

FINITE RESOURCES -UNLIMITED WANTS

KEYPOINTS:

- **The economic problem:** The economic problem of not being able to satisfy everyone's wants is due to scarcity.
- **The economic problem can never be solved because** the economic problem is scarcity. Also wants are infinite but resources are limited. The wants exceed resources as wants grow faster than resources (or to put it the other way: the growth of resources will never exceed the growth of wants)
- **Nature of the basic economic problem:**

At any given point of time in an economy, output is limited by the resources and the technology available. There is therefore a basic condition of scarcity. On the other hand, the wants of the consumers are infinite or unlimited and the ability of the resources to satisfy those wants however are limited. There is therefore a need to make a choice as a result of this scarcity. This choice will be in terms of what to produce, how to produce and for whom to produce.
- **Economic good:** An economic good is a consumable good that is useful to people but scarce in relation to its demand. Also economic goods have a price. Human effort is required to obtain economic goods.
- **Free good:** It is a product that does not require any resources to make it and so does not have an opportunity cost
- **Difference between economic goods and free goods:**

	Economic good	Free good
1	Produced using the scarce resources	Produced without using any scarce resources
2	More of it is preferred	More of it is not preferred
3	They have utility and exchange value.	They have utility but no exchange value.
4	They are created by man	They are created by nature

A PEEK INTO THE APPLICATION BASED QUESTIONS FOR PAPER 2

Here's a quick look into the some of the application-based questions asked in the previous years. The idea is to help you answer the questions in the correct way

1. What is meant by the term : "The basic economic problem?[2]

Ans: Basic economic problem refers to the basic situation of scarcity which arises due to the finite resources and the unlimited wants. Hence there is a necessity for a choice to be made.

2. Why do all countries face the basic economic problem? [4]

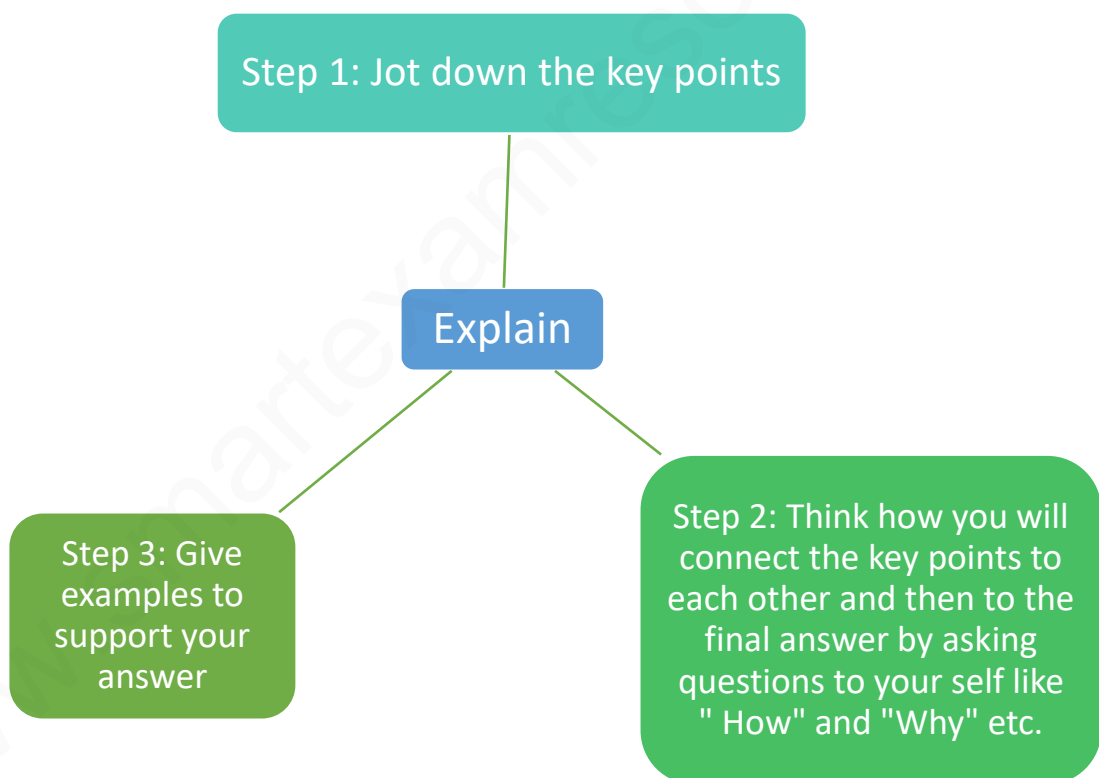
Ans: Countries face the basic economic problem because there are finite resources and unlimited wants , so there is a basic situation of scarcity and hence there is a need to exercise choice.

