

THEORY PROGRAM
FORTNIGHTLY REVIEW [FNR]
 Suggested 'Answers'

FNR: 04

Issued on:

AL - 2023

Due on:

ATTEMPT. PRACTICE. LEARN. IMPROVE. ACHIEVE.

Part [A]

Question	Answer	Question	Answer
01	3	16	2
02	2	17	4
03	4	18	2
04	2	19	2
05	5	20	4
06	4		
07	3	(I)	False
08	1	(II)	True
09	4	(III)	False
10	3	(IV)	True
11	4	(V)	True
12	1	(VI)	False
13	1	(VII)	False
14	2	(VIII)	True
15	4	(IX)	True
		(X)	False

Part [B]

(01) **Briefly explain** what is meant by the concept of 'Economic Efficiency'.

[04 marks]

Economic efficiency is where a given society uses **limited economic resources efficiently** in the process of **satisfying** their **unlimited wants**. In other words, utilizing limited resources in producing the **most desired** and **wanted** goods and services by a society at the **optimum level**.

An economy is said to be in a situation (state) of economic efficiency in terms of using (utilizing) scarce resources, if the **welfare** of one party or person cannot be improved, without foregoing or decreasing another party or person (i.e., there is an essential trade-off of welfare or benefit).

[02 marks]

There are two types of efficiencies (**sub efficiencies**) which must be **fulfilled simultaneously** (at the same time) for a country to achieve economic efficiency.

[1] Productive efficiency

Producing a combination of goods and services at **lowest** possible **production cost**.

[2] Allocative efficiency

Allocating limited resources of a society towards the production of the **most desired combination** of goods and services.

[Explanation of sub efficiencies is not expected]

[02 marks] [Total 04 marks]

Question [02]

(I) Allocative efficiency

Allocative efficiency is the process using limited resources of a society, towards the production of a **combination** of **goods** and **services**, **most desired** or **wanted** or **needed** by the given **society**.

If an economy has attained a state of allocative efficiency, it means that the given economy is operating or producing on a **specific (or a given) optimum point of output on its production possibilities curve**.

[01 mark]

Such an optimum product combination (allocatively efficient combination) is arrived at or found when the **marginal cost (MC)** of producing each product is **equal** to the products marginal benefit (**MB**) or **price (P)**, i.e., when **MB = MC** or **P = MC**.

[01 mark] [Total 02 marks]

(II) Productive Efficiency

Productive Efficiency is ensuring all industries (markets) are engaged in production at the '**Lowest Production or Resources Cost**' (Lowest Average Total Cost: ATC) possible. Thus, productive efficiency is also known as '**Cost Efficiency**'.

Alternative Definition [1]:

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

Alternative Definition [2]:

Productive efficiency is where the output of one product category **can not** be **increased without foregoing or decreasing the output of the other product category**, by **operating** or producing **along the production possibilities frontier (PPF)**.

If an economy has **attained** a state of **productive efficiency**, it means that the given economy is **operating or producing at any point on the given economy's PPF**.

[01 mark]

There're two principal conditions which must be essentially satisfied for the achievement of productive efficiency.

- **Full Employment** of Resources
- **Full Production** in using Resources

(III) Full Employment

This is the process of using **all resources (land, capital, labour and entrepreneurial)**, which are **presently available** and **suitable** within the production process, during the period under consideration.

Full employment should be achieved with a focus on **sustainability of the economy's limited resources for the future generations.**

[02 marks]

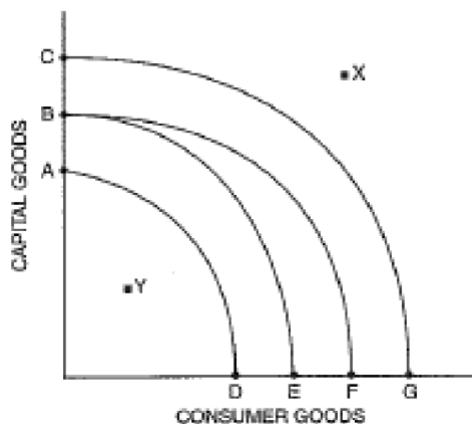
(IV) Full production

Using all resources employed in production, provide their **maximum productive contribution** towards the process of satisfy physical or material needs of a society.

