SUGGESTED SOLUTION

CA FOUNDATION

SUBJECT- ECONOMICS & BCK

Test Code – JKN_ECO_03

BRANCH - () (Date :)

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1. In the given figure AR = MR which means that the firm is a price – taker. Firms are price takers only in perfectly competitive markets. In imperfect markets they are either price makers or price searchers or price adjusters.

[Ans.: B]

2. If tea and coffee are substitutes then with a fall in the price of tea, people will shift to drinking tea and at the same time start consuming less of coffee. This happens due to substitution effect. A relative change in price of commodity forces the consumer to change the quantity demanded of the commodity. If relative price goes up, less of it is demanded and vice – versa.

[Ans.: B]

3. To address the fundamental problem of scarcity of resources each country can choose an economic system from among – capitalism, socialism & mixed economy.

These systems differ from each other in the way the economy is managed.

In socialism government plays an important role in deciding what to produce, how to produce & for whom to produce. Freedom given to private sector is the minimum. The biggest advantage of socialism is relative equality in distribution of income & wealth & complete absence of consumer & labor exploitation.

[Ans.: C]

4. In imperfect competition – monopoly or monopolistic competition – a firm can sell more by decreasing price (AR). Therefore with more sold at a decreasing price, AR and MR both fall & MR falls faster than AR. So both are negatively sloped. Moreover, MR curves always lies half – way between AR curve and Y – axis. MR is zero when TR is maximum and MR can become negative when TR starts decreasing.

[Ans. : D]

5. Here, $D_1 = 8$; $D_2 = 12$ $\therefore \Delta D = 12 - 8 = 4$ units

$P_1 = 23$; $P_2 = 27$ $\therefore \Delta P = 27 - 23 =$ Rs. 4

Formula to calculate cross elasticity of demand is : -

$e_c = \frac{\Delta D_x}{\Delta P_y} \cdot \frac{(P_1+P_2)}{(D_1+D_2)}$

$= \frac{4}{4} \times \frac{(27+23)}{(12+8)} = 1 \times \frac{50}{20} = +2.5$

As e_c is positive, X & Y are substitutes.

[Ans.: D]

6. Business cycle refers to the fluctuation of aggregate economic activity (measured by real GDP) around a trend line (long – term real GDP growth rate). It is basically ups and downs in economic activity around an average growth rate over a period of time.

[Ans.: B]

7. In perfect competition, the firm is a price taker due to the presence of large number of buyers and sellers. The price is decided by the industry and the firm can sell all that it wants at this price. At this price, AR = MR i.e. MR is equal to prices and it is a straight line parallel to X – axis. By definition, fixed costs remain constant.

[Ans.: D]

8. Objectives of an enterprise are many – organic, economic, social, human and national. Human objectives are concerned with the comprehensive development of its employees. There are stated as – fair dealing with all employees; enabling them to develop new skills & abilities, providing them a work climate in which they can grow as mature and productive individuals; providing then with an opportunity to participate in firm's decision – making & to make job contents interesting and challenging.
All these will ensure that they enjoy a high living standard and maintain work – life balance.

[Ans.: B]

9. Given the demand, if money supply increases, the price of money. i.e. interest rate will decrease. Lower lending rates will increase demand for investment as cost of production decreases and profitability increases. Moreover, AD = C + I + G + (X – M). If I increases, given other components, aggregate demand (AD) will tend to rise.

[Ans.: C]

10. The relationship between AR, MR and Price elasticity of demand (e) is expressed by the following formula –

$$MR = AR\left(\frac{e-1}{e}\right)$$

Now AR is always positive.

So, if

(i) e = 1, then MR = 0
(ii) e < 1, then MR is negative
(iii) e > 1, then MR is positive

[Ans.: D]

11. Objective of a firm is profit maximization. It may happen that in an attempt to maximize profits, the firm may have to incur losses. But despite incurring losses firm continues to remain in business till it is able to recover its variable cost i.e. TR = TVC. But If TR < TVC then the optimal strategy for the firm would be to shut down /s top production so that losses can be minimized.

[Ans.: B]

12. Excess capacity is the difference of output at the minimum point of AC curve and at the falling portion of AC curve. Both in monopoly and monopolistic competition firm in the long run is in equilibrium at the falling portion of AC curve. So there is excess capacity indicating underutilization of resources.

In perfect competition the firm operates at the lowest point of AC curve when in equilibrium indicating absence of excess capacity.

