

SAHODAY SR. SEC. SCHOOL

II PERIODIC TEST (2017), SCIENCE CLASS X

Time: 1.5 hrs

Max Marks: 30

PHYSICS

- Q1. Define electric power. Give its formula in terms of current and resistance. 1
- Q2. Explain why, the core of an electromagnet should be of soft iron and not of steel. 1
- Q3. Name the commercial unit of electrical energy consumed. State its relationship with 1 joules.
- Q4. Calculate the total energy consumed by two electric bulbs each rated 60 W, when they operate for 20 hours. 1
- Q5. Three resistances of 3 ohms each are connected in parallel in the circuit. Draw the circuit diagram and calculate the total resistance of the circuit. 2
- Q6. Name any two factors on which the strength of the magnetic field produced by a current carrying solenoid depends. How does it depend on these factors? 2
- Q7. i) State Fleming's left hand rule. 2
ii) Explain the principle of an electric generator.

CHEMISTRY

- Q1. What will be the colour of the precipitate formed when you mix 1
a. Lead nitrate and potassium iodide solution. *yellow precipitate*
b. Sodium sulphate and barium chloride solution. *white*
- Q2. What are Olfactory Indicators? 1
- Q3. What is corrosion? 1
- Q4. Write two uses of Plaster of Paris. 1
- Q5. What are Decomposition reactions? Give one example. 1.5
- Q6. What is the chemical name of Baking soda? How it is prepared? 1.5
- Q7. How will you prepare sodium hydroxide by chlor alkali process? 1.5
- Q8. What is pH? You have two solutions A and B. The pH of A is 6 and the pH of Solution B is 10. Which of these is acidic and which one is basic. 1.5

BIOLOGY

- Q1. Why is the use of iodized salt advisable? 1
- Q2. Define synapse. 1
- Q3. What is the range of normal systolic and diastolic blood pressure. ^{120 mm of Hg} 1
- Q4. Which part of brain gives rise to spinal cord. ^{80 mm of Hg} 1
- Q5. Draw a diagram of excretory unit of human kidney and label the following parts 2
- a. Glomerulus
 - b. Bowman's capsule
 - c. Renal artery
 - d. Collecting duct
- Q6. Write two differences between tropism and nastic movement in tabulated form. 2
- Q7. Why is transpiration important for plants? *It is important because* CO_2