For example: It is not possible for any country to produce all the goods because of the limited resources available to them. For instance, the resources such as the labour, land, and capital are limited as compared to the demand. Therefore, the economy cannot provide everything that people want. Hence, a country then makes a choice between the types of goods that it can produce with its limited available resources.

A second example could be of that of a farmer who wants to grow both soyabean and groundnut. But with his limited piece of land, which is a scarce resource for him, he needs to decide, whether to grow soyabean or groundnut during the rainy season. If he then makes a choice to grow just soyabean, then he cannot grow groundnut and vice-versa. Or if he decides to grow both, then he needs to decide the proportion of land that goes for each kind of crop.

Note:

1. In Q1, you were supposed to just state the meaning, so you only need to express the meaning in clear terms.
2. In Q2, you were asked to explain. Whenever you will be asked to explain something, you need to have a clear picture in your mind about the terms/points you will need to include in your answer and at the same time show how there exists a clear relation between these terms/points. Provide reasons as to why/how things are related and do not forget to support your answer with relevant evidence. For answers that ask you to explain, it helps to first quickly jot down the key points and then build your answer around them.



THE FACTORS OF PRODUCTION

1.2.1

➤ Factors of production and their rewards

- The economic resources of land, labour, capital and enterprise are called as the factors of production.
- **Land:** It refers to all the natural resources used in the production such as oil, coal etc. In addition, the water, plants, animals etc are also included. Example: Farmland, minerals, sea
- **Labour:** Labour stands for the human effort (mental or physical) that is used in producing goods and services. Example: A teacher, workers.
- **Capital:** Capital refers to all the human made (man-made) goods used in production. Example: Machinery and equipments
- **Enterprise:** It refers to the risk bearing and the key decision-making function in a business. This is needed as some events cannot be anticipated beforehand and might not qualify for being insured. Example: An entrepreneur

Some board[4 m]questions

Define enterprise

Enterprise is a factor that takes the risk in bringing the other factors together or combining the other factors in order to produce goods and services to make profits. Enterprise involves the taking of decisions in terms of what to produce and how to produce. Enterprise is taken by entrepreneurs example shareholders who receive profit as reward

Using examples, define the factor of production capital

Capital can be defined as any human-made good that is used to produce other goods and services; that is they are aids to production. Examples of capital are factories, machinery, tools, equipments etc.

1.2.2

➤ **Mobility of factors of production:**

- **Mobility of land** refers to using land for a new purpose than before. Land used for farming can be used for selling clothes, or for constructing houses etc. So geographically land is immobile but it is occupationally mobile. Referring to wildlife, they can be transported and relocated to other areas such as sanctuaries. Even the course of rivers can be diverted. In recent times, large trees are also carefully uprooted and replanted in newer areas. So in this case, trees and rivers can now be said to be geographically mobile too.

Reward for land is rent

- **Mobility of capital:** Certain capital goods that can be transported from one place to another are classified as being geographically mobile; for example: School desks and chairs can be sold to another school / coaching class which may then start using for its own students. If these desks and chairs were used by a small hotel, then they could have been said to be geographically as well as occupationally mobile too.