[Ans.: D]

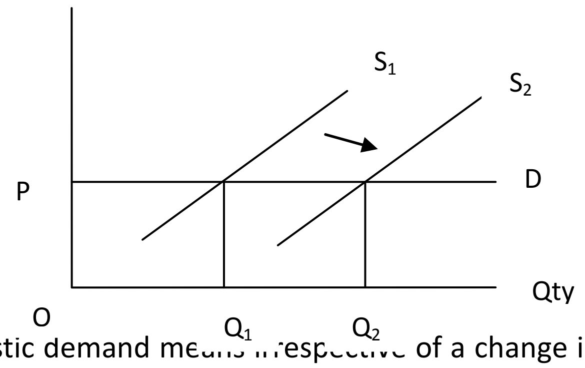
13. Economics has been defined as the science of scarcity or science of choice – making. This is due to the fact that human wants are unlimited, resources are limited & resources have alternative uses. It will never be possible to decreases human wants. They are going to increase by leaps and bounds whereas resource scarcity will not be addressed that rapidly. This means that not all of our wants can be satisfied.

[Ans.: A]

14. Capital formation refers to sustained increase in the stock of real capital in a country. The most important factor determining capital formation is savings. Increased savings results in increased capital formation which in the future will increase growth rate by enhancing productive capacity of economy. Increase in current savings is equivalent to reduction in current consumption which is necessary for the purpose of capital formation.

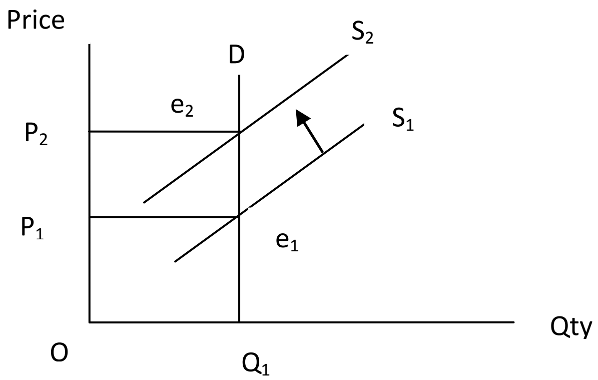
[Ans.: B]

15. Price is jointly determined by demand and supply. In perfect competition demand curve is horizontal (perfectly elastic demand) as the firm is a price – taker. At a given price the firm can sell as much as it wants. Under these conditions if a new firm enters the industry, supply increases which means the supply curve shifts to the right (from S_1 to S_2 in the below given figure), the quantity supplied too increases but price remains unchanged.



[Ans.: D]

16. Perfectly inelastic demand means irrespective of a change in price demand will not change. This makes demand curve vertical. Given this, if supply were to decrease, there will be scarcity so price will shoot up but due to perfectly inelastic demand, the quantity demanded and bought will remain the same.



Supply decreases from S_1 to S_2, Price increases from P_1 to P_2 but quantity remains the same i.e. Q_1.

[Ans.:D]

17. LAC curve is derived from SAC curves. LAC curve envelopes all the SAC curves. It is tangent to all the SAG curves. It is to be noted that LAC curve is not tangent to the minimum points of all the SAC curves. When the LAC curve is declining, it is tangent to the falling portions of the SAC curves as all these plants are being operated at less than their full capacity.

[Ans.:A]

18. Economic indicators are statistics that tell us about the health of the economy. Movements in these indicators are used as basis for forecasting the likely economic environment in the near future. There are three types of indicators
    (i) leading indicators – they move ahead of the level of economic activity.
    (ii) coincident indicators – they move simultaneously with the level of economic activity and
    (iii) lagging indicators – they move behind the level of economic activity.

    Industrial production, inflation and retail sales are coincident indicators as they move along with economic activity.
    New orders for plant and equipment is a leading indicator.

[Ans.: D]

19. Capitalism is an economic system in which fundamental or basic economic problems (what to produce, how to produce, for whom to produce) are addressed by market mechanism. Resources are allocated using price as the most important signal. More of those goods are produced whose demand & therefore prices increase. More of those factors are used in production whose supply increases and therefore prices decrease.

[Ans.: D]

20. Consumer surplus is defined as the difference between the maximum amount a person is willing to pay for a good & its market price. In terms of diagram it is the area between the price line (AR) and the demand curve (MU curve).

[Ans.: A]

21. In his method of measuring price elasticity, Alfred Marshall compares the changes in total expenditure due to a change in price of the commodity. He concludes the following :

(i) If with a change in price, total expenditure does not change then it is a case of unit elastic demand.

