EVERWIN VIDHYASHRAM

12.12.19 TT - Chemistry

STD:XI Marks:25

I. Answer in one sentence: 5x1=5

- 1. What is absolute temperature scale?
- 2. State Charle's law.
- 3. What is known as Avogadro constant?
- 4. What is aqueous tension?
- 5. What is meant by partial pressure?
- II. Answer in short: 3x2=6
- 6. What is known as Boyle's law?
- 7. State Dalton's law of partial pressures.
- 8. Using the equation of state Pv=nRT, show that at a given temperature density of a gas is proportional to gas pressure P.

III. Answer in brief:

3x3=9

- 9. Derive the ideal gas equation.
- 10. A vessel of 120ml capacity contains a certain amount of gas at 35° c and 1.2 bar pressure. The gas is transferred to another vessel of volume 180ml at 35° c. What would be its pressure?
- 11. Calculate the volume occupied by 8.8g of CO₂ at 31.1°c and 1 bar pressure R=0.083 bar dm³K⁻¹mol⁻¹.
- IV. Answer in detail:

1x5=5

- 12. i) Calculate the total pressure in a mixture of 8g of dioxygen and 4g of dihydrogen confined in a vessel of 1dm at 27°c, R=0.083 dm³K-¹mol-¹.
 - ii) State Avogadro's law.

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TT – Micro Economics

STD:XI Marks:25

I. Give very short Answers:

5x1=5

- 1. What is Law of Demand?
- 2. Give one reason for a rightward shift in demand curve.
- 3. What economic measure can the Government take to reduce demand for commodity X which is harmful for health?
- 4. If the price of good x rises and this leads to a fall in the demand for good y, how are the tow goods related?
- 5. Define substitute goods.

II. Answers in short:

5x2=10

- 1. Define the following term:
 - i)Increase in Demand

ii)Contraction in Demand

- 2. Explain the inverse relationship between the price of a commodity and its demand
- 3. Distinguish between a normal good and an Inferior good. Give example in each case.
- 4. Goods X and Y are substitutes. Explain the effect of fall in price Y on demand for X.
- 5. Explain three factors that can bring about an increase in the market demand for a commodity.

III. Give Long Answers for:

2x5=10

- 1. Explain in brief, the various exceptions to law of demand.
- 2. Distinguish between an inferior good and a normal good. Explain the effect of change in income on each, giving suitable examples.