ATOMIC ENERGY CENTRAL SCHOOL, KAKRAPAR
SESSION:2015-16
ANNUAL EXAMINATION

CLASS: XI **PAPER CODE:043** **SUBJECT:CHEMISTRY THEORY**

Time Allowed: 3 hours ***Maximum Marks:70***

General Instructions:

a)All the questions are compulsory.
b)There are 26 questions in total.
c)Questions 1 to 5 are very short answer type questions and carry one mark each.
d)Questions 6 to 10 carry two marks each.
e)Questions 11 to 22 carry three marks each.
f)Questions 23 is value based question carrying four marks.
g)Questions 24 to 26 carry five marks each.
h)There is no overall choice. However, an internal choice has been provided in one question of two marks, one question of three marks and all three questions in five marks each. You have to attempt only one of the choices in such questions.
i)Use of calculators is not permitted. However, you may use log tables if necessary

1. What do you understand by the term nucleophile?

2. What is the basic difference in approach between the Mendeleev's Periodic Law and the Modern Periodic Law?

3. What do you mean by Biochemical Oxygen Demand (BOD)?

4.Why are potassium and caesium, rather than lithium used in photoelectric cells?

5. What effect does branching of an alkane chain has on its boiling point?

6.(i) Write the electronic configuration of the element Chromium [atomic no. 24].
(ii)Give two drawbacks of Rutherford's model of an atom.

7. At 25°C and 760 mm of Hg pressure a gas occupies 600 mL volume. What will be its pressure at a height where temperature is 10°C and volume of the gas is 640 mL

8. A compound contains 4.07 % hydrogen, 24.27 % carbon and 71.65 % chlorine. Its molar mass is 98.96 g. What are its empirical and molecular formulas ?