INTRODUCTION TO ECONOMICS & FINANCE
Suggested Answers
Foundation Examinations – Spring 2014

SECTION - A

Ans.1

(i)	(d)	none of the above
(ii)	(a)	the elasticity of demand is greater than one
(iii)	(a)	Tariff
(iv)	(a)	Terms of trade
(v)	(b)	the change in total utility as a result of consuming an additional unit of a product
(vi)	(a)	change in the unit price of the particular product
(vii)	(a)	the steps taken by the market leader would be observed very closely by the other firms.
(viii)	(a)	marginal cost
(ix)	(d)	taxes
(x)	(b)	investment
(xi)	(b)	medium of exchange
(xii)	(a)	Pakistani exporters will be in an advantageous position
(xiii)	(b)	increasing prices and declining employment
(xiv)	(d)	all of the above
(xv)	(c)	shows the same levels of output that can be achieved by alternative combinations of inputs

Ans.2 Consumer's Surplus is the difference between the total amount that consumers are willing and able to pay for a good or service (indicated by the demand curve) and the total amount that is actually paid for the purchase of the goods or services i.e. the market price.

Difficulties in the precise measurement of Consumer's Surplus

(i) ***A complete list of demand prices is not available***
Consumers' Surplus takes cognizance of only that part of the demand schedule with which individuals are familiar. As individuals do not know the prices of goods and services of other units, the whole of the consumers' surplus cannot be ascertained.

(ii) ***Necessities of life***
Consumers' surplus, in the case of necessities of life and conventional necessities is indefinite and immeasurable. In case of necessities of life as well as conventional necessities, there is no positive satisfaction. In these cases, it is the removal of pain rather than deriving of pleasure that matters.

(iii) ***Consumers' circumstances***
Individual consumers are rich as well as poor. An affluent individual may be prepared to pay much more for a product or service rather than go without it. This difference in the consumer's circumstances makes the measurement of consumers' surplus difficult and arbitrary.

(iv) ***Consumer's sensibilities***
Individual consumers have their selective tastes and sensibilities. Some individuals may desire a commodity more ardently than others, and are, therefore, prepared to offer higher prices.

(v) ***Change in marginal utility of money***
As individuals purchase more and more quantity of a commodity, less and less amount of money is left with these persons. Hence, the marginal utility of money increases, but in measuring consumers' surplus, allowance is not made for the changes in the marginal utility of money.

(vi) ***Change in earlier units***
With each increase in the purchase of a commodity, both the urgency of the need for further purchases and their utility decreases. Decrease in the utility of earlier units is not taken into consideration while calculating the consumers' surplus.

(vii) ***Substitutes***
Presence of substitutes makes it difficult to determine the consumer's surplus. To overcome this difficulty, the substitutes can be regarded as one commodity, as suggested by Marshall.

(viii) ***Commodities used for distinction***
In case of such commodities like diamonds and rare paintings, a fall in price may not lead to increase in demand. Hence, a fall in prices in such cases will not result in an increase in consumer's surplus.

Ans.3 (a) According to the Marginal Productivity Theory, employment of an additional unit of a factor of production would be stopped when the marginal productivity of that factor of production is equal to the factor's reward.

To explain this we take following example of labour, assuming that labour is the only variable factor whereas the other factors are held constant.

Units of labour	Marginal Revenue Product (Rs.)	Wage Rate (Rs.)
21	50	30
22	40	30
23	**30**	**30**
24	20	30
25	10	30

It would be advantageous for an entrepreneur to employ more persons till MRP> Wage Rate e.g. the 22nd worker is providing MRP which is equal to Rs. 40, whereas his wage is Rs. 30. Thus, the entrepreneur is getting a surplus of Rs. 10 and would continue to engage more workers.

The above table shows that MRP and the wage rate are equal with the employment of the 23rd worker. This determines the level of employment.

However, if MRP < wage rate, the entrepreneur would incur a loss, e.g. the 24th worker is producing only Rs. 20 worth of output whereas the remuneration paid the worker is Rs. 30.

It would therefore be advisable to restrict the number of workers to the point where MRP is equal to the wage rate.

(b) Grounds of criticism against the Marginal Productivity Theory are as follows:

(i) It is valid only under the assumptions of perfect competition. In real life, perfect competition does not exist.

(ii) It assumes that all the units of a factor are homogenous, so that any one unit is as good as any other. This in not actually the case.

(iii) It assumes that different factors are capable of being substituted for one another, so that, at the margin, it is possible to use more land, or more labour or capital, etc. Practically, such substitution is rarely possible.

(iv) It assumes that the factors of production are mobile between various uses. However, land lacks mobility; whereas labour and capital are not perfectly mobile.

