Assignment-1

Sec. A

① Demand refers to the quantity of a good or service that consumers are willing and able to purchase at various prices during a specific period.

Ex: If the price of sugar decreases from 50/kg to 40/kg and consumers buy more sugar, this increases in quantity purchased reflects demand.

② Substitute Goods.

> Goods that can be used in place of each other.

> Ex: Tea and coffee. If the price of tea increases demand for coffee increases

Complementary Goods.

> Goods that are used together to satisfy a need.

> Ex: Car and Petrol. If the price of Petrol increases, the demand of cars may decreases.

③ • food • Clothing • Shelter

• Water • medicine

④ The law of supply that, other things being equal. the quantity of a good supplied increases as its price increases, and decreases as its price decreases.

Ex: If the price of tomatoes rises, farmers are likely to supply more tomatoes to maximize profit.

Sec-B

① The main factor influencing Price elasticity of demand are:

- Nature of the Good: Necessities have inelastic demand, luxuries have elastic demand.
- Availability of Substitutes - more substitutes make demand more elastic.
- Proportion of income spent - Goods that take up a larger Proportion of income have more elastic demand.
- Time Period - Demand is more elastic over a longer Period as Consumers adjust behaviour.
- Habit - forming Goods: Addictive Goods have inelastic demand.

③ The key factor influencing supply are:

- Price of the Good - Higher Prices encourage more supply.
- Cost of Production - Higher Production costs reduce supply.
- Technology :- Technological improvements increase supply.
- Government Policies - Taxes reduce supply, subsidies increases supply.

Natural factor: Weather and natural disasters affect supply.

• Number of sellers- more sellers increase market supply.

Sec-C

1(i) Perfectly elastic Demand- Any small change in Price causes an infinite change in demand ($E = \infty$)

(ii) Perfectly inelastic demand- Demand remains unchanged regardless of Price change ($E = 0$)

(iii) Relatively Elastic Demand- A small Price change leads to a large change in demand ($E > 1$).

(iv) Relatively Inelastic Demand- A large Price change causes a small change in demand ($E < 1$)

(v) Unit- Elastic demand- A change in Price leads to a proportional change in demand ($E = 1$)

② ARC elasticity measures the average Price elasticity over a range of Prices.

The formula is

$$E_d = \frac{\frac{Q_2 - Q_1}{Q_2 + Q_1}}{\frac{P_2 - P_1}{P_2 + P_1}}$$

Where

- Q_1, Q_2 = initial and new quantity demanded.

- P_1, P_2 = initial and new Price.

__Ex__ If the Price of a Product rises from 10 to 12 and demand decreases from 100 unit to 80 unit

$$E_d = \frac{\frac{80-100}{80+100}}{\frac{12-10}{12+10}} = \frac{\frac{-20}{180}}{\frac{2}{22}} = -1.22$$

Since the result is greater than 1 (in absolute terms), demand is elastic.