**A. Microeconomics and Macroeconomics, Basic Economic Terms, Opportunity Cost and Decision Making Process in Economics**

1. To an individual, the problem of scarcity is usually seen as

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|  | 1. **limited income but unlimited wants\***
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|  | 1. unlimited income and unlimited wants
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|  | 1. limited income but limited wants
 |
|  | 1. unlimited income but limited wants
 |

2. The central problem of all economic societies is how to

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|  | 1. achieve an equitable distribution of income and wealth
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|  | 1. ensure that resources are fully utilized
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|  | 1. **allocate resources between competing uses\***
 |
|  | 1. resolve the conflict between equity and efficiency
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3. In which of the following situations would most likely cause lemonade to cease being regarded as an economic good?

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|  | 1. Lemonade producers all decided to give their product away free.
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|  | 1. All lemonade drinkers started to prefer orangeade.
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|  | 1. The government banned the consumption of lemonade.
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|  | 1. **The sky began to rain lemonade instead of water.\***
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4. The ceteris paribus, or everything else held constant, assumption is used in

 economics

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|  | 1. To make the theory more complicated
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|  | 1. **To isolate the important variables when formulating the theory\***
 |
|  | 1. To indicate that no other assumptions are being made
 |
|  | 1. Because economic theory is an accurate reflection of the real world
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5. Which of the following statements is a positive economic statement?

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|  | 1. Smoking should be banned in public places
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|  | 1. Unemployment is more harmful than inflation
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|  | 1. Government subsidies for healthcare services need to be increased
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|  | 1. **Higher interest rate will reduce consumption expenditure**
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6. Which of the following are macroeconomic issues and which are

 microeconomic ones?

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|  | 1. The level of government spending
 | Macro |
|  | 1. A grant given by the government to the Singapore film industry
 | Micro |
|  | 1. The level of investment in the UK by overseas firms
 | Macro |
|  | 1. The price of cotton cloth
2. The rate of inflation
3. The average wage rate paid to textile workers
4. The total amount spent by UK consumers on clothing and footwear
5. The amount saved last year by households
 | MicroMacroMicroMicroMacro |

7. Which of the following is not classified as an economic resource?

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|  | 1. Bricklayers working for a local construction firm
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|  | 1. The cement mixer used by the bricklayers
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|  | 1. The building site they are working on
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|  | 1. **Wages paid to the bricklayers at the end of the month\***
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8. Explain the determinants of a student’s decision to enrol for a Junior College education.

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| (i) Constraints : ‘O’ Levels L1R5/L1R4 results, financial capability(ii) Benefits: Able to enter university after two years of JC education instead of three years of education in a Polytechnic. School fees for JC education is much cheaper than the school fees charged by polytechnics and private universities.(iii) Costs: Forgoing a polytechnic education, forgoing the opportunity to work and earn an income (Opportunity costs)(iv) Information : Courses offered by the different schools, school fees charged by the different schools, accessibility to the schools(v) Perspectives : Personal preference, parents’ and teachers’ expectations(vi) Intended Consequences : Both the benefits and costs stated above(vii) Unintended Consequences : Unable to cope with the curriculum offered by the different schools, increase in school fees charged by the schools |

**B. The Production Possibilities Curve**

Learning Objectives:

Students will be able to:

* Construct a production possibility curve
* Associate the concepts of scarcity, choice and opportunity cost with the production possibilities curve
* Account for the shifts of the PPC curve.

**Question 1**

Consider two goods that most schools have need for—1) New math textbooks and 2) New computers. The following chart represents the amount of computers and math textbooks that could be produced using all the resources available in the economy.

1. Calculate the opportunity cost of an additional computer and fill up the last column in the above table.

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| --- | --- | --- | --- |
| **Allocation** | **Computers** | **Math Text Books** | **O/C of an additional computer** |
| A | 0 | 190 | - |
| B | 1 | 180 | 10 |
| C | 2 | 168 | 12 |
| D | 3 | 154 | 14 |
| E | 4 | 138 | 16 |
| F | 5 | 120 | 18 |
| G | 6 | 100 | 20 |
| H | 7 | 78 | 22 |
| I | 8 | 54 | 24 |
| J | 9 | 28 | 26 |
| K | 10 | 0 | 28 |

1. Use the table above to draw the production possibilities curve for computers and math textbooks. Place computers on the x-axis and Math textbooks on the y-axis.
2. How are the concepts of scarcity, choice and opportunity costs illustrated in this model?