(v) According to marginal productivity theory, marginal productivity determines the reward of a factor of production. It may not always be true. For example, the marginal productivity or efficiency of a worker often depends on the reward it receives for its services..

(vi) The theory implies that the supply of a factor of production is fixed. In practice, the reward enjoyed by a factor influences its supply.

(vii) The productivity of workers is also dependent on factors such as the quality of capital and efficient management. These factors are outside the control of workers.

Ans.4 Division of Labour:

Division of Labour is the splitting of the production process into a number of individual operations and making each operation the special task of one worker. It involves greater levels of specialization among the workers.

The advantages and disadvantages of division of labour are:

Advantages:

(i) **Increase in productivity:**
Since each job is performed by an individual person who specializes in that field, it increases the productivity of the workers and reduces average (unit) cost of production.

(ii) **Increase in work skills:**
By performing the same task repetitively, the workers become very efficient at that particular operation.

(iii) **Introduction of machinery is facilitated:**
When a complex process is broken down into a series of separate, simple processes, it becomes possible to devise a machine to perform each individual operation.

(iv) **Easy learning / Saving of time:**
A worker can be trained in a relatively short period for the performance of a single operation.

(v) **Saving in tools and implements:**
Since workers specialize in performing a single task they do not need complete set of tools. One set of tools can serve many workers at a time.

(vi) **Diversity / Increase of employment:**
By the creation of various divisions, more workers are required. This increases the number and variety of jobs. Employment is thus diversified.

(vii) **Large scale production:**
Production improves not only in quantity but also in quality since tasks are performed by specialists.

(viii) **Right man in the right place:**
Each worker can be required to perform the job which is best suited for him.

Disadvantages:

(i) **Loss of flexibility:**
When workers specialize too much, it may be difficult for them to perform other tasks in the event of changes in demand.

(ii) **Monotony:**
Since the workers perform the same task over and over again, they may get bored. This could result in making mistakes, higher sickness rates and higher labour turnover.

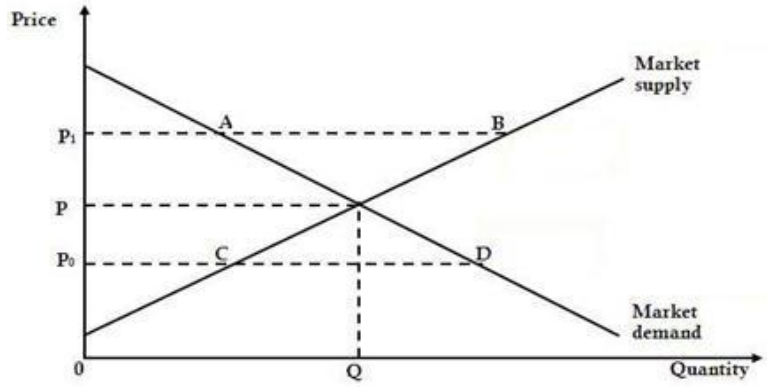
(iii) **Loss of skills:**
By breaking the production process into a series of separate, simple and often repetitive tasks, workers are not challenged. This could result in loss of interest in acquiring new skills.

(iv) **Increased risk of unemployment:**
Specialization means workers may not have wide range of skills. When demand or supply conditions change their particular skills may no longer be required.

(v) **Interdependence:**
A specialized system of production increases the extent to which different sectors of the economy depend upon one another. A problem in production in one company may cause hold-ups throughout the industry and related industries.

Ans.5 (a) When price is not at the equilibrium point there is a state of disequilibrium in the economy. Here quantity demanded and supplied is not equal to each other, i.e. either the quantity demanded is more or less than the quantity supplied.

Both the cases of shortage and surplus are shown below:



At price P_1, the suppliers want to produce quantities in excess of the quantity demanded at that price, as shown by the distance AB. The excess supply in the economy pushes the price level down until it shifts to equilibrium price.

The opposite will happen at price P_0 where there is an excess demand over supply shown by the distance CD. The short supply in the economy pushes the price level up until it shifts to equilibrium price.

(b) The essential conditions for the existence of conditions for perfect competition are:

(i) **Large number of buyers and sellers**
As a result of large number of buyers and sellers, no single buyer or seller is able to influence the price because the output of a single firm or the quantity demanded by a single buyer is a very small proportion of the total market.

(ii) **Homogenous product**
The products produced by all firms are standard or identical because any difference would allow the producer to charge different price.

(iii) **Free entry or exit**
There are no restrictions, legal or otherwise, on the firms to enter or exit from the market as any restriction would deter competition.

