THEORY PROGRAM

# FNR – SUGGESTED ANSWERS

FNR: **09**

**2024 A/L**

**Viewed SA (VR) on:**

**ATTEMPT. PRACTICE. LEARN. IMPROVE. ACHIEVE.**

## Part – [A]

| Question | Answer | Question | Answer |
|---|---|---|---|
| 01 | | 14 | |
| 02 | | 15 | |
| 03 | | 16 | |
| 04 | | 17 | |
| 05 | | 18 | |
| 06 | | 19 | |
| 07 | | 20 | |
| 08 | | 21 | |
| 09 | | 22 | |
| 10 | | 23 | |
| 11 | | 24 | |
| 12 | | 25 | |
| 13 | | | |

## Part – [B]

**Question [01]**

**(A)** **Distinguish** between the following pairs of concepts

(1) Capital and Human Capital
(2) Human Capital and Social Capital
(3) Human Resource and Human Capital

**(1)** Capital in economics refers to humanmade real assets which assist or aid in the production process. Capital consists of real assets such as factories, machinery and equipment, raw material stock etc.

Human capital refers to competencies, skills, knowledge, and interpersonal skills acquired and developed by a given individual through investments in education, receiving training and experience.

**[01 mark]**

Specific distinctions between capital and human capital tends to be:

- Human capital is a competency which is intangible unlike physical capital.
- Human capital is a combination of attributes from both labour and capital resources.
- Unlike the investments made in other assets, the investment in human capital is specific to the individual.

**[01 mark, total 02 marks]**

**(2)** **Human capital** refers to **competencies, skills, knowledge,** and **interpersonal skills** acquired and developed by a given individual through investments in **education, receiving training** and **experience**. Human capital is a combination of attributes from both labour and capital resources.

**[01 marks]**

**Social capital** consists of **inter-personal relationships**, norms and variety of behavioral ethics which emerge through **self-support groups**, **social networks** and **organizations** created to fulfill objectives related to **common wellbeing** of people both qualitatively and quantitatively.

<u>**Alternatively**</u>**:**

Social capital is something which emerges through **mutual trust and understanding** among a group of people (society) who **work together** with the aim of achieving some **common welfare-based** objectives or goals which **benefits all in society**.

## Examples:

Farmers association, women's societies, credit granting societies, charity organizations and different establishments' setup to assist special groups such as widowers, orphans, and disabled solders etc.

**[01 mark, total 02 marks]**

**Value Addition:** Human capital is developed and driven by individual effort and benefits, while social capital is collective in nature and driven by common benefits

**(3)** Human resource is **basically labour**, which is the **physical and mental efforts** of humans used in the production process. Labour is time (labour hours) allocated for a production activity by an individual and is a live resource. Labour is the **basic form of the human resource.**

**[01 mark]**

**Human capital** refers to **competencies, skills, knowledge,** and **interpersonal skills** acquired and developed by a given individual through investments in **education, receiving training** and **experience**.

**[01 mark, total 02 marks]**

**Value Addition:** Human capital is a combination of attributes from both labour and capital resources, and it is developed by an individual by enhancing their basic labour.

**[02 marks each]**

**(B)** **Outline** the main functions of an entrepreneur **[04 marks]**

- The entrepreneur shall **mobilize production factors** and initially **organize** and engage in the process of **producing goods and services.**
- The entrepreneur shall **introduce innovation** from a business perspective, i.e., he or she shall introduce new goods, new equipment, new production methodology, and business organizations.
- The entrepreneur **provides risk capital**, i.e., he or she shall combine resources and engage in producing an innovative good or service which may or may not be successful in the marketplace. The entrepreneur shall receive **profits** if the product is successful and faces the risk of incurring **losses.**
- The entrepreneur is expected to make **strategic business decisions** and formulate policies upon which business activities shall be conducted.

**[01 mark each, 04 marks]**

**(C)** **Define** 'Division of Labour' and **state** four main merits and demerits of division of labour as a productivity improvement strategy

Division of labour is the separation of the production process into several tasks, with each task performed by a separate person or group of persons, instead of all tasks being performed by the same person or the same group.

It is generally applied in organizations engaging in mass or large-scale production, specially using assembly line and automated modern production.

