



KENDRIYA VIDYALAYA – KHAMMAM
FA – I (2016-17)

Class : X
Subject: - SCIENCE

Max Marks:40
Time:90 Mins.

Physics

III Answer the Following Questions

1. State ohms law? **1m**
2. On what factors does the resistance of a conductor depend? **2m**
3. What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series? **3m**
4. (a) Define 1KWH?
(b) 100 J of heat are produced each second in a 4 ohm resistance. Find the potential difference across the resistor? **3m**
5. (a) With the help of a circuit diagram establish the relationship for the equivalent resistance of three resistances connected in series? **5m**
(b) How can three resistors of resistances 2Ω , 3Ω and 6Ω be connected to give a total resistance of (i) 4Ω (ii) 1Ω

CHEMISTRY

II Answer the Following Questions

1. Why do we apply paint on iron articles? **(1m)**
2. Why is respiration considered an exothermic reaction? **(2m)**
3. A solution of substance "x" is used for while washing
(a) Name the substance "x" and write its formula
(b) Write the reaction of the substance "x" name in (a) above with water. **2m**
4. Explain the following terms with one example each. **(3m)**
(a) corrosion (b) Rancidity
5. Balance the following chemical equations. **(5m)**
 - (a) $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3$
 - (b) $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$
 - (c) $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
 - (d) $\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{HCl}$
 - (e) $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$

BIOLOGY

I. Answer the Following Questions:-

1. What is transpiration? **(1m)**
2. What will happen if mucus is not secreted by the gastric glands? **(2m)**
3. What is double circulation in human beings, Why is it necessary? **(2m)**
4. Write any three differences between aerobic respiration and anaerobic respiration? **(3m)**
5. Draw the diagram of human digestive system and label the parts? **(5m)**

(OR)

Draw the diagram of a nephron cell structure and label the Parts.