On the other hand, certain capital goods are geographically as well as occupationally immobile. This means that they cannot change their location, neither can they be used for different purposes. Examples of these include: Coal mines, gold mines, docks

Reward for capital is interest

- **Mobility of labour:** Certain type of labour might be geographically immobile due to the difference in the cost of living, family ties that prevent the labour from migrating, poor infrastructure, lack of information of job opportunities elsewhere and also the unavailability of work permits might prevent geographical labour mobility. Labour might also become occupationally immobile at times too. For example; certain companies had made many labours redundant. This is because they had modernised their companies with new machineries and their then existing staff lacked the skills needed to operate the machines. On the other hand a computer programmer may change his online based job from one company to another. So although he is geographically immobile, he is occupationally mobile.

Reward for labour is wages

- **Mobility of enterprise:** Entrepreneurs are people who organise the factors of production and most importantly bear the uncertain risk of producing a product. In a public limited company, the role of entrepreneurs is divided into 2 categories, one type are the managers (The decision makers) and the second type are the shareholders who bear the risks. Entrepreneurs are mostly geographically and occupationally mobile.

Reward for enterprise is profit

BOARD EXAM QUESTIONS

Difference between land and labour [2 points-2 marks]

	Land	Labour
1	Land is a natural resource	Labour is a human resource or it refers to workers
2	The payment for land is rent	The payment for labour is wages
3	Most land is geographically immobile	There is some geographical mobility in the case of labour

Difference between labour and enterprise-[2 points-2 marks]

	Labour	Enterprise
1	Labour is human effort or workers services	Enterprise is the ability and willingness to bear uncertain risks and organise other factors of production.
2	Reward of labour is wages	Reward for enterprise is profit
3	Labour tends to be less geographically and occupationally mobile than enterprise	Enterprise tends to be more geographically and occupationally mobile than labour

1.2.3

➤ Quantity and quality of factors of production:

	Quantity	Quality
Land	<ul style="list-style-type: none">• Physical existence of land does not change much over time.• Agricultural land gets reduced due to soil erosion. Land reclamation on the contrary increases it.• Rainforests are declining at a faster rate.• Renewable natural resources like wind ,water are replaced by nature.• Non-renewable resources will be exhausted due to over-use.• Over fishing may make species extinct	<ul style="list-style-type: none">• Quality of land can be increased by use of fertilisers• Stopping firms polluting environment can improve the quality of water bodies thereby improving the health of marine creatures
Labour	<ul style="list-style-type: none">• Quantity of labours is affected by the number of workers available and also by the number of hours of availability of workers.• The number of available workers depends on many factors such as: Size of population, the age structure of population, the retirement age, the school leaving age and the attitude towards working women.• The number of hours of work depends upon: The length of the average working day or workers, duration of overtime, length of holidays taken by workers and the amount of	Quality of labour can be improved by training staff, providing them with better education, more experience and better healthcare. Such staff will operate complex machinery and projects and provide quality outputs in return. Healthier staff ensures less absenteeism on grounds of illness and can focus more on the job and deliver quality tasks.

	time lost through sickness and illness	
Capital	Investment increases the quantity of capital. Worn out and outdated goods are gradually replaced by good quality ones	Technological advancements has made it possible for better quality goods to be produced in a lesser amount of time. Example: Using robotics for car manufacturing.
Enterprise	<ul style="list-style-type: none"> • Number of entrepreneurs will increase if there are good university courses offered to students in business studies and economics. • Lower corporate taxes and reduced govt regulations will motivate many to set up businesses 	Quality of enterprise can be improved by providing training to entrepreneurs, better training. Their quality will also increase with increase in their experience.

OPPORTUNITY COST

KEYPOINTS:

- **Opportunity cost:** Opportunity cost is the best alternative forgone
- **Examples of opportunity costs:**
 - Buying a single branded t-shirt or buying two regular (regular brand) in place of one so that you get an extra t shirt.
 - To continue post-graduation and then take up high paying job or to take up a job immediately after graduation and start earning early in life to lessen financial burden.
 - Buying a villa in the suburbs or a 2 -bed apartment in a prime location.
- **Definition of opportunity cost in decision making of consumers, workers, producers, and governments:**
- **Opportunity cost and consumers**

Example: A local brand selling 1 litre liquid soap for \$x. The other high demand brand sells the same type and quantity of product for \$2x. Choosing the \$2x product means you just end up with half the quantity of liquid soap. So your opportunity cost is the quantity of liquid soap you received less as compared to what you would have received by opting for the local brand at the same price of \$2x

Opportunity cost and workers:

Example: Joining as a research fellow in a prestigious institute in America (a high paying job) against choosing to treating patients which is a dream you always wanted to live. Factors affecting the choice of occupation include: wages paid, promotions offered and the job satisfaction.

