2003 – ECONOMICS - I / Part -I

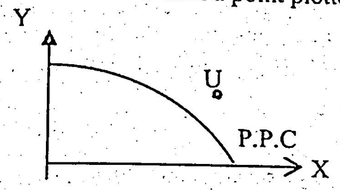
(1) i	(5) ii	(9) v	(13) iv	(17) ii
(2) iv	(6) ii	(10) iii	(14) iii	(18) ii
(3) iv	(7) iv	(11) iii	(15) iv	(19) iii
(4) iii	(8) v	(12) i	(16) ii	(20) v

2003 – ECONOMICS - I / Part -II

(1.) (i) Scarcity is the inadequacy of resources with regard to the needs of people. People's needs are unlimited but resources that are available to fulfil those needs are limited. Needs are satisfied by using goods and services. Resources are needed to produce those goods and services. This problem is common to any society Whether poor or rich. Scarcity does not mean poverty. Everyone in the society whether rich or poor faces this problem of scarcity. There can't be any economic good in the society where scarcity does not exist.

Since resources given at a certain point of time are limited compared to the needs of people, a choice has to be made to find out on what needs should resources be allocated and what needs should be left out. Every society faces three basic problems because of scarcity. They are what to produce? How to produce and whom to produce? Another feature of resources is that they have alternative uses. This also leads to the problem of choice. (05 marks)

(ii) Draw a PPC with a point plotted outside the PPC.



PPC shows all the alternative product combinations possible for an economy if all the given resources are used at their maximum efficiency under a given state of technology. Therefore the economy cannot attain a point lying outside the curve even though it is desirable. That is, people's needs are more than the production possible with a given amount of resources for a society. But because of scarcity larger needs of people cannot be met and economy's maximum production possibility is limited to any point lying on the curve.

iii Resources are not homogeneous. That is, resources that are used in the production of two goods are not perfectly matching for both products. In other words resources that are suitable for one product are not equally suitable for the other product. E.g.: Resources used in cloth production cannot be used for computer production in the same way.

Increasing opportunity cost.- That is, the amount of goods that should be sacrificed from the other product increases as the production of one good is increased.

2. i Private property ownership
Private entrepreneurship
Competition
Price mechanism and the price is decided by demand and supply (Market Forces)
Limited role is played by the government in economic activities.

ii Basic economic problems are resolved by price mechanism as follows. That show how resources are allocated in a free market economy.

- What to produce? The most profitable goods and services
- How to produce? At the minimum cost
- Whom to produce? Those who can afford

Price system solves these problems based on relative profitability. Relative profitability is decided by the relative price.

iii Providing financial and non-financial subsidies to the households (Transfer payments)

- Progressive taxes (changing a higher tax from high income earners)
- Supplying welfare goods and services (Education and health service)
- Market intervention through minimum and maximum price setting.

- Imposition of upper limits on property ownership.
- Enforcing government laws and legislations on minimum wages.

iv No resources are allocated to supply public goods and services
- Consumers can get exploited under monopolistic circumstances
- Disparity in income distribution
- Macro economic instability
- Consumer preference can change frequently due to advertising.
- Inefficient allocations of resources on good having externalities
- (Under supply / Over supply)

3). i The number and availability of substitutes
- The time horizon
- Percentage of income spent on the product.
- whether it is an essential good or a luxury good
- Number of uses of the product
- The width of the definition (whether narrow or broad definition)

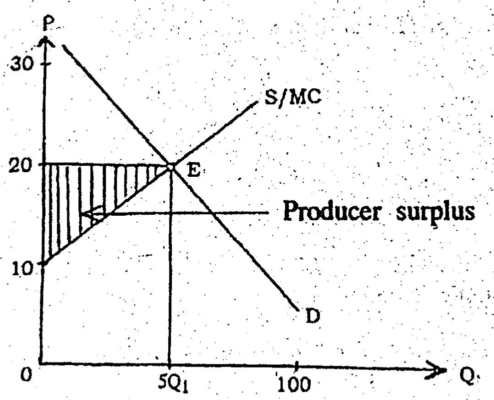
ii Positive price elasticity of demand - Giffen goods
Negative cross elasticity of demand - Complement goods
Income elasticity of demand greater than one - Luxury goods

iii Income effect
Real income rises when price of the product falls, given all the other factors remain unchanged. That is, quantity of goods and services that can be purchases from the existing income fluctuate (rises / falls) as price changes. Income effect refers to the change in demand for a good because of a change in purchasing power caused by a change in price.

