

2021 (A)

SSC PART-I (9th CLASS)

## CHEMISTRY GROUP-I

کیمسٹری گروپ - پہلا

TIME ALLOWED: 1.45 Hours

SUBJECTIVE حصہ انشائیہ

وقت = 1.45 گھنٹے

MAXIMUM MARKS: 48

کل نمبر = 48

نوٹ: - جوابی کاپی پر وہی سوال نمبر اور جزو نمبر درج کیجیے جو کہ سوالیہ پرچے میں درج ہے۔  
Write same question number and its part number on answer book, as given in the question paper.

## SECTION-I حصہ اول

2. Attempt any five parts.

10 = 2 x 5

سوال نمبر 2- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (i) Define physical properties. Write the names of two physical properties. (10)
- (ii) Write chemical formulae of: Washing soda, Caustic soda (10)
- (iii) Define monoatomic molecule with one example. (10)
- (iv) Write electronic configuration of  $Cl^-$  in its subshells. (10)
- (v) Write electronic configuration of sulphur and chlorine in their subshells. (10)
- (vi) What is the trend of atomic radius in groups? (10)
- (vii) What is periodic law? Who arranged it? (10)
- (viii) Give the trend of ionization energy in a period. (10)

3. Attempt any five parts.

10 = 2 x 5

سوال نمبر 3- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (i) What is meant by Hydrogen bonding? (10)
- (ii) Define ionic bond and give its one example. (10)
- (iii) What type of covalent bond is formed in nitrogen molecule? (10)
- (iv) What is meant by absolute zero? (10)
- (v) Explain the process of condensation. (10)
- (vi) Define solution and also give an example. (10)
- (vii) Define Brine. (10)

(viii) What is meant by percentage  $\frac{\text{volume}}{\text{Mass}}$ ? Give an example. (10)

پہلے سے کیا مراد ہے؟ ایک مثال دیجیے۔

4. Attempt any five parts.

10 = 2 x 5

سوال نمبر 4- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (i) Find oxidation number of nitrogen in  $HNO_3$  when the oxidation numbers of  $H = +1$  and  $O = -2$  (10)
- (ii) What is meant by weak electrolytes? Give two examples. (10)
- (iii) What is tin coating? Write its advantage. (10)
- (iv) What is the principle of electroplating? (10)
- (v) Write the names of any four very reactive metals. (10)
- (vi) What are transition metals? Give an example. (10)
- (vii) Give the trend of non-metallic character in a group and a period (10)
- (viii) How does chlorine react with methane in the presence of diffused sunlight? (10)

## SECTION-II حصہ دوم

NOTE: Attempt any two questions.

18 = 9 x 2

نوٹ: - کوئی سے دو سوالات کے جوابات تحریر کیجیے۔

- 5.(A) What were the defects in Rutherford's Model and also write the questions initiated by these defects? (10)
- (B) Define empirical formula and explain empirical formula for covalent and ionic compounds. (10)
- 6.(A) Define and explain Metallic bond. (10)
- (B) State and explain mathematically Charles' law. (10)
- 7.(A) Describe oxidation and reduction in terms of loss or gain of electron. (10)
- (B) If we add  $5cm^3$  of acetone in water to prepare  $90cm^3$  of aqueous solution. Calculate the concentration of this solution by  $\frac{v}{V}\%$ . (10)