Opportunity cost and producers:

Example: If an artist creates a painting of Monalisa, he then cannot use the same canvas to paint albert Einstein! So before deciding on what to produce with limited resources it is more important to consider the demand and cost of producing the goods. **So the artist could rather paint Monalisa and let the painting of Albert Einstein be his opportunity cost if there is a greater demand for Monalisa!**

Opportunity cost and the government:

Example: Government needs to give a serious thought regarding its expenditure of tax revenue. Spending excessively ;for instance on healthcare might not leave enough to be spent on educational sector. If government choses to levy higher taxer on its people, then it generates an opportunity cost for them ; who now have to sacrifice saving money or spending on their leisure activities etc. in an effort to pay the increased taxes.

Note: There is no opportunity cost with regards to free goods. But there is an opportunity cost in producing economic goods.

BOARD EXAM QUESTIONS

M/J/17-P-12-Q2

Heavy rain caused floods in an area of a country.

What may be an opportunity cost of repairing the damage caused?

- A** the allocation of government funds to the area instead of on a new airport
- B** the cost of providing shelter for those made homeless
- C** the decline in the tourist industry in the area
- D** the loss of profits from businesses affected by the flood

CORRECT ANSWER AND EXPLANATION

1-A. Heavy rains caused floods in an area of a country. Since the government had to allocate the funds to the area instead of the new airport, this obviously became the opportunity cost, as now the making of the new airport will not be possible till funds become available in the future. The airport that could not be built was the opportunity cost.

M/J/17-P-11-Q2

Helium is a gas that is limited in supply. It takes thousands of years to form from decaying radioactive rocks. The US government holds 35% of the world's supply and has been selling its stocks. Helium is essential in medical scanners. It is also used for party balloons which some say is a wasteful alternative use of a valuable good.

Which concepts can be applied to the above statement?

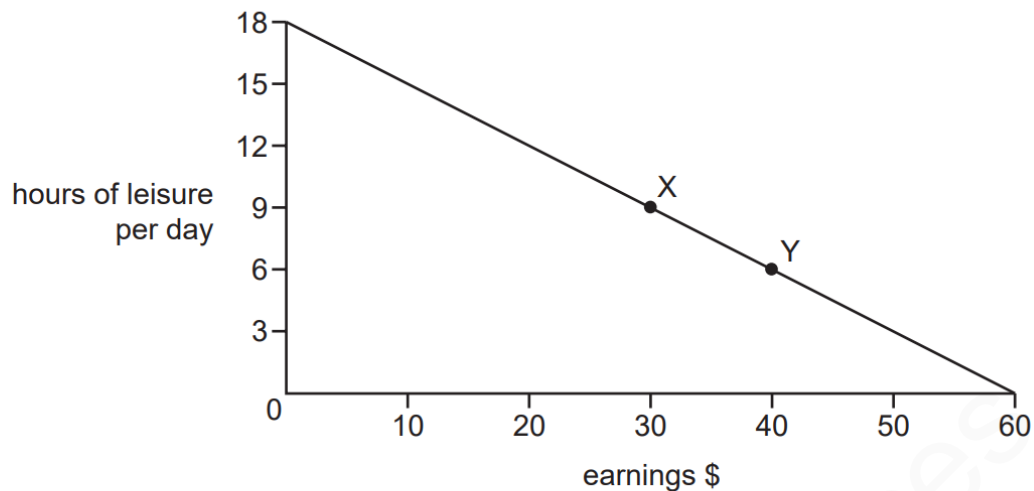
- A** demand and supply, government subsidy
- B** excess demand, resource allocation
- C** factors of production, private monopoly
- D** opportunity cost, public sector

CORRECT ANSWER AND EXPLANATION

2-D. Helium is a gas that is limited in supply. It takes thousands of years to form from decaying radioactive rocks. The US government holds 35% of the world's supply and has been selling its stocks. Helium is essential in medical scanners. It is also used for party balloons which some say is a wasteful alternative use of a valuable good.

