

Name: _____ R. No. _____ Class/ Sec: _____ Date: _____ Invig. Sign _____

ATOMIC ENERGY CENTRAL SCHOOL, NARORA

CLASS X SCIENCE PERIODIC TEST FIRST 2018-19

MM: 40

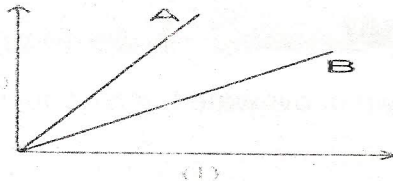
TIME: 1:30 Hr.

General Instructions:

- All questions are compulsory and marks are mentioned in front of each question.
- Electronic devices are prohibited to use in the examination.
- Use Blue or Black Pen only.
- Don't write answer or objectionable things on question paper.

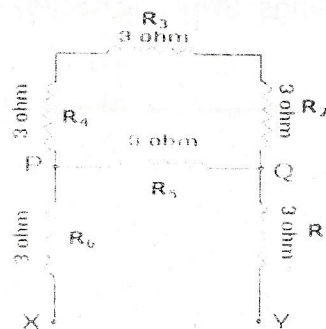
PHYSICS (13 MARKS)

- 1) The length of the wire is doubled, what is the change in its resistivity? 1
- 2) In households, most electrical devices are connected in parallel combination in electrical circuits. Why is it so? 2
- 3) What is resistance? In the given graph, which wire has more resistance, A or B? 2



- 4) Two bulbs, one rated 100 W at 220 volts and the other 60W at 220 volts are connected in parallel to a 220 V supply. What current is drawn from the supply line? 3
- 5) a) State Ohm's law. Give its mathematical expression.
- b) Six resistors, each of 3Ω are connected as shown in the figure below. 5

Calculate the resistance between: (a) Points P and Q (b) Points X and Y.



CHEMSITRY (13 MARKS)

- 1) Define corrosion and rancidity. 1
- 2) What is rust ? Write its formula. 2
- 3) Write one example of each of the following reaction- in balanced form 5
 - a) Decomposition reaction
 - b) Double displacement reaction
 - c) Hydrogen displacement reaction
 - d) Neutralisation reaction
 - e) Metal displacement reaction
- 4) Balance the equation- 2
 - (a) $\text{FeS}_2 + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3 + \text{SO}_2$
 - (b) $\text{NH}_3 + \text{Cl}_2 \rightarrow \text{NH}_4\text{Cl} + \text{N}_2$
- 5) Complete and balance the following chemical reaction- 3
 - (a) $\text{C}_6\text{H}_6 (\text{l}) + \text{O}_2 (\text{g}) \rightarrow$
 - (b) $\text{Al}_2(\text{SO}_4)_{3\text{aq}} + \text{Ca}_3\text{P}_{2\text{aq}} \rightarrow$
 - (c) $\text{Na}_2\text{SO}_{4\text{aq}} + \text{Ba}_3(\text{PO}_4)_{2\text{aq}} \rightarrow$

BIOLOGY (14MARKS)

- 1) What is the role of acid in our stomach? 1
- 2) In which part of the cell the breakdown of pyruvate to give cabon di oxide, water and energy take place? 1
- 3) How are fats digested in our bodies? Where does this process take place? 2
- 4) How is oxygen and carbon di oxide transported in human beings? 2
- 5) Explain the process of nutrition of Amoeba. 2
- 6) Describe the structure and function of nephrons. 3
- 7) Describe double circulation in human beings. Why is it necessary? 3