Chapter 1: Introduction to Microeconomics

Coverage: Core Definitions, Central Problems, Opportunity Cost, Micro vs. Macro, Positive vs. Normative, and Production Possibility Curve (PPC).

SECTION A: VERY SHORT ANSWER QUESTIONS (1 MARK EACH)

Q1. Define Microeconomics.

1 Mark

Answer: Microeconomics is the branch of economics that studies the economic behavior and decision-making of individual economic units, such as a consumer, a firm, a industry, or a specific market.

Q2. What is meant by Opportunity Cost?

1 Mark

Answer: Opportunity cost is defined as the cost of the next best alternative foregone when a choice is made between available mutually exclusive options.

Q3. Define Marginal Rate of Transformation (MRT) / Marginal Opportunity Cost (MOC).

1 Mark

Answer: MRT (or MOC) is the ratio of the units of one commodity sacrificed to produce one additional unit of another commodity. Formula: $MRT = \Delta Y / \Delta X$ (where ΔY is units sacrificed and ΔX is units gained).

Q4. Why does an economic problem arise in any society?

1 Mark

Answer: Economic problems arise primarily due to three reasons: (i) Human wants are unlimited, (ii) Economic resources are scarce/limited relative to wants, and (iii) Resources have alternative uses.

Q5. What is the shape of a Production Possibility Curve (PPC) and why?

1 Mark

Answer: A PPC is concave to the origin because of the increasing Marginal Rate of Transformation (MRT) — as more units of a good are produced, more units of the other good must be sacrificed.

SECTION B: SHORT ANSWER QUESTIONS (3–4 MARKS EACH)

Q6. Distinguish between Microeconomics and Macroeconomics.

3 Marks

Answer:

Basis	Microeconomics	Macroeconomics
Unit of Study	Studies individual economic units (e.g., individual consumer, firm).	Studies the economy as a whole (e.g., aggregate demand, national income).
Main Objective	To determine price of a commodity or factor of production.	To determine income and employment levels of the economy.
Core Variables	Individual demand, individual supply, product price.	Aggregate demand, aggregate supply, general price level.

Q7. Differentiate between Positive Economics and Normative Economics with examples.

3 Marks

Answer:

- **Positive Economics:** Deals with facts, actual economic state, and relationships that can be verified with data ("what is", "what was", or "what will be"). It is objective and value-neutral. *Example:* "Prices in India have risen by 5% this year."
- **Normative Economics:** Deals with opinions, value judgments, and ethical considerations ("what ought to be" or "what should be"). It cannot be empirically verified. *Example:* "Government should provide free education to all children."

Q8. Explain the three central problems of an economy.

4 Marks

Answer: Due to scarcity of resources and alternative uses, every economy faces three fundamental central problems:

1. **What to Produce and in What Quantities?** Deciding which goods and services (consumer goods vs. capital goods, civil goods vs. war goods) to produce and in what proportion, to maximize societal satisfaction.
2. **How to Produce?** Selection of the technique of production — either *Labor-Intensive Technique* (using more labor than capital) or *Capital-Intensive Technique* (using more machines/capital than labor), depending on resource availability and cost efficiency.
3. **For Whom to Produce?** Allocation of produced goods and distribution of national income among different sections of society (rich vs. poor / personal vs. functional distribution).

Q9. **What causes a shift in the Production Possibility Curve (PPC)? Explain with examples.** 4 Marks

Answer: A shift in the PPC indicates a change in the productive capacity of an economy.

- **Rightward Shift (Growth of Resources / Technological Progress):** Indicates an increase in the economy's productive capacity.
  Causes: Discovery of new natural resources, influx of skilled labor, advances in technology, or growth in capital stock.
- **Leftward Shift (Decrease in Resources):** Indicates a contraction in productive capacity.
  Causes: Natural calamities (e.g., earthquakes, floods destroying capital), war, brain drain, or depletion of natural resources.

SECTION C: LONG ANSWER & SCHEDULE QUESTIONS (6 MARKS EACH)

Q10. **Explain the concept of Marginal Opportunity Cost (MOC) with the help of a hypothetical schedule and state the properties of PPC.** 6 Marks

Answer:
Marginal Opportunity Cost (MOC): MOC is the loss of output of one commodity (say, Butter) per unit increase in output of another commodity (say, Guns) when factors of production are shifted from one to the other.

Possibility	Guns (Units) [X]	Butter (Units) [Y]	Loss of Butter (ΔY)	Gain of Guns (ΔX)	MOC / MRT ($\Delta Y / \Delta X$)
A	0	15	-	-	-
B	1	14	1	1	1 Butter : 1 Gun
C	2	12	2	1	2 Butter : 1 Gun
D	3	9	3	1	3 Butter : 1 Gun
E	4	5	4	1	4 Butter : 1 Gun
F	5	0	5	1	5 Butter : 1 Gun

> **Why MOC increases:** Resources are not equally efficient in the production of all goods. When resources are transferred from Butter to Guns, less suitable resources are moved, leading to higher sacrifices per additional unit.

Two Main Properties of PPC:

1. **PPC Slopes Downwards from Left to Right:** Because resources are scarce and fully employed, to increase output of one good, production of the other good must be reduced.
2. **PPC is Concave to the Origin:** Due to increasing Marginal Opportunity Cost / Marginal Rate of Transformation (MRT) as production shifts from one commodity to another.

Q11. **Distinguish between a Point Inside, Point On, and Point Outside the Production Possibility Frontier (PPF). What do they signify?** 6 Marks

Answer:

A Production Possibility Frontier represents maximum attainable combinations of two goods with given resources and technology.

- **Point ON the PPF:** Represents *Full Utilization and Efficient Utilization* of resources. The economy is operating at its maximum potential capacity.
- **Point INSIDE (below) the PPF:** Represents *Underutilization, Unemployment, or Inefficient Allocation* of resources. Output produced is less than potential capacity (e.g., recession or labor strikes).
- **Point OUTSIDE (above) the PPF:** Represents an *Unattainable Combination* with current resources and technology. The economy cannot reach this combination unless resources expand or technology improves.