(iv) **Perfect knowledge of prices**
The buyers and sellers are fully aware of the price prevailing in the market and hence the same price prevails throughout the market.

(v) **Transport costs are zero or very insignificant**
If the same price is to exist throughout a market, it is necessary that the transport cost should be zero or insignificant.

(vi) **Perfect mobility of the factors of production**
The mobility is essential in order to allow the firms to adjust their supply to demand. If the demand exceeds supply, additional factors will move into the industry and vice versa.

SECTION - B

Ans.6 (a)

Expenditures Approach	**Rs. in million**	
Consumers' expenditures	240	
Government expenditures	90	
	330	
Add: Exports	70	
	400	
Less: Imports	(90)	
GDP	310	
Income Approach		
Income from employment (before tax)	180	
Income of the firm (before tax)	130	(400-180-90)
GDP	310	
Value- added Approach		
Output of the firm at sales value	400	
Less: Cost of goods imported	(90)	
GDP	310	

(b) The estimates of national income helps to:

(i) Determine the extent of welfare of the people and their standard of living.
(ii) Determine whether the economy is growing, stagnating or declining and whether or not the standard of living and economic welfare of the individual citizens has shown any improvement.
(iii) Ascertain the contribution made by the various sectors of the economy to the national income and provide guidance to the government for future planning.
(iv) Understand how the income is contributed among the various factors of production in the economy and various segments of the population and allows the government to take appropriate remedial measures.
(v) Estimate consumption, savings and investments in the economy. These estimates are then used for economic planning purposes.
(vi) Compare standard of living and economic welfare of the people in different countries.

Ans.7 **(a)** Capital market is a term which describes the institutions which provide long-term and medium-term finances, and the financial instruments that are traded in these markets. Both private firms and the government place and raise funds in the capital markets.

(b) An active stock exchange :

(i) Facilitates large firms and governments in raising long-term capital by providing a market place for both the borrowers and investors in which they can interact.

(ii) Enforces a regulatory environment so that investors have the assurance that companies listed on the exchange and the traders would comply with the rules and regulation.

(iii) Index of share prices listed on the stock exchange acts as a barometer of the state of investor confidence in the country's economy. It helps the government to assess the impact of tis policies, on the economy.

(iv) Prices of quoted/ listed securities are readily available and the investors can therefore make informed decisions for purchase and sale of their shareholdings.

(v) Ensures liquidity of the investments.

(c) Following factors are responsible for fluctuations in the share prices of companies:

(i) Company's profitability
(ii) Rate of dividends
(iii) Important transactions like takeover bids, signing of large contracts etc.
(iv) Changes in the strategies and corporate policies
(v) Monetary and credit policies in the country
(vi) Inflation and deflation in the country
(vii) Taxation policies of the government
(viii) Expectations of economic upturns/downturns
(ix) Import and export policies
(x) Conditions prevailing and emerging in the country e.g. civil unrest and commotion, imminent conflicts with other countries, elections, international incidents, floods, earthquakes, etc.

Ans.8 Fiscal policy can be defined as the conscious policy of a government to achieve certain pre-determined socio-economic objectivesthrough changes in policies pertaining to public revenues, public expenditures and public debts.

A govt. can implement fiscal policy measures to stimulate demand in the economy as discussed below:

(i) Higher expenditures by the government on health services, education, employment, etc. stimulate demand in the economy i.e. aggregate demand.
(ii) By reducing taxation and thereby allowing firms and individuals to earn more after-tax income. When this income is spent, it would generate demand in the economy.
(iii) Increase in government spending on capital projects would generate demand as well as employment opportunities in the construction of infrastructure facilities. After completion, the capital project would enhance production and generate further demand.
(iv) Government-funded training schemes raise the levels of skills of workers and make them better qualified for employment by the private sector.
(v) Government may tax companies on the basis of numerical strength and pay levels of their employees. Lower employment taxes would encourage employers to hire more workers and create employment opportunities.

Ans.9 **Process of Credit Creation:**
A commercial bank accepts deposits from one customer and lends the funds to its borrowers. The money given as loans to the borrowers by the bank is deposited in other banks and again lent to others. In this way, a process of credit creation takes place in the economy.

Concept of Credit Multiplier
The size of credit expansion depends primarily on the size of the cash ratio which means the ratio of cash that a bank has to maintain as compared to its total deposits. It is also referred to as the reserve requirement. Credit multiplier is the inverse of Cash ratio. Hence, the greater the cash ratio greater would be the amount of credit creation. The above relationship can be summarized as under:

$$\text{Maximum deposit creation} = (\text{Initial Deposit} - \text{Reserve}) \times \text{Credit multiplier}$$
$$\text{whereas Credit Multiplier} = 1/\text{Reserve Percentage}$$

Example:
Assume that Bank A receives a deposit of Rs. 100 from a customer. It lends Rs. 80 to another customer (Assuming 20% reserve requirements).