**[02 marks]**

## **Advantages (Merits)** & **Disadvantages (Demerits):**

- Increase in quantity and quality of production and reduction in the cost of production
- Maximum utilization of machinery and incentive to engage in large scale production
- Maximum use of everyone's ability
- Saving of time and expenses in training
- Management control
- Encourages inventions.
- Increase in efficiency of workers and their skills
- Increases mobility of labour and employment opportunities

**[01 mark each, subtotal 02 marks]**

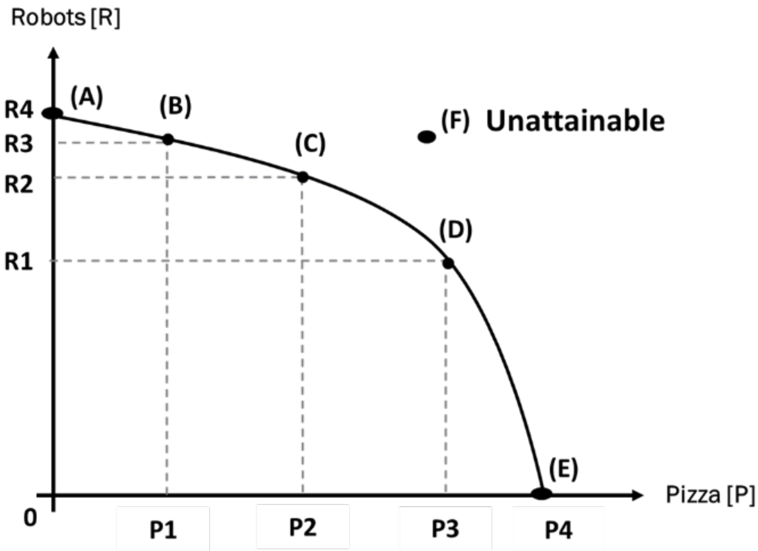
## Disadvantages (Demerits):

- Possibility of over-production
- Lack of responsibility
- Increased dependence of on machines
- People become dependent upon each other
- Administrative difficulties and industrial disputes
- Worker feels bored or workers becomes monotonous. Workers may even feel that they are alienated
- Fear of unemployment

**[01 mark each, subtotal 02 marks]**
**[Total 06 marks]**

**Question [02]**

**(A)** With the help of a Production Possibilities Frontier (PPF) diagram **briefly explain** the fundamental economic concepts [Hint: Scarcity, alternative uses of resources…,]




**Scarcity (Relative Scarcity):**
Combination /APC – (**F**)

**Alternative Uses of Resources:**
Ability to move from one combination/APC to another
E.g. (A) to (B)
(B) to (C)
(E) to (D)
(D) to (C)

**The Problem of Choice:**
Any combination/APC on the PPF: (A), (B),(C), (D) and (E)

### Opportunity Cost

**From point (C) to (D)**

$$\frac{\Delta R}{\Delta P} = \frac{-(R1 - R2)}{+(P3 - P2)}$$

**From point (D) to (C)**

$$\frac{\Delta P}{\Delta R} = \frac{-(P2 - P3)}{+(R2 - R1)}$$

**[06 marks]**

**Note:** A brief explanation as follows is most recommended. Make sure to relate to the PPF diagram presented by you in the explanation

## [1] Relative 'Scarcity':

The implication of relative scarcity of resources is given economies maximum sustainable alternative output combinations (i.e., potential output) with regards to two product categories is restricted it PPC.

Accordingly, any product combination or point located outside (in the area right of the PPC) becomes unattainable and unsustainable (or an impossibility), at the economy's present production potential.

## [2] Alternative Uses of Resources:

Alternative uses in production inherently held by majority of resources, implies that an economy is able to move from one product combination to another along its PPC (i.e., substitutability of resources from one industry to another is relatively or moderately possible).

## [3] The Problem of Choice:

The fact of relative scarcity of resources and alternative uses makes selecting one amongst many alternative product combinations located on a given economy's PPC unavoidable. Making such a choice inevitably leads to the creation of opportunity cost.

## [4] The Problem of Opportunity Cost:

Opportunity cost in general refers to the benefit foregone out of the next best alternative upon which resource could have been allocated on in terms of production or consumption.