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| Scarcity : unattainable points outside PPC Choice: different points on PPC, movements along PPCOpportunity Cost : slope of PPC and downward negative slope |

1. What is the opportunity cost of increasing the number of textbooks produced from 100 to 120?

|  |
| --- |
| 1 computer |

1. Explain the significance of the slope and the shape of the PPC.

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| Slope: Downward sloping from left to rightReason: Scarcity of resourcesExplanation: To produce more computers/Math Text Books, lesser Math Text Books/computers can be produced. This is due to the limited amount of resources available to meet the unlimited wants. Shape: Concave to the origin (bell-shaped)Reason: Assumption of increasing opportunity costExplanation: The opportunity cost of producing one more unit of computer increases because resources are not perfectly substitutable. |

1. Assuming that there is an improvement in the level of technology, what will happen to the original production possibilities? Draw a new diagram to illustrate your answer. Explain why your new diagram is drawn this way.

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| PPC shifts out further. State of technology improves e.g. advancement in capital machinery which can produce more output using the same amount of resource i.e. more computers and textbooks can be produced 🡪 entire PPC shifts outwards. |

**Question 2**

1. What does a point inside a PPC imply?

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| A point inside a PPC implies that there is unemployment and inefficient use of resources where there is wastage of idle resources. |

1. What does a point on the PPC imply?

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| A point on the PPC implies that there is efficient resource utilisation where the economy is producing goods with all the resources available being fully employed. |

1. What does a point outside the PPC imply?

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| A point outside the PPC implies that there are insufficient resources and technology due to scarcity to obtain the combination of goods. |

**C. Challenging Questions**

1. What role can a government play in trying to move from a point inside the PPC to a point on the PPC?

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| A point inside the PPC represents unemployment and under production. To encourage production, the government has to encourage production as well as consumption of goods. In other words the government must encourage Consumption, investments and perhaps even raise its own expenditure and even find means to raise exports and lower imports.* To raise C: Cut personal income tax, raise wages, cut employee CPF rates, improve accessibility to credit, cut interest rates, increase transfer payments to households.
* To raise I: Cut corporate taxes, improve infrastructure to attract Foreign investments, lower interest rates.
* To raise G: More expenditure by government. e.g on infrastructure.
* To raise X: Ensure country produces good quality products, depreciate the country currency.
* To lower M: Depreciate currency, impose quotas, raise import taxes.
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2. Other than having improvements in technology, how else can an economy consume outside of its PPC?

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| By trading with a country that has higher opportunity cost in producing a particular good and purchasing imports from country that has a lower opportunity cost in producing goods than the economy. |

3. Recommend policies to shift Singapore’s PPC outward.

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| PPC can only be shifted outward by having more resources or better quality resources. Resources comprise land, labour, capital and entrepreneurship. Hence answer to this question can be found by examining how the government can influence these resources. |

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| 4. | Statement 1: | At any point in time, with full employment prevailing, production of more of one good will result in less of another good being produced |
|  | Statement 2: | With the passage of time, with full employment prevailing, production of more of one good will be accompanied by an increase in the production of another good |
|  | Explain the difference between the two statements. |

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| Statement 1 implies an economy that is already producing on its PPC, fully utilizing resources, assuming that the state of technology or productivity remains the same. However, statement 2 implies that, with the passage of time, the economy can push out of its PPC via increase in technology, discovery of new resources or rise in labour productivity, enabling the economy to produce more of both goods. |

5. During the Second World War, an increase in the production of war weapons by Japan was followed by a fall in the production of consumer goods. On the other hand, an increase in the production of war weapons by the USA was accompanied by an increase in the production of consumer goods.

1. Sketch the production possibility curves for Japan and USA to reflect the situation above.
2. Explain the difference in behaviour of the 2 countries stating clearly any assumptions you made to arrive at the answer.

Consumer good Consumer good

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War Weapons

 War Weapons

 Japan USA

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| Japan – already producing on its PPC, fully utilizing all resources. Hence, an increase in production of war weapons means an opportunity cost needs to be incurred in the form of less production of consumer goods.USA – not producing on its PPC but inside it, underutilizing resources. Hence, an increase in production of war weapons need not incur any opportunity cost. Instead, it could be accompanied by production of more consumer goods. |

6. Suppose that an economy produces only 2 goods, wine and cars. At some point on its PPC, there was no way that the country could use its wine-producing resources to produce additional cars. Sketch out the country’s PPC.

wine

cars

7. “Only poor countries experience the problem of scarcity and this problem will be eliminated once they have achieved substantial economic progress.”

Is the statement true or false? Explain.

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| Both rich & poor countries cannot escape from the problem of scarcity as human wants are unlimited but resources are limited. Rapid economic growth rate will alleviate the problem of scarcity [help to improve their SOL] but it cannot eliminate the problem. |