(ii) If with a change in price change in total expenditure is directly related then it is a case of inelastic demand (increase in price total expenditure increases & vice versa)

(iii) If with a change in price change in total expenditure is inversely related then it is a case of elastic demand (increase in price total expenditure decreases and vice versa)

[Ans.: D]

22. In case of two commodities X and Y, consumer equilibrium condition is expressed as

$$MRSx, y = \frac{P_x}{P_y} = \frac{MUx}{MUy}$$

Now the slope of budget line is $\frac{P_x}{P_y}$.

Therefore in this case,

$\frac{MUx}{MUy} = \frac{5}{10}$ = 0.5 = Slope of budget line

[Ans.: A]

23. Microeconomics is the study of behavior of individual economic agents (buyer /seller). Central theme of microeconomic analysis is determination of prices – of goods, services & factors of production. So it is also known as value/ price theory.

Issues like economic growth, inflation & employment fall in the domain of macroeconomics.

[Ans.: D]

24. Here, D_1 = 30,000 ; D_2 = 20,000

$\therefore \Delta$ D = 20,000 – 30,000 = (-) 10,000

P_1 = 300 ; P_2 = 400; ΔP = 400 – 300 = Rs. 100

According to mid – point method

$$e_p = \frac{\Delta D}{\Delta P} \times \frac{(P_1+P_2)}{(D_1+D_2)} = \frac{(-10{,}000)}{100} \times \frac{(400 + 300)}{(30{,}000+20{,}000)}$$

$$e_p = \frac{(-10{,}000)(700)}{100 \times (50{,}000)} = (-)\ 1.4$$

Ignoring the sign, the answer is 1.4 **[Ans.: A]**

25. Monopolistic competition is characterized by the presence of large number of sellers selling differentiated products to large number of buyers. Product differentiation is a defining characteristic of monopolistic competition. Each seller is selling a product which is a very close substitute of its rival. So all firms try to develop brand loyalty to increase their customer base by advertising and fulfilling their promises.

[Ans.: A]

26. It is given that

Budget (B) = Rs. 200 ; X = 10 units

Px = Rs. 5 and Py = Rs. 10
Equation of budget line is
B = Px. X + Py. Y

Substituting the given values & solving it we get

B = Px. X + Py. Y

200 = (5). (10) + (10) .y

200 = 50 + 10y

150 = 10y

$\therefore$ y = 15

[Ans.: C]

27. Land in economics is defined as all natural resources available on the surface of the soil, below it and above it which are useful in production. One of the important characteristics of land is that its supply for mankind as a whole is totally fixed (i.e. perfectly inelastic) as it is not man – mode. But for an individual firm the supply of land is relatively elastic i.e. if it wants more of land it will have to pay higher price to purchase it.

[Ans.: B]

28. Monopoly is the market structure which is basically defined by the following three important features –
(i) There is only one seller/ producer in the market
(ii) there are no close substitutes of the product and
(iii) there are man – made & natural barriers to entry

[Ans.: D]

29. Many economists have explained the reasons responsible for ups and downs in the economy. According to Nicholes Kaldor business cycle result from the fact that present prices substantially influence production at some future date causing ups and downs. This is cobweb theory.
According to Schumpeter trade cycles occur as a result of innovations.
According to Keynes changes in AD are responsible for trade cycles & Hawtrey attributes trade cycles to changes in money supply.

[Ans.: B]

30. Based on the information given, we rewrite the table as

Units	TFC	TVC	TC	MC
0	500	0	500	-
1	500	400	900	400
5	500	1600	2100	300

MC = $\frac{\Delta TC}{\Delta Q}$; Here ΔTC = 2100 – 900 = Rs.1200

ΔQ = 5 – 1 = 4

$\therefore$ MC for 5 units = $\frac{1200}{4}$ = Rs. 300 **[Ans.: A]**

31. Capitalism is an economic system in which market mechanism addresses the problem of allocation of resources arising due to the problem of scarcity. Under capitalism full freedom is given to the private sector / market to take economic decision regarding what to produce, how to produce and for whom to produce. Government intervention in such an economy is the least.

[Ans.: B]

32. Important elements of market are – buyers, sellers, commodity, price & interaction between buyers & sellers. Market is defined as an arrangement which brings together buyers & sellers of a commodity for the purpose of transacting it at a given price. In the process buyers and sellers bargain with each other for an acceptable price.

Government regulation and control is not an element of market.