In a PPF context the process of measuring the cost of producing an increasing number of goods with regards to a given product, in terms of the forgone units of the other product category will result in the estimation of 'Opportunity Cost'. Opportunity cost on a marginal basis is essentially the slope or gradient of the PPF (when moving downwards along the PPF)

**(B)** **Briefly outline** the 'Concept', 'Conditions' and 'PPF Implications' of 'Productive and Allocative Efficiency'

## Productive Efficiency:

### <u>Concept</u>

Productive efficiency is said to be achieved when **either**, the **maximum** possible **output** is produced, using a **given** amount of scare resource **inputs** OR a **given** level of **output** is produced, using the **minimu**m possible level of scarce resource **inputs**. Accordingly producing a unit of output at the lowest resource cost.

**Alternatively:**

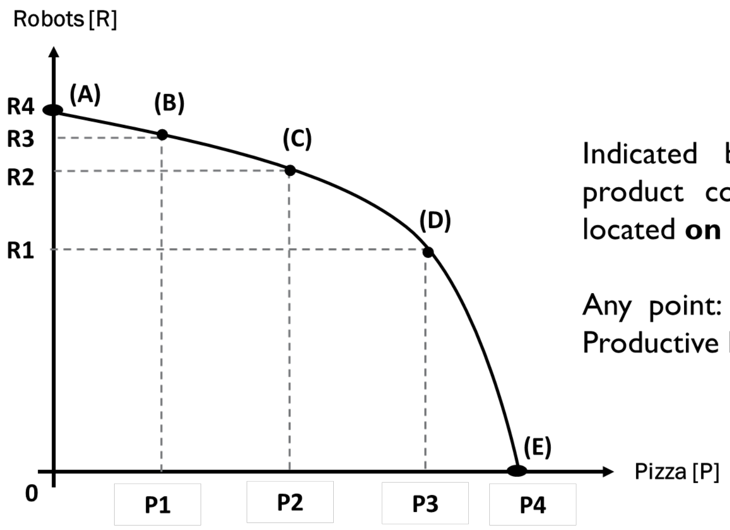
Productive efficiency is said to be created in a situation where an economy is unable to increase the output of a given product category, without decreasing or foregoing the output of another product category. Such a situation infers the economy is operating on its PPC.

## Conditions

In order to attain productive efficiency a country should fulfil two main conditions at the same time:

1) Full employment of resources
2) Full production

## PPF Implications




Indicated by '**any**' alternative product combination or point, located **on the PPF**:

Any point: (A) to (E), indicates Productive Efficiency

**[03 marks]**

**Allocative Efficiency:**

## Concept

The process of allocating limited resources of a society, towards the production of a combination of goods and services, **most desired** or **needed** by the given **society.**

## Condition

Such an optimum product combination is arrived at when the **Marginal Cost (MC)** is **equal** to the **Marginal Benefit (MB)** or **Price (P)**, i.e., when **MB = MC** or **P = MC.**

## PPF Implications

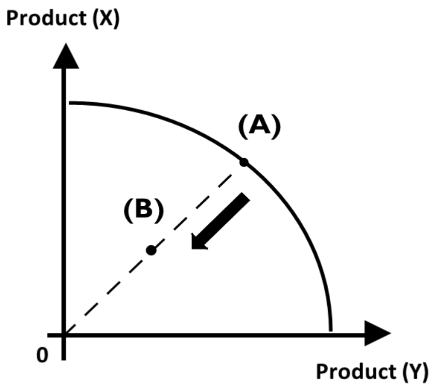
If an economy has attained a state of allocative efficiency, it implies the given economy is operating on a **specific optimum point of output on its PPF,** where **MB = MC**.