Substitution effect
There is a tendency to purchase more from a certain product when its price falls since it becomes cheaper relative to other products. Hence, demand for that product increases. Substitution effect will always be in compliance with the price theory.

iv (a) Total revenue decreases
Total revenue decreases
Total revenue increases
Total revenue increases
Total revenue remains uncharged

(4) (i) Producer surplus is the difference between the market price suppliers get and the price at which suppliers are prepared to supply a certain quantity (marginal cost of the product) to the market. When this is calculated for each quantity they supply and then sum up, producer surplus can be calculated.



Calculating the producer surplus:

$$= \frac{(\text{Equilibrium Price} - \text{Minimum price at which Good is supplied to the market}) \times \text{Equilibrium quantity}}{2}$$

= (20-10) x50/2 = 10x50/2 = Rs. 250 /=.

(ii) Similarities

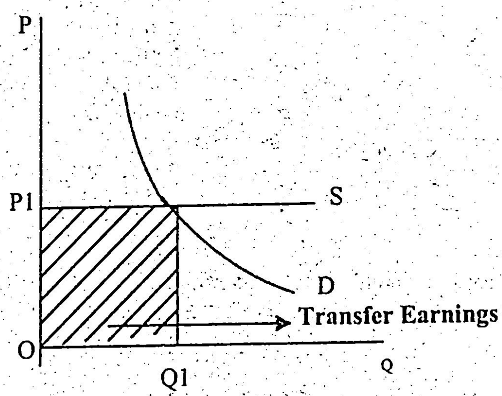
- Large number of firms
- Individual firms are not relatively significant in the industry
- Free entry and free exit
- No normal profits in the long run
- Pricing and supplying policy of one firm do not affect the other firms in the industry.

Differences
- Product differentiation (perfect competition →homogenous products, whereas monopolistic competition →differentiated products)
- Firms in monopolistic competition are price setters where as firms in perfect competition are price takers.
- A firm in monopolistic competition faces a downward sloping demand curve while a firm in perfect competition faces a perfectly elastic demand curve.
- In perfect competition production is decided in such a way that price is equal to marginal cost whereas in monopolistic competition price will lie above the marginal cost when deciding the equilibrium quantity.

iii Diminishing return is related to the short run production whereas decreasing return to scale is related to the long-term production. (04 Marks)

iv Total earnings of a factor of production contain transfer earnings when the supply of factor is perfectly elastic.

(Transfer earnings are the income, which includes the amount sacrificed by the factor owner and salary for the labour employed or interest for capital employed by the factor owner. The income earned over and above this transfer income is called economic rent.)



(5.) i Gross National Product (GNP)

GNP = C + G + I + NX + NF

GNP = 45,000 = 15,000 + 20,000 + (- 5,000) + (- 2,000)

= Rs. Millions 73,000 (04 marks)

NX =Net Exports=Goods and Services Exports – Goods and Services Imports
NF =Net Foreign Factor Income=Foreign Factor Receipts – Foreign Factor Payments

ii Disposable Gross National Product (Y1)

1st method

Y1 = Gross National Product + Foreign Net Transfers
= GNP + NT
= 73,000 + 5,000
= Rs. Million 78,000

2nd Method

Y1=Gross Domestic Product + Current Account Balance of the BOP
= C + I + G + (NX + NF + NT)
= 45,000 + 15,000 + 20,000 + (- 5000) + (-2,000) + 5,000
Rs. Million 78,000

(iii) National Savings

1st method

National savings=Disposable Gross National Product – (Personal Consumption + public consumption)
= 78,000 – (45, 000 + 15,000)
= Rs. Million 18,000

2nd method

National Savings = Gross investments + Currents Accounts Balance of the BOP
= 20,000 + (-2,000)

= Rs. Million 18,000

3[rd] method

National Savings = Domestic Savings + (Net Foreign factor income + foreign net transfer)

Domestic Savings= Gross Investment + Net Exports

National Savings = 20,000 + (-5,000) + (-2,000) + 5,000

Rs. Million 18,000

iv Current Account balance of the BOP

1[st] method

Current Account Balance = Net Exports + Net Foreign Factor Income + Net Foreign Transfer

= (-5,000) + (-2,000) + 5,000

= Rs. Million = -2,000

2[nd] method

Current Account Balance = National Savings – Gross Investment

18,000 – 20, 000

Rs. Million = -2,000

(6.) (i)

Aggregate Income	=	Aggregate Expenditure
Y	=	E
Y	=	C+I+G+X-M
Injections	=	Withdrawals
J	=	W
I + G x X	=	S + T + M

(ii) (a)

Y	=	E
Y	=	C + I + G
Y	=	200 + 0.9Yd + 80 + 300
Y	=	200 + 0.9 (Y – T) + 380
Y	=	200 + 0.9 (Y – 120) + 380
Y	=	200 + 0.9Y – 108 + 380
Y	=	0.9Y+472
Y – 0.9Y	=	472
Y	=	472 x 1/0.1 = 472 x 10/1
Y	=	Rs. Million 4720

(b) Value of the multiplier (K) should be calculated to find the answer for this. Alternatively the answer can be obtained by adding extra investment to the existing investment expenditure and by reproducing the aggregate expenditure function.