[Ans.: D]

33. The formula to calculate price elasticity of demand according to arc elasticity method is

$e_p = \frac{\Delta D}{\Delta P} \times \frac{(P_1+P_2)}{(D_1+D_2)}$

Here, P_1 = 100, P_2 = 125; D_1 = 1,25,000 & D_2 = 1,00,000

$\therefore$ Δ D = 1,00,000 -1,25,000 = (-) 25,000 units

Δ P = 125 – 100 = Rs. 25

$\therefore$ Substituting these values, we get

$e_p = \frac{25,000}{25} \times \frac{(100+125)}{(1,00,000+1,25,000)}$

$e_p = \frac{25,000}{25} \times \frac{225}{2,25,000}$

$e_p = 1.0$ **[Ans.: C]**

34. There are five distinct phases of a business cycle – peak, contraction, trough, recovery and expansion.

Trough encompasses – both recession and depression economic activity declines during trough. Aggregate demand decreases, prices decline, profits decline, unemployment expands and bank credit too decreases.

When recession becomes severe we call it as depression.

In depression profit prospects are bleak. Most of the businesses run in severe losses. So even if banks are willing to offer loans at low interest rate there are no borrowers.

[Ans.: D]

35. An important rationale for the operation of law of demand is the existence of negative price effect.

Price effect = Substitution effect + Income effect

This bifurcation of price effect was for the first time developed by two economists J.R. Hicks and R.G.D. Allen

[Ans.: C]

36. One of the important features of monopolistic competition is free entry and exit of firms. If existing firms are making abnormal profits, new firms will enter. This will increase supply, reduce price & abnormal profits. The price will decrease to an extent where P = AC i.e. firms, earn only normal profit on the other hand if industry is making losses some firms may decide to exit. As a result supply decreases, price increases & losses will start decreasing. The price will increase till it becomes equal to AC guaranteeing normal profits.

[Ans.: B]

37. Capitalism is one of the economic systems where resources are allocated by the price mechanism. Here all economic decisions are taken by the private sector. Full freedom is given to private firms & individuals to decide what to produce, how to produce, for whom to produce & how to accelerate economic growth. The biggest advantage of capitalism is fast growth & high living standards. The biggest disadvantage of capitalism is inequalities of income which refers to the gap in average income earned by the rich and the poor.

[Ans.: A]

38. Isoquants show all possible combinations of two factors which can produce the same quantity of output. Isoquants are downward sloping, convex to the origin & they never touch either of the axes. They are also non – intersecting. If two isoquants intersect the that would mean that one combination of labour and capital can produce two different levels of output, which is not possible.

[Ans.: D]

39. The formula to calculate elasticity of supply is

$e_s = \frac{\%\,\Delta\, in\, S}{\%\,\Delta\, in\, P}$

Here % Δ in S = 60
& % Δ in P = 50

$\therefore$ es = $\frac{60}{50}$ = +1.2 **[Ans.: B]**

40. Fixed cost is the one which does not depend on the level of output produced. It remains the same irrespective of increase or decrease in output. It has to be incurred even when nothing is produced. Examples of fixed cost include rent, salary, interest, depreciation, etc.

[Ans.: C]

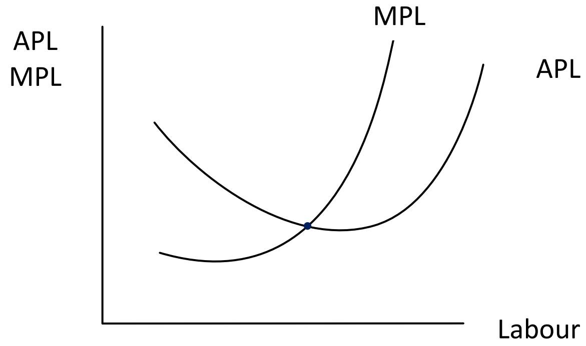
41. Oligopoly is a market structure in which few firms sell their products to large number of buyers. In this market selling costs are very important (i.e. non – price competition) to boost sales. Firms avoid price war as it lowers everyone's profits. So the prices are observed to be rigid/ sticky.

Horizontal demand curve is a characteristic typical of a firm in perfect competition as it is a price – taker.

[Ans.: A]

42. The relationship between average product of labor (APL) and marginal product of labor (MPL) is a mathematical One. It is the MPL which determines what happens to APL due to an extra unit of labour employed.

If MPL > APL then APL tends to increase
If MPL < APL then APL tends to decrease
If MPL = APL then APL remains the same
MPL intersects APL at its lowest point as shown below.



