EVERWIN MATRIC. HR. SEC. SCHOOL

03.07.19	T.T Physics	Time: 45 Mins

STD: XI (C,D)   Marks: 30

I. Choose the correct answer: 5x1=5

1. Which of the following pairs of physical quantities have same dimension?
   a) Angular velocity & velocity   b) Angular velocity & frequency
   c) Density & force   d) Energy & work

2. Dimensional formula for planck's constant
   a) M^2T^{-1} b) ML^2T^{-1} c) $M^2L^3T^{-1}$ d) T^{-1}

3. S.I unit for current density is _____.
   a) Am^{-2} b) Nm^{-1} c) JS d) JK^{-1}

4. $1^0 =$_____ rad
   a) 1.723×10^{-11} b) 1.745×10^3 c) 1.745×10^{-2}

5. Which among the following is not a dimensionless variables?
   a) Strain   b) Specific gravity   c) Refractive index
   d) Velocity

II. Answer any 3 of the following: 3x2=6

6. What are the types of physical quantities?
7. Define steradian.
8. Write a short note on dimensionless constant.
9. Define unit.

III. Answer any 3 of the following: 3x3=9

10. Check the correctness of the equation $\frac{1}{2}mv^2 = mgh$ using dimensional analysis method.

11. What are the limitations of dimensional analysis?

12. What are the different types of measurement systems?

13. If the value of universal gravitational constant in SI is 6.6×10^{-11} Nm^2 Kg^{-2}, then find its value in CGS system?

IV. Answer any 2 in detail: 2x5=10

14. Obtain an expressin for the time period T of a simple pendulum. The time period T depends on i) mass 'm' of the bob ii) length 'l' of the pendulum and iii) acceleration due to gravity g at the place where the pendulum is suspended (constant $k=2\pi$).

15. Explain the principle of homogenity of dimensions. What are its uses? Give example.

16. Assuming that the frequency of a vibrating string may depend upon i) applied force (F) ii) length (l) iii) mass per unit length (m) prove that $\delta \, \alpha \, \frac{1}{l} \sqrt{\frac{F}{m}}$ using dimensional analysis.

03.07.19	T.T English	Time: 45 Mins

STD: XI (E,H)   Marks: 25

I. Choose the appropriate synonyms of the underlined word   3x1=3

1. The common link of friendship was snapped.
   a) praised   b) hailed   c) broken   d) welcomed

2. For several hours she thumped the sagging skins of the dilapidated drum.
   a) elegant   b) damaged   c) unbreakable   d) reputable

3. Hundreds of little birds collected round her creating a veritable bedlam of chirruping.
   a) noisy confusion   b) scoldings   c) damaged   d) rested

II. Choose the appropriate antonyms of the underlined word   3x1=3

4. My grandmother accepted her seclusion with resignation.
   a) isolation   b) companionship   c) retirement   d) retreat

5. Some came and perched on her legs, others on her shoulders.
   a) landed   b) rested   c) nestled   d) moved

6. She said her morning prayer in monotonous sing-song.
   a) boring   b) interesting   c) smoothed

III. Answer the following questions: 7x2=14

7. Describe the grandfather as seen in the portrait.
8. Why was the author left with his grandmother in the village?
9. Where did the author study in his childhood?
10. What was the happiest time of the day for grandmother?
11. Why didn't the grandmother feel sentimental when the author went abroad for higher education?
12. Describe about the author's grandmother.
13. The grandmother was strong-minded – Justify.
14. How is school education in the village different from that in the city?
15. The grandmother appreciated the value of education – Give instances in support of your answer.

IV. Answer the following in a paragraph of 100-150 words each: (5)

16. As young Khushwant Singh, write a letter to your parents describing your daily routine along with your thoughts and feelings about staying in the village.