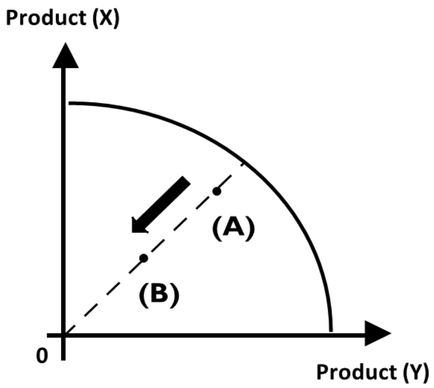
**[03 marks] [Total 06 marks]**

**(C)** With the help of a Production Possibilities Frontier (PPF) diagram **distinguish** between the dynamic macro phenomena of 'Economic Recession', 'Economic Depression' and 'Economic Decline'

An **economic recession** is a macroeconomic phenomenon in which a country's real actual GDP decreases, and unemployment rate increases persistently for a short period of time (generally for a period of two or more quarters). An economic downturn is generally caused due to a deficiency or reduction in Aggregate Demand (AD)

PPF Representations:




 A **downturn** (beginning of a recession) generally is shown by a **point moving from the curve to another point located inside the curve**, using an indicative arrow

**[02 marks]**
[One of the above methods is sufficient]

An **economic depression** is generally known as a severer and prolonged period of recession, with long term contractionary effects or consequences. A depression shall result in reducing in AD and Long-run Aggregate Supply (LRAS)

An economy in a depression (i.e. a severe, prolonged recession) shall generally experience an **'inward or leftward parallel shift'** of its production possibility curve (PPC), since the economy's production capacity is generally negatively affected or reduced.

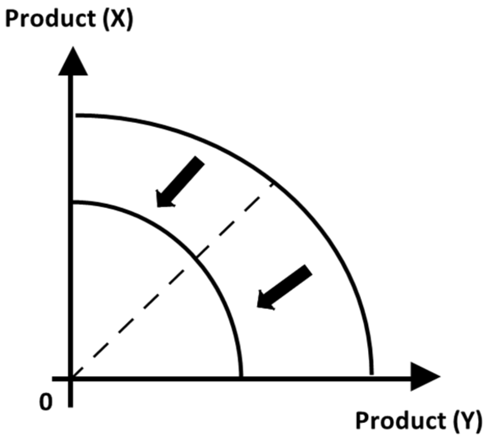
**[02 marks] [PPF should be shown]**

An **economic decline** generally refers to a significant reduction in an economy's production potential, due to losses or damages caused by certain manmade (e.g., war or nuclear disasters) or natural disasters. (Tsunami, earthquakes, prolonged droughts), epidemics, pandemics.

Accordingly, a situation of 'Economic Decline or Breakdown' shall create an **inwards (leftwards) shift** of a country's PPC.

**[02 marks] [PPF should be shown]**

# Economic Depression Vs. Decline




**Outcome/Effect [PPF Implication]:**
The PPF outcome of an economic depression and decline is the same, and both have long-term impact on the economy.

**Reasons/Causes:**
The principal difference between a depression and decline tends to be that a depression is a result of a persistent and drastic reduction in AD and Long-run Aggregate Supply (LRAS) or Potential Output, while a decline is caused by non-macroeconomic man-made and natural disasters, and epidemics (pandemics)

**[Total 06 marks]**
[Reasons/causes description is not essential, only for knowledge purpose]

**<u>Question [03]</u>**

'Why' is the demand curve for a normal good tends to **Negatively** sloped. **[06 marks]**

The demand curve for a normal good tends to negatively sloped due to the **price effect.** The price effect refers to the impact on quantity demanded of a given product, due to a change in its price, while other factors affecting demand are held constant.

The price effects operates through two main forces or sub-effects:

- **Substitution Effect**
- **Income Effect**

**[02 marks]**

**Substitution effect** of a price change is the tendency of consumers to change quantity demanded of a given good as a result of its relative price changing.

When all other factors affecting demand of a product are held constant *(specially price of substitute goods and consumers' nominal income)*, when only the price of the product concerned increases, consumers "substitute away" from the product concerned (i.e. decrease quantity demanded), since it becomes relatively expensive and if price decreases, consumers shall 'substitute in favour' (i.e., increase quantity demanded) of the product concerned, since it becomes relatively cheap.

**[02 marks]**

**Income effect** of a price change is the change in quantity demanded of a product because the change in its price has the effect of changing a consumer's real income.