Y	=	E
Y	=	C + I + G
Y	=	200 + 0.9Yd + 100 + 300
Y	=	200 + 0.9 (Y – T) + 400
Y	=	200 + 0.9 (Y – 120) + 400
Y	=	200 + 0.9Y – 108 + 400
Y	=	492 + 0.9Y
Y – 0.9Y	=	492
0.1Y	=	492
Y	=	Rs. Million 4920

Value of the multiplier should be calculated to find the solution for this. To find out the multiplier in a closed economy, savings functions should be derived from the given information. If,

C	=	200 + 0.9Yd
S	=	Yd – C
S	=	-200+0.1Yd
K	=	1/MPS
K	=	1 / 0.1 =10/1
K	=	10

Full employment level of national income	=	Rs. Million	5,000
New equilibrium income	=	Rs. Million	<u>4,920</u>
Required increase in income	=	Rs. Million	80

The increase in the Investment to increase the income by Rs. Million 80

	=	ΔY / K= ΔE
ΔE	=	ΔI
ΔE	=	80 / 10
ΔE	=	8

Hence, investment should be increased by Rs. Million 8

(7). (i) - Macro economic stability.

- Fair distribution of income
- Efficient distribution of resources
- Improving infrastructure facilities and human resource development preserving the environment for sustainable quality growth

  Establishing the necessary legal framework to ensure the efficiency in market economy.

(ii) Collective consumption by everyone without paying a price.
Cannot exclude those who do not pay from consumption (non excludable)
There is no less availability for any one person because another person is enjoying it.(non rival)

(iii) Marginal cost is zero
Government should interfere in certain economic activities when market system fails to make the economy efficient and to promote income distribution. But even the government might fail in this process due to some inherited limitations of the state sector.
Wastage, corruption, bureaucratic style of management, ineffective decision marking can cause state failure.

(iv) Expansion of Monetarism.
- Collapse of Socialism.
- Governments becoming unsuccessful.
- Debt crisis faced by many third world countries.
- Influences by the international monetary funds.

(8.) (i) Unnecessary interference by the government in activities of state enterprises.
E.g. :- Hiring employees without a limit
Inefficient management
E.g. :- Inefficient purchasing system and tender procedures Corruption
Inadequate investments in new technology and human resource development.
E.g. :- Controlled prices

(ii) Expansionary
Borrowings from the banking system
- Central Bank
- Commercial Banks

Non-expansionary
Borrowings from the non-banking sources
National Savings Bank, Employee Provident Fund, Employee Trust Fund.
Non-market sources
Administrative loans

(iii)
- Removing subsidies
- Reducing political interventions
- Privatisation
- Liquidation
- Division of public enterprises in to profitable units
- Privatising only the management
- Introducing an activity based incentive system
- Subcontracting certain activities of public enterprises with a view of reducing the cost.

(iv) For Privatization
- Production becomes efficient through market mechanism
- Creating competition in the market instead of monopolistic situation

  Reducing the financial burden imposed on the government from loss making public enterprises.
- Government revenue increases.
- Expanding the ownership of business shares.

Against Privatisation
- Private monopoly can emerge in place of state monopoly

  It may be harmful to the society since decisions are made based on private profits.
- Profits will flow to other countries because of multinational companies
- It might loss the government control on economy.

2003 – ECONOMICS - II / Part -I

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2003 – ECONOMICS - II / Part -II

(1) (i) Money market is the market in which short term debt instruments are traded. Debt instruments, which mature within one year, are traded in this market. Examples for such debt instruments are treasury bills, certificate of deposits, Repo, Reverse Repo. Capital market is the market where debt instrument, which mature in more than one year, are traded. Examples include company shares, treasury bonds etc.

(ii) Near money are liquid assets which serve as a store of value and can be converted in to a medium of exchange easily. Near money of its own sake is not a medium of exchange. Money substitutes can temporarily be used as a medium of exchange but cannot serve the function of store of value.
E.g.: Credit Cards, Debit cards

(iii) High-powered money consists of the following
(a) Currency held by general public and Commercial banks.
(b) Deposits maintained by commercial Banks at the Central Bank.
High-powered money provides the base for country's money supply. The base money and the size of the money multiplier decide money supply.
Money Supply = Money Multiplier x High powered Money

(iv) (a) This bank cannot expand the loans.
This is because this bank does not have surplus reserves. The bank has demand deposits amounting to Rs. Million 200 and 15% of the deposits should be maintained as reserves, which amounts to Rs. Million 30. The bank maintains exactly the same amount as reserves. Hence they are not left with any surplus reserves.