The borrower then draws a cheque for Rs. 80 i.e. the entire amount of the loan and makes payment to an individual who deposits the amount in Bank B.

Bank B after satisfying the required reserve ratio generates a loan of Rs.64.

The second borrower draws a cheque of Rs.64 for the entire amount of the loan and makes payment to another individual who deposits the amount in Bank C.

Bank C after satisfying the required reserve ratio generates a loan of Rs.51.

This process continues and the banking system is thus able to create money supply to the extent of Rs. 400 from the initial deposit of Rs. 100 as shown hereunder:

$$= (100 - 20) \times 1/20\%$$
$$= 80 \times 5 = \mathbf{400}$$

Ans.10 Economic growth is measured by increase in real GDP accruing over a specific period.

The following factors are conducive for economic growth:

(i) **Level of new investments**
Investments are undertaken if there are expectations of future growth in demand. Increase in the quantum of investments results in increase in the income levels of individuals.

(ii) **Terms of trade**
An improvement in the terms of trade would mean that more imports can be made or alternatively a given volume of exports will earn higher profits. This will boost investment and hence growth. This can be achieved by exporting value added goods and services.

(iii) **Training**
Increasing the number of trained workers would enable the economy to increase its productivity by being able to exploit the available resources in a better way.

(iv) **Mobility of labour**
It helps to ensure that available skilled workers would easily move to the regions where there is a demand for their work.

(v) **Availability of capital**
Sufficient capital must be made available to finance new capital investments in the country.

(vi) **Availability of suitable infrastructure facilities**
Land must be available with suitable infrastructure facilities of roads, railways and communications network to support commercial activities.

(vii) **Technological Development**
Technological progress increases productivity of factors of production resulting in higher output. Furthermore, new products are developed resulting in output growth.

(viii) **Government policies**
The government policies should provide incentives and encouragement for economic growth.

(ix) **International trade**
International trade taps new markets for exporters and enables firms to benefit from economies of scale by increasing production levels.

Ans.11 (a) The harmful effects of inflation are as follows:

(i) Inflation leads to a redistribution of income and wealth in ways which may be undesirable. Redistribution of wealth might take place to the detriment of the creditors in favour of the debtors. This is because under inflationary conditions, the debts lose their 'real' value

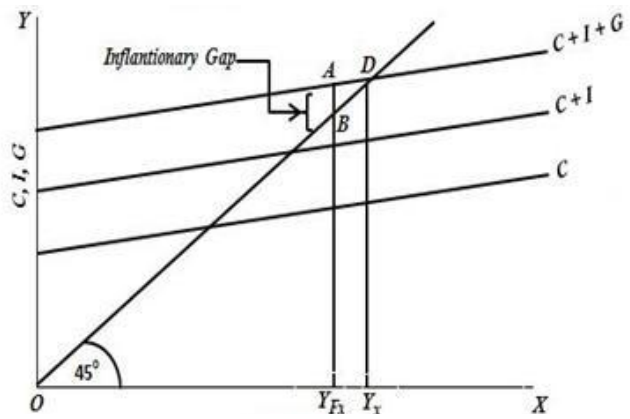
(ii) If rate of inflation in a country is higher than its major trading partners, its exports will become relatively more expensive and imports relatively cheap. As a result, the balance of trade will suffer, affecting employment in export industries and in industries producing import-substitutes.

(iii) If inflation continues to persist over prolonged periods, it would not be possible to have precise knowledge of the true rate of inflation. As a result, there would be widespread speculation of the value of money and anticipated fluctuations in the prices of different products and services.

(iv) In times of high inflation, substantial time and effort is expended on planning and implementing prices changes. Customers may also have to spend more time and efforts to make comparisons of widely changing market prices as they would seek to buy from the lowest cost source.

(b) Inflationary gap arises when consumption and investment spending are greater than the resources at full employment. At this level, changes in the aggregate demand will cause price changes instead of any variation in real output.

The inflationary gap can be explained with the help of following diagram:



In the above diagram, C, I and G denotes consumption, investment and government expenditures respectively. (C+I+G) line shows the total expenditure on demand in the economy. At this level, Y_x is the total real output, as shown by the intersection, point D, with the 45° line. Y_{Fx} represents a full employment limit on real output. Real income of the economy, obviously cannot reach Y_x.

At Y_{Fx} total demand (C+I+G) exceeds total output, leaving a gap AB, which is the inflationary gap as stated by Keynes.

(THE END)