Resources will be utilized at full production, if all resource used in production perform at their **maximum productive efficiency** (i.e., using all production factors at their normal intensity or at their productivity).

[02 marks]

[03] Assume the BE represents a given country's current PPC.



Indicate the curve chosen with two letters. Eg: BE

- (A)** Suppose there is a major technological breakthrough in the consumer goods industry, and the new technology is widely adopted. Which curve in the diagram would represent the new PPC? **[BF]**
- (B)** Suppose a new government comes into power and forbids the use of automated machinery and modern production techniques in all industries. Which curve in the diagram would represent the new PPC? **[AD]**

(C) Suppose massive new sources of oil and coal are found within the economy, and there are major technological innovations in both industries. Which curve in the diagram would represent the new PPC? [CG]

(D) If BE represents a country's current PPC, what can you say about a point like 'X'?

It is impossible for this country to produce this combination of goods with its current resources and technology.

(E) If BE represents a country's current PPC, what can say about a point like 'Y'?

At this point of the diagram the country is producing beneath its potential because of unemployment and inefficient use of its resources.

[02 marks each] [Total 10 marks]

Question [04]:

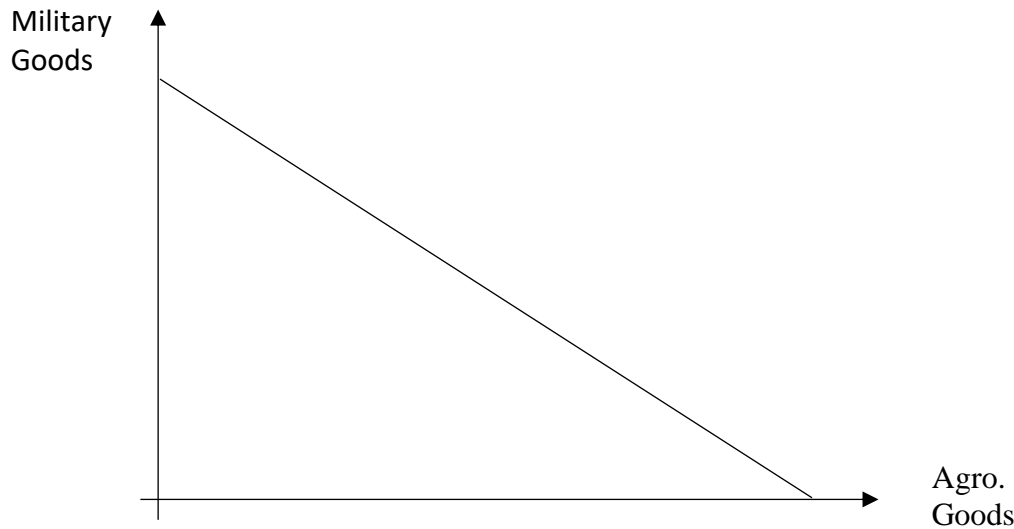
(I) The following table contains some data pertaining to a linear PPM, complete the table and answer the relating questions

Agro Goods (Units)	Military Goods (Units)	Opportunity Cost of Agro Goods [$\Delta M / \Delta A$]	Opportunity Cost of Military Goods [$\Delta A / \Delta M$]
00	10		
01	08	- 2	- 0.5
02	06	- 2	- 0.5
03	04	- 2	- 0.5
04	02	- 2	- 0.5
05	00	- 2	- 0.5
		[02 mark]	[02 mark]

Note: the minus sign not essential, correct value is key.

[Total 04 marks]

- (II) Construct the PPC pertaining to the above table, represent Military goods in the vertical axis and Agro goods in the horizontal axis



- (III) Briefly describe the general Marginal Opportunity Cost (MOC) behaviour along the PPF constructed by you and state the main reasons which would explain such MOC behaviour

If axis is indicated correctly, point of origins is indicated, for a linear PPC constructed based on the proper scaling of the axis [04 marks]

A **linear (straight line)** PPC implies **fixed** marginal opportunity cost, upwards or downwards along the curve.