It is evident from the above figure that when MPL is below APL the latter is falling.

[Ans.: C]

43. An economic activity is the one which involves monetary transaction. It is basically concerned with earning income in any form. When the motive of any activity is not to earn income from it then it becomes non – economic activity e.g. playing a friendly cricket match or teaching one's own daughter or duties discharged by a housewife. In all these cases no money is paid.
Manufacturing chairs at subsidized ratios is an economic activity because the underlying motive is to earn profit from its sale.

[Ans.: C]

44. Economic indicators are statistics that tell us about the health of the economy. Movements in these indicators are used as basis for forecasting the likely economic environment in the near future. There are three types of indicators
(i) leading indicators – they move ahead of the level of economic activity.
(ii) coincident indicators – they move simultaneously with the level of economic activity and
(iii) lagging indicators – they move behind the level of economic activity.

[Ans.: C]

45. Price discrimination refers to the practice of selling the same commodity to different buyers at different prices. Price discrimination is possible & profitable when the following conditions are satisfied : -
(a) It should be possible to segregate total market into different segments.
(b) It should not be possible to transfer demand from high – priced to low – priced market and
(c) Elasticities of demand in different markets should be different.

[Ans.: C]

46. Consumer is said to be in equilibrium when he ends up maximizing satisfaction from his purchases of different goods. Under cardinal approach in case of one commodity x, the consumer attains equilibrium when the following condition gets fulfilled : -

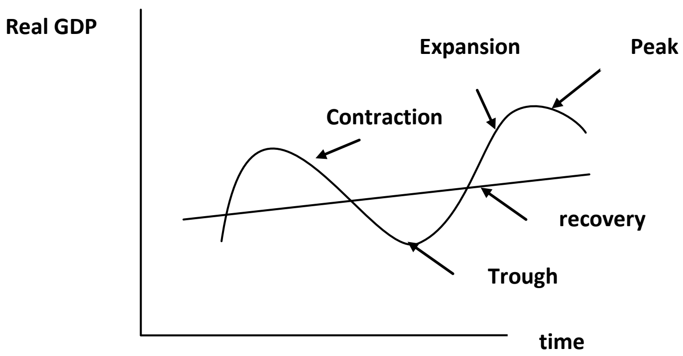
$MU_x = P_x$
Where MU is marginal utility & P is price.
If $MU_x > P_x$, the consumer will increase his consumption of x

If $MUx < Px$, the consumers will decrease his consumption of x.

He will stop exactly at a point where $MUx = Px$

[Ans.: B]

47. There are five distinct phases of a business cycle – peak, contraction, trough (recession & depression), recovery and expansion as shown below



Trough is the lowest point of economic activity whereas peak is the highest point, on a business cycle. As can be seen, in the diagram above, expansion falls between the trough ad peak.

After the peak is reached, the economy starts contracting which when becomes severe culminates into recession (trough)

[Ans.: C]

48. Statistical methods are considered to be superior compared to other methods of demand forecasting because they are simple to understand, transparent, realistic (based on data/facts) and most importantly objective.
Expert opinion and survey method are subjective and therefore less accurate.
Barometric method is not superior because it is difficult to identify and construct leading indicators for different industries. Moreover it gives the direction of change but not the magnified.

[Ans.: C]

49. The kinked demand hypothesis was advanced by Paul Sweezy, an American economist to explain price rigidity that exists in oligopoly market. According to him the demand curve in oligopoly market has a kink at the existing price due to typical behaviour of the firms -all firms follow a price cut initiated by one firm but they do not follow a price increase initiated by one firm.

[Ans.: D]

50. Economic costs = Explicit costs +Implicit costs

$\therefore$ Economic Profit = TR – (Explicit costs + Implicit costs)

OR

$\therefore$ Economic profit = TR – Total Economic costs

In a perfectly competitive industry due to free entry and free exit all firms in the long run earn only normal profit (equivalent to zero economic profit). Economic profit is same as abnormal or supernormal profit.

[Ans.: D]

51. Due to the universal problem of scarcity of resources, all countries have to sort out the following fundamental economic problems –

(a) what to produce ?

(b) How to produce ? This is the problem of choice of technique of production – labour intensive or capital intensive.

(c) For whom to produce ? This is the problem of distribution of national income.

(d) How to make provisions for growth ?

