05.07.19   T.T Chemistry   Time: 45 Mins

STD: XI (C,D)   Marks: 30

I. Choose the correct answer: 5x1=5

1. The oxidation number of hydrogen in metal hydrides is

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

2. Among Zinc, copper and silver, the element with high electron

    releasing tendency is

     a) Copper   b) Zinc   c) Silver   d) both (a) and (b)

3. The change in oxidation number of Zinc in the following

    reaction $Zn + 2Hcl \rightarrow Zncl_2 + H_2$

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

4. _____ is the quantitative relationship between reactants

    and products.

     a) Stoichiometry   b) mole   c) empirical formula

     d) molar mass

5. Which of the following reactions does not show oxidising

    behaviour?

     a) $Cu + H_2SO_4 \rightarrow CuSO_4 + SO_2 + 2H_2O$

     b) $C + H_2SO_4 \rightarrow CO_2 + 2SO_2 + 2H_2O$

     c) $Bacl_2 + H_2SO_4 \rightarrow BaSO_4 + 2Hcl$

     d) none of the above

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

6. Define Stoichiometry.

7. Calculate the oxidation number for the underlined elements

    i) $H_2\underline{S}O_4$ ii) $\underline{C}H_2F_2$

8. What is oxidation number?

9. What is an excess reagent?

10. Name some oxidation reactions taking place in our daily life.

11. Give the classical concept of oxidation and reduction.

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

12. Write a note on i) combination reaction

                     ii) disproportionation reaction

13. The balanced equation for a reaction $2x+3y \rightarrow 4\ell + m$. When

    8 moles of x react with 15 moles of y then,

     i) Which is the limiting reagent?

     ii) Calculate the amount of products formed.

     iii) Calculate the amount of excess reagent at the end of the

       reaction.

14. i) Calculate the amount of water produced by the combustion

     of 32g of methane (s).

    ii) Define oxidation and reduction in terms of electronic

     concept.

15. a) Give the oxidation number of oxygen in the following

     i) H_2O ii) H_2O_2 iii) KO_2 (3)

    b) What happens when a Zinc metal stripe is placed in

     aqueous copper sulphate solution. Identify the type of

     redox reaction in this process.   (2)

I. Choose the correct answer: 12x1=12

1. The basic problem studied in Economics is

   a) Unlimited wants b) Strategy to meet all our wants

   c) Scarcity

2. Which of the following is micro economics statement?

   a) The general price level increased by 4 percent last year

   b) The price of wheat determines its demand

   c) The real domestic output increased by 2.5 percent last

      year

3. Find the odd one out.

   a) "Ceteris paribus"   b) "Principles of Economics"

   c) "Nature and Significance of Economic Science"

4. "Economics is a science". The basis of this statement is _____.

   a) Experiment

   b) Use of deductive method and inductive method for the

      formation of laws

   c) Relation between cause and effect

   d) All the above

5. The equilibrium price is the price at which _____.

   a) Excess demand is zero

   b) Quantity demanded equals quantity supplied

   c) Buyers spend their money

6. Identify the correct characteristics of utility.

   a) It depends upon consumer's mental attitude

   b) It is same as pleasure

   c) It is equivalent to 'usefulness'

7. Which theory is generally included in micro economics?

   a) Income theory   b) Price theory   c) Trade theory

8. Total revenue is equal to total output sold multiplied by _____

   a) Price   b) Total cost   c) Marginal cost

9. _____ have exchange value and their ownership rights can be

   established and exchanged.

   a) Services   b) Markets   c) Goods

10. Micro economics is concerned with _____.

    a) The study of Individual economic units behaviour

    b) The study of society   c) Economic growth

11. The process of reasoning from particular to general is _____.

    a) deductive method   b) Inductive method

    c) Positive economics

12. A market is _____.

    a) Only a place to buy things

    b) A system where persons buy and sell goods directly or

       indirectly   c) only a place to sell goods

II. Answer any 6 of the following: 6x3=18

13. Define positive economics.

14. Define micro economics.

15. What are goods?

16. Give the meaning of deductive method.

17. Name any two types of utility.

18. What is meant by Economics?

19. Distinguish goods from services.

III. Answer any one of the following: 1x10=10

20. Explain basic problems of the economy with the help of

    production possibility curve.