[01 marks]

The main assumptions or reasons for fixed opportunity cost can be stated as follows:

- The **Homogeneous nature of production factors** used within both industries [Perfect mobility or perfectly substitutable resources among industries]
- The **similarity** in **production methodology and techniques** used in both industries
- The **productivity of production factors** used in both industries is consistent or **similar**, leading to a constant resource combination rate, among the production of the two product categories under consideration.

[01 mark each, subtotal 03 marks]

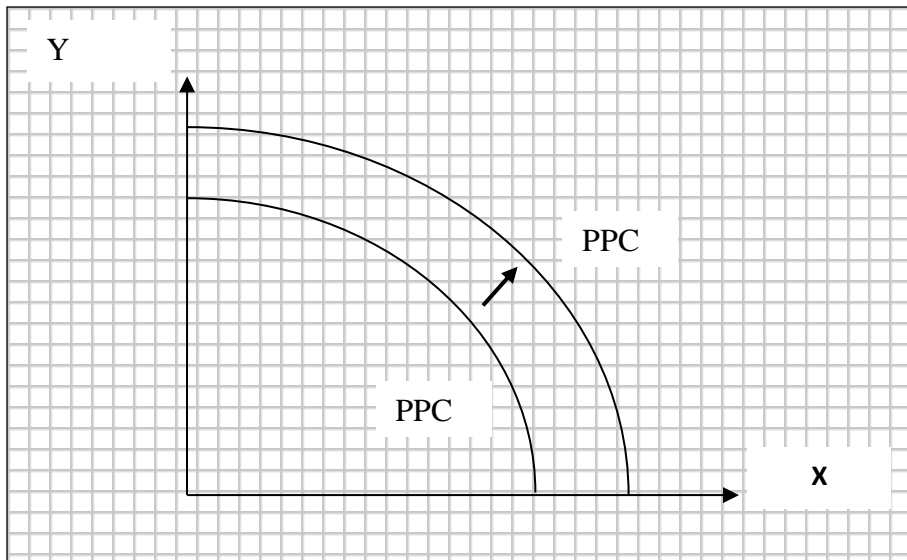
[Total 04 marks]

[05] Represent the given situations using concave PPF diagrams

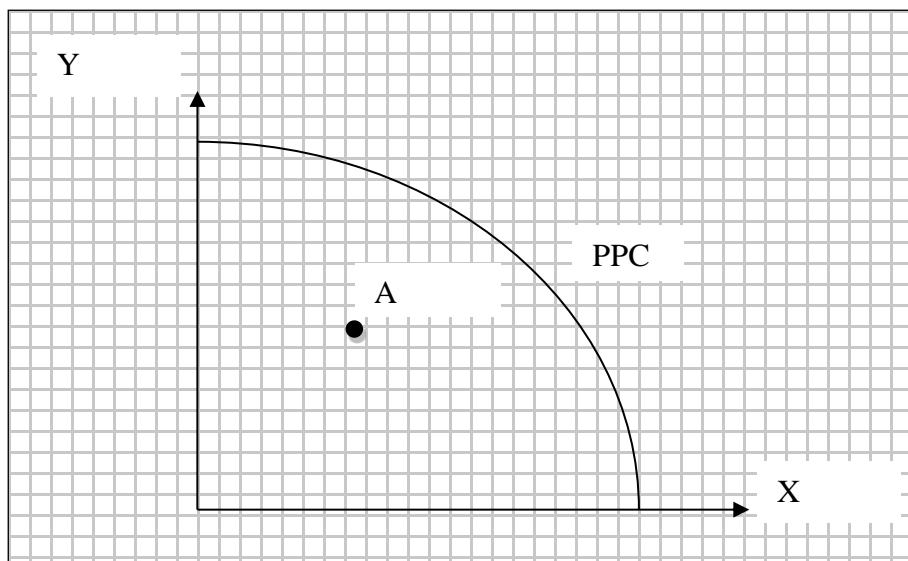
- (I) Economic Growth
- (II) Unemployment of Resources
- (III) Productive Efficiency
- (IV) Economic Downturn (Recession)