(b) When the reserve ratio is reduced up to 10% the bank should maintain only Rs. Million 20. Rs. Million (200 x 10%). Currently the bank has Rs. Million 30. Therefore the bank has surplus reserves of Rs. Million 10. Bank's lending ability goes up Rs. 10 Million. (To the extent of surplus reserves)

(02 (i) Real interest rate is the nominal interest rate adjusted for inflation.
Real Interest Rate = Nominal Interest Rate – Inflation Rate

Real interest rate is zero if the nominal interest rate is same as inflation rate.
If inflation rate is higher than nominal interest rate, real interest rate becomes negative.

(ii) Treasury bills are short-term instrument issued by the government to raise short-term loans for the government.
Treasury bills are available with 3 months. 6 months and 9 months maturity periods.
Treasury bonds are long-term debt instruments used by the government to raise long-term loans, usually with 2-6 years maturity periods.

(iii) Repurchase market refers to sale of treasury bills held by the government to Commercial Banks with the agreement of purchasing them back on a specified date.
Maturity period of such agreements normally ranges from 1 day to 180 days. But over night repurchases are very much popular. This was opened in 1993 by the Central Bank as an additional facility.
Reasons for this:
- This is a very safe market for Commercial Banks to invest their surplus funds.
- To bring the inert bank call money market to stability without allowing the call money interest to fall below the minimum accepted level.
- Repurchasing rate is a better indicator, which shows the direction of the Central Bank's monetary policy.

Increasing the Statutory Reserve Ratio. (SRR)
Increasing the bank interest rate.
Sale of securities in the open market.

(3) (i) Balance of Trade = Value of Exports – Value of Imports
(110) = 4800 – Value of Imports
Value of Imports = 4800 + 1100
= Rs. Million 5900

(ii) Current Account Balance = Trade Balance + Net Services + Net Income + Net Current Transfer
= - (1100) + 100 + (-280) + 950
= Rs. Million 330

(iii) Overall Balance =Current Account Balance + Net Capital Account+ Net Financial Account
= (330) + 200 + 400
= Rs. Million 270

(iv) Short Tem Financial Account balance =Net Financial Account + Long term Financial Account (Net)
= 400-450
= Rs. Million -50

(v) Monetary Movements = Inverse of the total balance = Rs. Million 270

(4) (i)

Commodity	Number of Units	Labour hours per unit(US)	Labour hours per unit(Japan)
Computer	01	100	120
Bicycle	01	05	08

(a) US have an absolute advantage in the production of both commodities because US takes the least amount of labour to produce both products.

(b) Opportunity Cost
If we assume that both countries have 300 labour hours, the production possibility for both countries from each product is shown below .

Country	Opportunity cost of producing Computers in Terms of Bicycles	Opportunity cost of producing Bicycles in Terms of Computers
USA	100/5=20	5/100= 0.05
Japan	120/8=15	8/120

(i) Imposing import tariffs. Exchange control
(ii) Import quotas
- Exchange control
- Voluntary export restraints (Requesting from exporting countries to restrict their exports voluntarily)
- Embargoes
- Setting standard specifications for imported products.

(5) (i) Negative real growth refers to a situation where GDP or GNP calculated at constant price has gone down in a particular year compared to the previous year. The percentage fall in GDP or GNP at constant price compared to the previous year is identified as the negative real economic growth rate. In such a situation growth rate is negative.

(ii) Fall in agricultural production and hydropower electricity generation due to continuous droughts.
- Economic activities got disrupted due to frequent power failures.
- Tourism industry collapsed due to the terrorist attack at the Air Port.
- Investment ratio fell to 22% (2001) from 28% (2000).
- Political instability.
- Downturn in the world economy.

(iii) Macro economic imbalances refer to adverse trends of an economy's macro economic variables, which are detrimental to the economic stability and growth. Imbalance is shown through the following indicators.
Fall in economic growth
- Rising unemployment rate
- Rising inflation rate
- Balance of payment is not favourable
- Deterioration of exchange rate.
- Widening budget deficit.

(iv) Maintaining macroeconomic stability
- Creating a conductive environment that favours foreign and local investments.
- Improving the productivity of labour by investing more money in education and health care (Improving human capital)
- Developing infrastructure facilities.
- Promoting domestic savings as a means of increasing capital Formation.
- Increasing investments on research and development.

(6.) i 1990-1991 - 20% (Upper poverty line 33%)

(iii) Overall Balance =Current Account Balance + Net Capital Account+ Net Financial Account
= (330) + 200 + 400
= Rs. Million 270

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