find the amount of electrical charge that flows through the circuit.

**Q : 4 Answer the following questions : [5 Marks]**

**25**

18. Write word equations and then balance equations for the reaction taking place when :
- dilute sulphuric acid reacts with zinc granules
  - dilute hydrochloric acid reacts with magnesium ribbon.
  - dilute sulphuric acid reacts with aluminium powder.
  - dilute sulphuric acid reacts with iron filings.
19. Give reasons.
- Metals and non metals combine with each other to form compounds.
  - Write electron dot structure for sodium, oxygen and magnesium.
  - Show the formation of  $\text{Na}_2\text{O}$  and  $\text{MgO}$  by transfer of electrons.
  - What are the ions present in these compounds ?
20. Explain chemotropism with suitable example ?
21. State some precautions to be taken while using electricity?
22. Explain, with the diagram, the construction and working of a box - type solar cooker.
- OR**
22. Along with the diagram, state the sign conventions used for spherical lenses.

★★★★ **Best of Luck** ★★★★★