M/J/16-P-13-Q3

The diagram shows the choices for an individual between leisure and earnings.



What is the opportunity cost to the individual of the extra earnings when moving from position X to position Y?

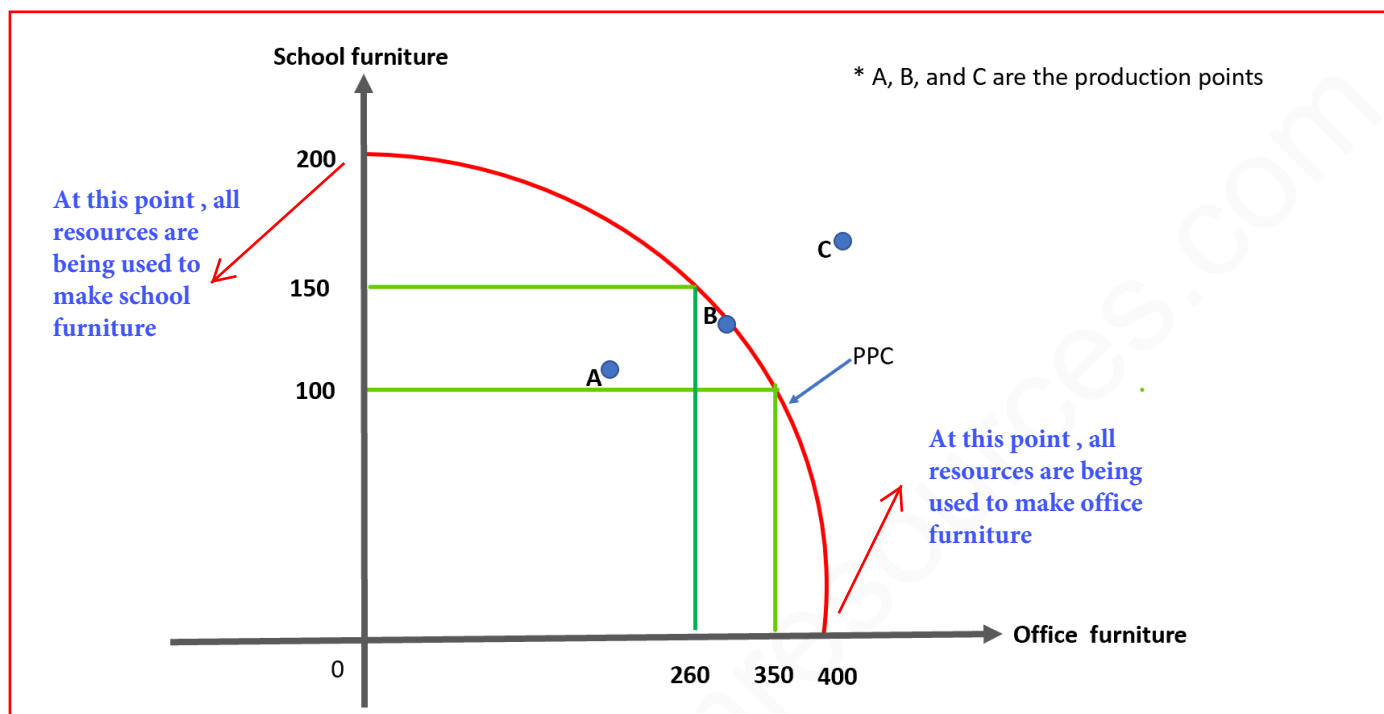
- A \$10
- B \$40
- C 3 hours of leisure per day
- D 6 hours of leisure per day

CORRECT ANSWER AND EXPLANATION

The concept of opportunity cost and public sector can be applied to the above information. "Public sector" because, the government is holding the stock and opportunity cost because the stocks of helium are already limited. So if a choice has to be made to use this limited resource in medical scanners , then less will be available for party balloons and vice-versa.