21. Elaborate the nature and scope of Economics.

05.07.19   T.T Commerce   Time: 45 Mins

STD: XI (E)   Marks: 40

I. Choose the correct answer: 12x1=12

1. Human activities can be categorized into _____ types.

    a) one   b) two   c) three   d) four

2. Activities undertaken with the object of earning money are

    called _____ activities.

    a) Economic b) Non-economic c) Financial d) Money

3. Occupations may be classified into _____ categories.

    a) One   b) Two   c) Three   d) Four

4. _____ refers to the occupation in which people work for

    others and get remuneration in the form of wages or salaries.

    a) Employment   b) Profession c) Business d) Industry

5. Primary objective of a business is _____.

    a) Making profit   b) not making profit   c) Special skill

    d) none of the above

6. Activities undertaken out of love and affection or with social

    service motive are termed as _____ activities.

    a) Economic b) Monetary c) Non-economic   d) Financial

7. Occupation of a Supervisor is _____.

    a) Employment   b) Profession   c) Business

    d) All of the above

8. Occupation of a Doctor is _____.

    a) Profession   b) Employment   c) Business

    d) None of the above

9. _____ defined business as human activity directed towards

    acquiring wealth.

    a) James Stephenson   b) Wheeler   c) J.L.Hansen
    d) H.Haney

10. _____ refers to fulfillment of expectations of employees.

    a) Human objectives   b) Social objectives

    c) Organisational objectives   d) Economic objectives

11. Public enterprises are classified into _____, _____, _____.

12. Raymonds is an example of _____ industry.

    a) Micro   b) Small   c) Medium   d) Large

II. Answer the following: 4x3=12

13. What do you mean by human activities? Explain.

14. Explain economic objectives.

15. State comparison of profession and business (any 3 points).

16. State the classification of business activities.

III. Answer the following: 2x8=18

17. Distinguish between economic and non-economic activity.

18. Explain the characteristics of business.

05.07.19   T.T Commerce   Time: 45 Mins

STD: XI (H,I)   Marks: 40

I. Choose the correct answer: 12x1=12

1. _____ is part and parcel of human life.

     a) Commerce   b) Banking   c) Insurance   d) Warehousing

2. _____ functions as a medium of exchange.

     a) Transport   b) Banking   c) Money   d) Warehousing

3. Which one helps in announcing the arrival of new products

   and their uses to the people?

     a) Advertising   b) Banking   c) Trade   d) Transport

4. _____ advocated maintenance of perfect balance between

   state's management and people's welfare through trading

   activities.   a) Kautilya   b) Pandiya   c) Chera   d) Chola

5. Boats like _____ were used for crossing oceans for foreign

   trade.   a) Thoni   b) Ambu   c) Thimil   d) Vangam

6. _____ means exchange of goods for goods.

     a) Insurance   b) Money   c) Barter system   d) Transport

7. Who encouraged import of foreign goods from Persia and

   subsidised the goods?

     a) Balban   b) Sultan   c) Kautilya   d) Alauddin Khilji

8. Profit margin allowed for traders ranged from _____% for

   imported goods.   a) 5   b) 10   c) 15   d) 20

9. _____ was the chief port of the kingdom of Cholas.

     a) Marakanam   b) Arikamedu   c) Kayal

     d) Kaveripumpattinam

10. _____ in sangam period was both internal and external.

     a) Sales   b) Education   c) Industry   d) Trade

11. Which is called as iruperu neymath?

     a) Chennai   b) Madurai   c) Tuticorin   d) Salem

12. Commerce activities are heading for a cashless system

   through _____.

     a) e-commerce   b) banking c) insurance   d) warehousing

II. Answer the following: 4x3=12

13. What is meant by Barter system?

14. What is meant by Nallangadi and Allangadi?

15. What was focused in Arthasasthra about trade?

16. What is the role of Sangam in trade development of ancient

   TamilNadu?

III. Answer the following: 2x8=16

17. What are the hindrances of commerce?

18. State the constraints in Barter system.

05.07.19   T.T Physics   Time: 45 Mins

STD: XI (A,B)   Marks: 30

I. Choose the correct answer: 5x1=5

1. S.I unit of magnetic induction _____.
      a) Am^{-2} b) AS   c) $NA^{-1}m^{-1}$ d) Nm^{-1}

2. $1^{11}=$_____ rad
   a) 2.91×10^{-4} b) 4.85×10^{-6} c) 1.745×10^{-2} d) 57.27×10^{-5}

3. The dimension of $(\mu_0 \epsilon_0)^{\frac{1}{2}}$ is _____.
      a) length   b) time   c) velocity   d) force

4. Which of the following pairs of physical quantities have same dimension?
      a) velocity & frequency   b) linear velocity & frequency
      c) Angular velocity & frequency   d) force & velocity

5. The dimensional formula of Boltzmann constant _____.
      a) $ML^2T^{-2}K^{-1}$ b) ML^2T^{-1} c) MT^{-2} d) $ML^2T^{-2}K^{-1}$

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

6. What are the different types of physical quantities?

7. Define dimensionless constant with examples.

8. Define Radian.

9. Define unit.

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

10. What are the limitations of dimensional analysis?

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

12. How will you measure the diameter of the moon using parallax method?

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

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

14. Assuming that the frequency γ of a vibrating string may depend upon i) applied force [F] ii) length (l) iii) mass per unit length (m) prove that $\gamma \propto \frac{1}{l}\sqrt{\frac{F}{m}}$ using dimensional analysis.

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

16. Write a note on triangulation method and radar method to measure larger distances.