[02 marks each]

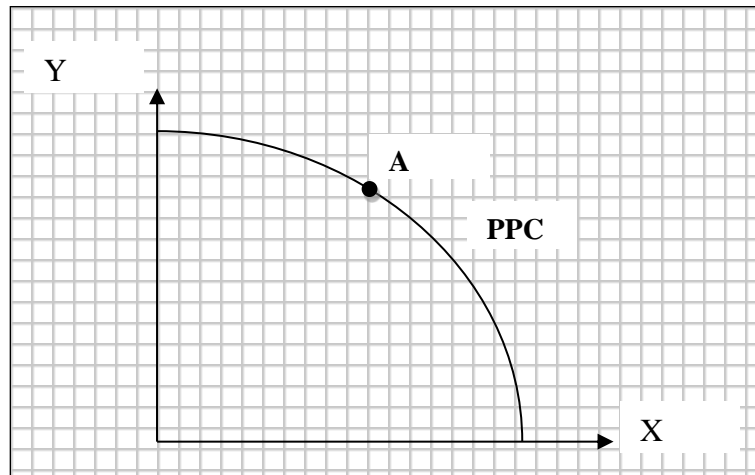
(I) Economic Growth



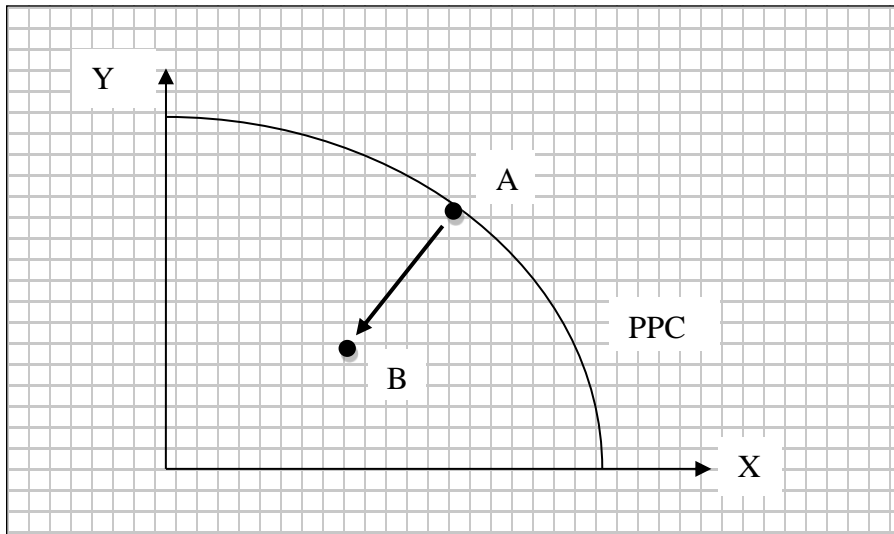
(II) Unemployment of Resources



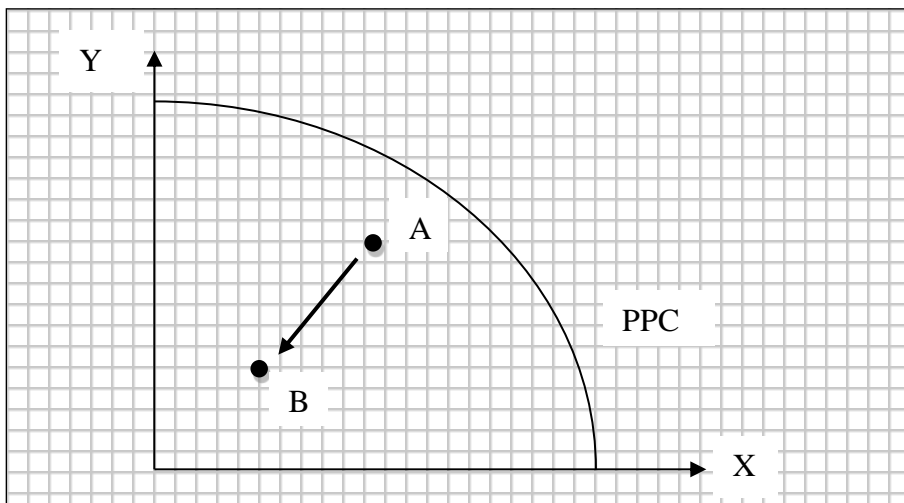
(III) Productive Efficiency



(IV) Unemployment of Resources

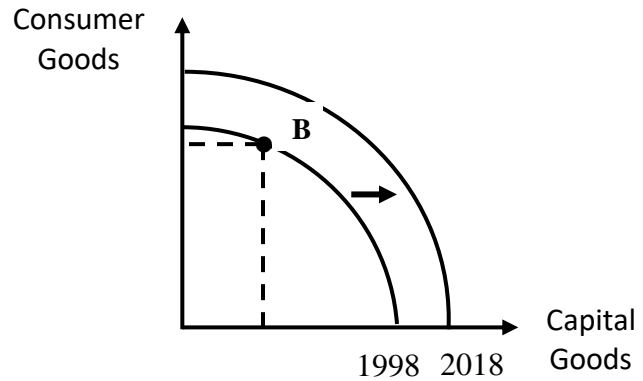
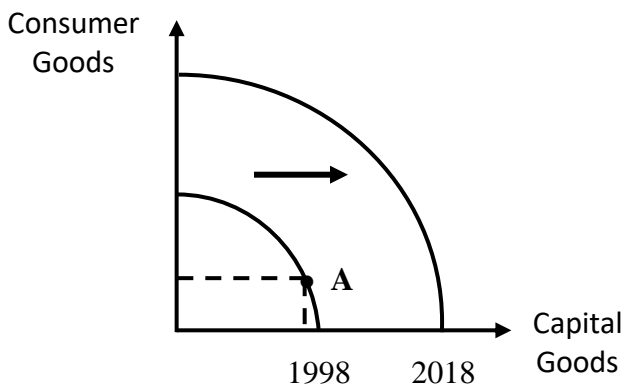


Alternative Presentation [Recession]



[06] Explain using appropriate Production possibilities Frontier (PPF) diagram(s), how a country's present resource allocation decisions may affect their future economic growth potential

[04 marks]

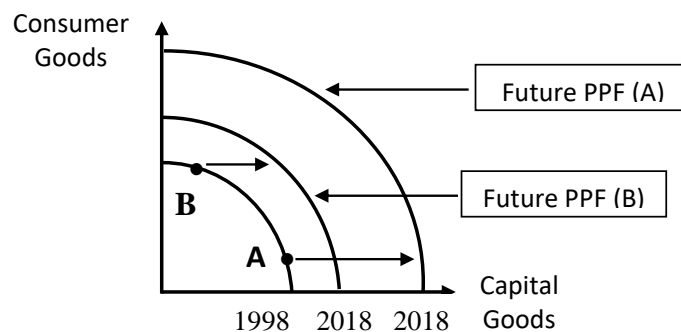


(A) An economy allocating relatively less resources towards the production of consumer goods during the present period of time. Is able to achieve relatively higher degree of economic growth in the future.

(B) An economy allocating relatively less resources towards the production of capital goods during the present period of time. Is expected to achieve relatively lower degree of economic growth in the future.

[01 mark for each diagram and 01 mark for the explaining, total 04 marks]

Alternative, representation approach



[07] State the main characteristics of 'Land' as an economic factor of production [04 marks]

- A gift of nature (a natural resources)
- The supply is inelastic (perfectly inelastic)
- Exists in the form of **renewable** and **nonrenewable**
- Immobile in nature (**geographically immobile**: cannot be physically moved from one place to another)
- The productivity can be enhanced (i.e., can be improved)
- **Nonhomogeneous** in nature (**quality** differs or changes from country to country)
- All payments for and from land resources are termed as **Rent**