PRODUCTION POSSIBILITY CURVE (PPC) OR PRODUCTION POSSIBILITY FRONTIER OR PRODUCTION POSSIBILITY BOUNDARY

KEYPOINTS:



- **The production possibility curve:** It is a curve that shows the maximum output of two types of products and combination of those products that can be produced with existing resources and technology.
 - **A PPC shows how much maximum product can be produced**
 - **A production point shows what is being produced or what may be produced in future**
- **Points under, on and beyond the PPC:**
 - **Point under the PPC (Point A):** This point indicates under-utilisation of resources. In other words this means that some resources are unemployed when goods are being produced.
 - **Point on the PPC (Point B):** This point indicates maximum utilisation of resources and in terms of the output, it is efficient. In other words this means that no resources are unemployed when goods are being produced.
 - **Point above the PPC (Point C):** This point indicates an unattainable point. This is because there are not enough resources to produce outside the limit set by the PPC.

Note: A PPC shows the maximum possible output for two goods or services with a given amount of resources

➤ **Movements along the PPC:**

- Any movement of a point along a PPC is an indication of the re-allocation of the resources.

Example: When manufacturing 100 units of school furniture and 350 units of office furniture, more resources went into making the office furniture units. A decision to make 150 units of school furniture means more resources have to be employed while creating the additional 50 units of school furniture.

➤ **Shape of the PPC**

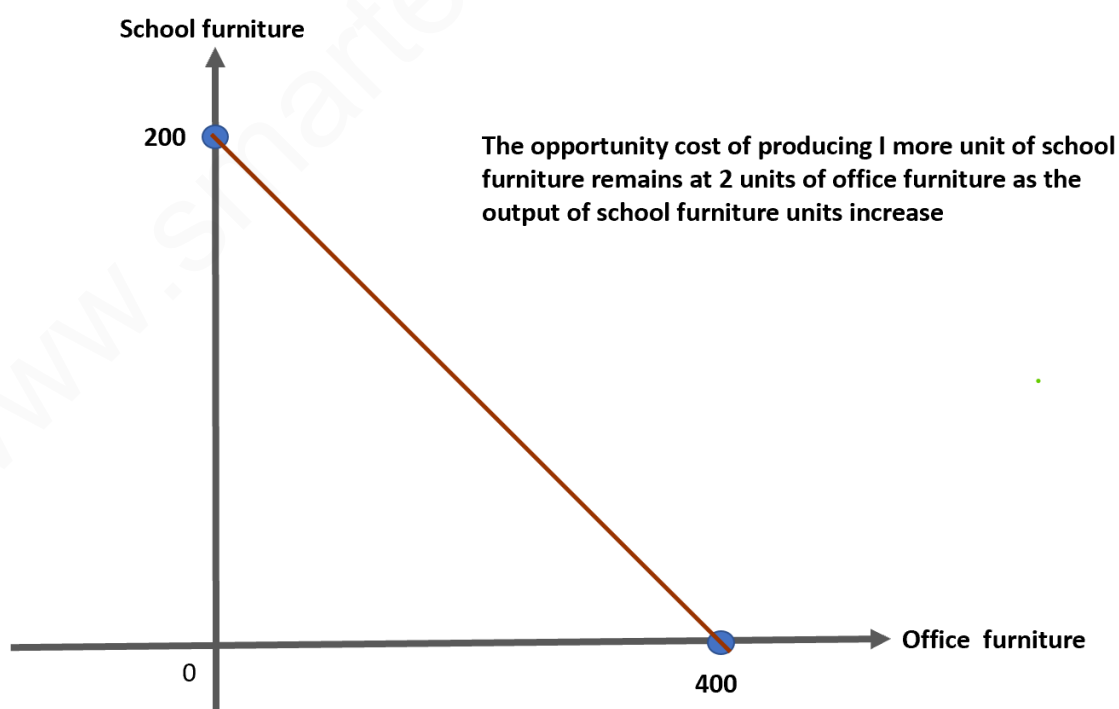
- The shape of the PPC can be bowed out [usual shape] or a straight line [very rare case]