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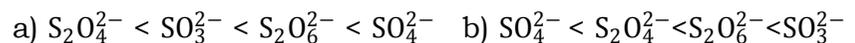
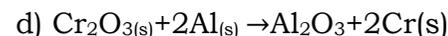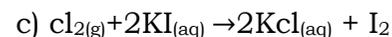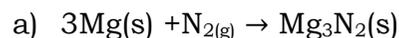03.07.19 T.T Chemistry Time: 45 Mins

STD: XI (A,B) Marks: 30

I. Choose the correct answer: 5x1=5

1. The correct increasing order of the oxidation state of sulphur in the anions

SO_4^{2-}, SO_3^{2-}, $S_2O_4^{2-}$, $S_2O_6^{2-}$ is

a) $S_2O_4^{2-} < SO_3^{2-} < S_2O_6^{2-} < SO_4^{2-}$ b) $SO_4^{2-} < S_2O_4^{2-} < S_2O_6^{2-} < SO_3^{2-}$

c) $SO_3^{2-} < SO_4^{2-} < S_2O_4^{2-} < S_2O_6^{2-}$ d) $S_2O_6^{2-} < S_2O_4^{2-} < SO_4^{2-} < SO_3^{2-}$

2. Choose the disproportionation reaction among the following redox reactions.

a) $3Mg(s) + N_{2(g)} \rightarrow Mg_3N_2(s)$

b) $P_{4(s)} + 3NaOH + 3H_2O \rightarrow PH_{3(s)} + 3NaH_2PO_{2(aq)}$

c) $cl_{2(g)} + 2KI_{(aq)} \rightarrow 2Kcl_{(aq)} + I_2$

d) $Cr_2O_{3(s)} + 2Al_{(s)} \rightarrow Al_2O_3 + 2Cr(s)$

3. The oxidation number of oxygen in O_2 is _____.

a) 0   b) +1   c) +2   d) -2

4. Consider the following statements:

i) Oxidation number of He=zero

ii) Increase in oxidation number results in reduction

iii) The substance undergoing increase in oxidation number is reducing agent

Which among the above statements is/are correct?

a) only (i)   b) (ii) and (iii)   c) (i) and (iii)   d) only (i)

5. Among the three metals, Zinc, copper and silver, the electron releasing tendency decreases in the following order.
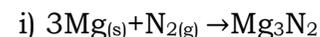
a) Zinc > Silver > Copper   b) Zinc > Copper > Silver

c) Silver > Copper > Zinc   d) Copper > Silver > Zinc

II. Answer any 5 of the following: 5x2=10

6. Write oxidation number and identify the type of redox reaction taking place in the following reaction.

i) $3Mg_{(s)} + N_{2(g)} \rightarrow Mg_3N_2$

7. Write a note on combination reaction.

8. Distinguish oxidation and reduction with electronic concept.

9. What is limiting reagent?

10. Write the oxidation number for the underlined element.

a) $\underline{Cr}_2O_7^{2-}$ b) $\underline{S}O_2$

11. What do you understand by the term oxidation number?

III. Answer any 3 of the following: 3x5=15

12. How many moles of hydrogen is required to produce 10 moles of ammonia?

13. Write a short note on disproportionation reaction.

14. In a reaction $x+y+z_2 \rightarrow xyz_2$. Identify the limiting reagent if any, in the following reaction mixtures.

a) 200 atoms of x + 200 atoms of y + 50 molecules of z_2

b) 1 mol of x +1 mol of y + 3 mol of z_2

c) 50 atoms of x + 25 atoms of y + 50 molecules of z_2

15. Write the oxidation number of oxygen

i) H_2O ii) H_2O_2 iii) KO_2

iv) OF_2 v) O_2

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03.07.19 T.T Accountancy Time: 45 Mins

STD: XI (F,G,I) Marks: 40

I. Answer the following questions: 4x10=40

1. Define Accounting. Write the objectives of Accounting.

2. Explain briefly Accounting cycle.

3. Discuss in detail the importance of Accounting.

4. Explain the functions of Accounting.