When all other factors affecting demand of a normal good are held constant *(specially consumers money income and price of related products)*, when only the price of the product concerned increases, the quantity demanded for the product is decreased, since the consumers' real income decreases *(i.e. consumers' become relatively poor in real terms),* and if price falls, consumers shall increase their quantity demanded, since consumers' real income increases (i.e. consumers' become relatively richer in real terms).

**[02 marks] [Total 04 marks]**

## Question [04]

**Define, outline** the main features of the following cost related concepts, and **present** the standard functions in a diagram.

(A) Average Fixed Cost (ATC)
(B) Average Variable Cost (AVC)
(C) Average Total Cost (ATC)
(D) Marginal Cost (MC)

**[02 marks for each concept, and 02 marks for the correct cost diagram]**

**[A] Average Fixed Cost (AFC):**

- Definition:
  The **fixed cost** applicable **per unit** of output
- Formula [AFC = TFC ÷ Q], specific to the short run [AFC = ATC – AVC]
- The AFC curve resembles the shape of a **rectangular hyperbola**

**[B] Average Variable Cost (AVC):**

- Definition:
  The **variable cost** applicable **per unit** of output
- Applicable to the short run and long run of production
- Generic Formula [AVC = TVC ÷ Q] and in the short run [AVC = ATC - AFC]
- The generic AVC curve is 'U' shape

## [C] Average Total Cost (ATC):

- Definition:
  The total cost applicable **per unit** of output

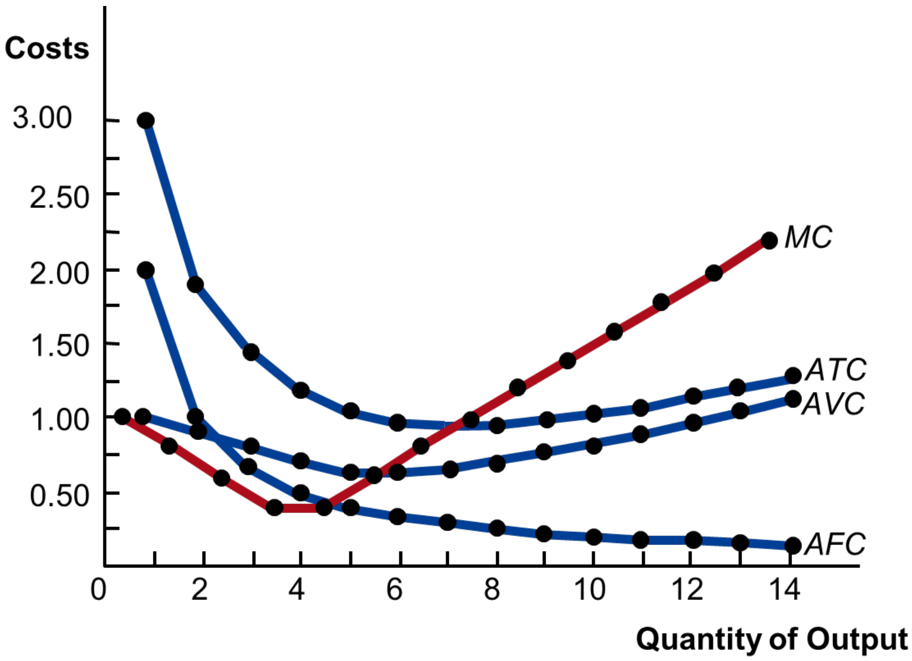
- In the short run of production ATC consists of Average Fixed Cost in addition to Average Variable Cost
- Generic Formula [ATC = TC ÷ Q] and short run [ATC = AFC + AVC]
- Short run ATC curve is a narrower and deeper ‘U’ shape, while in the long run it’s a wider and shallower ‘U’ shape (AKA: Envelope Curve)

## [D] Marginal Cost (MC):

- Definition:
  The **incremental cost** of producing **one extra unit** (denotes the change in total cost, caused by producing one extra unit of output).

- The slope of the total cost curve
- Purely consists of variable cost, even in the short run as total fixed cost remains constant.
- Generic Formula [MC = ΔTC ÷ ΔQ] and in the short run [ΔTC = ΔTVC = MC]
- The generic MC curve is ‘U’ shape.

**[02 marks each]**




**[02 marks for current diagram]**
[Values not required]