DESCRIBING THE BOWED PPC CURVE

- Usually when an increased quantity of one of the products is being manufactured, it results in a reduction in the quantity of the other type of product. The quantity of the second product that could not get produced is the opportunity cost of producing an increased amount of the first product.
- Example: A decision to manufacture 150 units of school furniture instead of 100 units leads to an opportunity cost of producing 90 ($350 - 260 = 90$) units less of office furniture [Refer figure above]

DESCRIBING THE STRAIGHT-LINE PPC CURVE

- But if there can be a situation when the resources are capable of producing both kind of products equally, then the opportunity cost remains constant. So the shape of the PPC is a straight line as shown below



BOARD EXAM QUESTIONS

M/J/14-P21-Q2C

Using a production possibility curve diagram, analyse the impact of an increase in resources on an economy. [5]

MARKSCHEME:

Up to 3 marks for the diagram:

1 mark for the original curve or downward sloping line which must touch the axes.

1 mark for axes correctly labelled in terms of two different products or types of products.

1 mark for showing the curve or line shifted out to the right.

Figure 2 (c)



Up to 2 marks for written analysis:

1 mark for an increase in resources moves the PPC to the right.

1 mark for more resources enables an economy to produce more of both products/increase productive potential/economic growth.

1 mark for whether output increases or not will depend on what happens to the production point.

USE THE FOLLOWING SPACE TO ANALYSE THE ABOVE MARKSCHEME

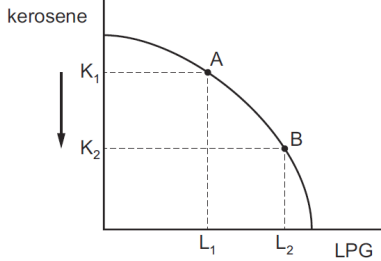
M/J/18-P23-Q6C

Analyse, using a production possibility curve (PPC) diagram, the effect of reallocating resources from kerosene to LPG.

6

MARKSCHEME:

Award up to 4 marks for a correct diagram:



- ☐ Axes labels LPG and kerosene (1)
- ☐ Curve / downward sloping line drawn to axes (1)
- ☐ Two production points illustrating increased production of LPG (1)
- ☐ New production point indicated (1)

Accept points on the curve with arrow from A to B.

Award up to 2 marks for associated explanation:

Reallocating resources will involve a movement along the PPC (1) this will involve an opportunity cost (1).

Analysing the above markscheme:

1. The curve should be drawn bowing outwards.
2. You need to draw 2 axes and label them appropriately as kerosene[y-axis] and LPG[x-axis] as indicated in the diagram above.
3. Mark 2 hypothetical points on the y-axis for kerosene . Here the highest of the two points on the y-axis ; K_1 , is the point which represents the production of kerosene before its reallocation to make more of LPG.
4. Use a downward arrow to show the movement is downward on the y-axis as resources are being reallocated from petrol to LPG.
5. The effect of such a re-allocation is that the output of LPG increases . Or in other words, the quantity of LPG increases from L_1 to L_2 , as shown in the figure above. Mark an arrow to the right on the x-axis.
5. Show dotted lines connecting the points K_1 and L_1 [which tell us that before reallocation, Kerosene production was greater than LPG production]. Also the dotted lines connecting K_2 and L_2 indicates that after reallocating the kerosene resources, more of LPG is being produced.
6. Reallocating the resources will involve the movement of production points along the PPC. There is an opportunity cost involved [the quantity of kerosene that is produced less is the opportunity cost($K_1 - K_2$)]

Note: Developments could move the PPC curve to the right:

1. Addition of new resources, for example , addition of more labour
2. Providing on-the job training to labour to help them use the resources more efficiently
3. Using more advanced equipments/techniques