[Ans.: B]

52. Price effect explains the law of demand . Price effect = Substitution effect + Income effect Substitution effect refers to the change in quantity demanded of a commodity due a change in its relative price, other things remaining constant.

On the other hand income effect refers to the change in quantity demanded of a commodity due to a change in his real income (purchasing power) because of change in the price of the product.

[Ans.: C]

53. External economies of scale refers to various advantages enjoyed by all the firms when an industry expands. As more and more firms enter a particular industry or when the old firms expand, there is growth of ancillary industries which supply related goods (components, spare parts) and services (repairing) to the industry.
Internal economies of scale refer to various advantages enjoyed when a firm expends.
Diseconomies of scale refer to various disadvantages faced by a firm (internal) or an industry (external) when it over expands.

[Ans.: C]

54. Economic indicators are statistics that tell us about the health of the economy. Movements in these indicators are used as basis for forecasting the likely economic environment in the near future. There are three types of indicators

(i) leading indicators – they move ahead of the level of economic activity.

(ii) coincident indicators – they move simultaneously with the level of economic activity and

(iii) lagging indicators – they move behind the level of economic activity.

Unemployment falls in the category of lagging indicator

[Ans.: C]

55. Formula to calculate income elasticity of demand is

$e_y = \frac{\%\,\Delta\, in\, D}{\%\Delta\, in\, y}$

Here % Δ in y = (-) 4 &
% in D = $\frac{335-352}{352} \times 100 = \frac{(-)17 \times 100}{352}$

= (-) 4.82

$\therefore$ $e_y = \frac{(-)4.82}{(-)4}$ = + 1.20 **[Ans.: D]**

56. Cold drink industry in India is dominated by two multinational giants – Pepsi and Coke plus a very few regional /national players. A market characterized by the presence of few sellers & large buyers is oligopolistic in nature.

If there are many sellers selling homogeneous goods, we have perfect competition. Many sellers selling differentiated products makes monopolistic market & one seller selling to many buyers defines a monopoly.

[Ans.: D]

57. Objective of rational producer is to maximize output. In the law of variable proportion output becomes maximum at the end of stage 2 i.e. the stage of diminishing marginal returns.
Producer will not work in the first stage (stage of increasing marginal returns) because the output has still not become maximum.

Similarly the producer will avoid working in the third stage (stage of negative marginal returns) as output starts decreasing.

[Ans.: C]

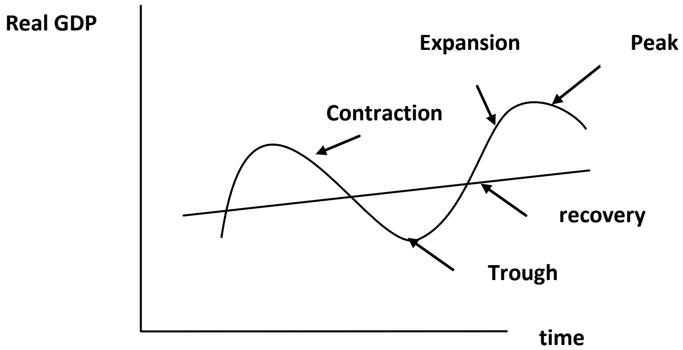
58. Elasticity of Demand for a product is affected by a number of products. One of them is the time period.
In the short term demand for a product tends to be less elastic as the consumers cannot all of a sudden change their habits to shift to new products or get information about rival product prices in response to a price increase.
In the long – term as these constraints are removed, demand tends to become elastic.

[Ans.: A]

59. Business economics is applied microeconomics. It is meant to bridge the gap between theory & practice & enable the managers to take accurate decisions. Positive theory focuses more on description answering the question – 'what it is? Normative theory focuses more on prescription answering the question 'what it should be ?' Going by the nature of the subject it becomes obvious that the emphasis of business economics is more on normative than positive theory.

[Ans.: C]

60. There are five distinct phases of a business cycle – peak, contraction, trough (recession & depression), recovery and expansion as shown below



Trough is the lowest point of economic activity whereas peak is the highest point, on a business cycle. As can be seen, in the diagram above, expansion falls between the trough ad peak.

[Ans.: D]

61	B
62	C
63	C
64	C
65	B
66	C
67	A
68	A
69	C
70	B
71	A
72	A
73	C
74	C
75	A
76	B
77	C
78	B
79	C
80	B
81	A
82	A
83	A
84	B
85	C
86	D
87	A
88	A
89	A
90	D
91	C
92	A
93	B
94	D
95	B
96	D
97	C
98	A
99	D
100	A