

PART B: MICRO

Chapter 5: Supply and elasticity of supply

Q. NO	QUESTION	MARKS	
1	A steel producer finds that the price of iron ore has increased by 20 % per unit. But other factors of production are constant. What will happen to the supply of steel? a- Supply will increase b- Supply will decrease c- No effect on supply Any situation can happen	1	
2	A seller sells 5 lakh units of a commodity by Rs 10 per unit. The government imposes a new tax on the product. The supply of the commodity will	1	
3	Supply curve is positively sloped, because a- There is direct relation between price and supply. b- There is inverse relation between price and supply. c- Price and demand are inversely related. Supply and demand are interrelated.	1	
4	A stationary shop provides the service of photocopy(xerox). He charges Rs 2 per page for photocopy. He buys a new photocopier machine which reduces the ink cost but increases the speed of photocopy. What may happen with the supply of the service of photocopy? a- Increase in supply b- Expansion of supply c- Decrease in supply d- Contraction of supply	1	
5	In 2009 there were 5 bread industries in my district. In 2025 the number became 11. And as on 20 August 2023, there are 16 no. of bread industries functioning. What may be its effect? a- Market supply of bread will expand. b- Individual supply curve will shift to right. c- Market supply curve will shift to right. Individual supply curve will shift to left.	1	
6	When quantity supplied remains same in spite of change in price, then supply is a- Perfectly elastic b- Perfectly inelastic c- Inelastic Unitarily elastic.	1	

7	Which of the followings can cause a movement along the supply curve?	1
	a- Fall in price.b- Rise in price of related goods	
	c- Rise in price of inputs.	
8	Fall in per unit price.	1
9	The diagram presents a- Perfect elastic supply b- Perfect inelastic supply c- Unitary elastic supply Zero elastic supply	1
	The diagram presents a- Expansion of supply b- Rightward shift of supply	
	c- Increase of supply Fall in supply	
10	When the price of a good is Rs 10 per unit, quantity supplied is 500 units. If the price rises, what must not be the quantity supplied? a-800 units b-510 units c-600 units d-450 units	1

11	If the percentage change in quantity supplied of commodity X is more than the percentage change in price of the commodity X, the coefficient of price elasticity of supply would be(Choose the correct alternative) (a) Es = 1 (b) Es< 1 (c) Es= 0 (d) Es > 1	1
12	Suppose when the price of shirts increases from ₹500 to ₹550, the quantity supplied increases. This change is best described as a. movement along a supply curve. b. a change in supply. c. movement along a demand curve. d. a change in demand. e. none of the above.	1
13	Which of the following statements is true, regarding the supply of a particular good, and that good's own price? a. A price increase shifts the supply curve to the right. b. A price decrease shifts the supply curve to the right. c. A price increase shifts the supply curve downward. d. A price change alone does not shift the supply curve. e. A price change is the only way to shift the supply curve	1
14	Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below: Assertion (A): Contraction in Supply leads to a downward movement along the same supply curve. Reason (R): Downward movement along the same supply curve occurs due to an increase in price of the commodity, other factors remaining constant. Alternatives: (a) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation of Assertion (A). (b) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation of Assertion (A). (c) Assertion (A) is True but Reason (R) is False. (d) Assertion (A) is False but Reason (R) is True.	1
15	Read the following statements carefully and choose the correct alternative from the following: Statement 1: The coefficient of price elasticity of supply is independent of price and quantity units. Statement 2: Depending upon degree of responsiveness of quantity supplied to the price change, there are seven kinds of price elasticities of supply. Alternatives: (a) Both the statements are true. (b) Both the statements are false. (c) Statement 1 is true and Statement 2 is false. (d) Statement 2 is true and Statement 1 is false.	1
16	Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I: Column I (i) Supply (ii) Law of supply (b) Percentage change in quantity supplied Percentage change in price (iii) Downward movement (c) Always related to price of the commodity	1

	along the supply curve (iv) Elasticity of supply (d) A straight line, positively sloped supply curve starts from Y-axis (v) E_{s} > 1 (e) Positive relationship between own price of the commodity and its quantity supplied	
17		1
	Price of rugs The graph shown above depicts two possible supply curves for production of handmade rugs. S1 is the initial supply curve, and S2 is the new supply curve after a change has occurred in the market. Which of the following events could have caused this shift? a. Several rug makers have left the market, making handmade rugs more scarce. b. Several new rug makers have entered the market, making handmade rugs more plentiful. c. The price of thread used in rugs has dropped, making it cheaper to produce rugs. d. Rugs have come into fashion, so buyers want more of them. e. Rugs have gone out of fashion, so buyers want fewer of them.	
18	There are ten restaurants in your town. On a given night, each restaurant has the ability to produce up to twenty full course dinners at a price of ₹ 200 each. What is the total market supply of full course dinners tonight, at price of ₹200?	1
19	Which of the following statement is not valid with respect to 'Law of Supply'? (a) Indicates the magnitude of change in supply due to change in price (b) States one sided between price and quantity supplied (c) Does not establish proportional relationship between change in price and change in supply (d) States the direct relationship between price and quantity supplied	1
20	If the supply curve is a straight line parallel to the vertical axis (Y-axis), supply of the good is called as (a) Unitary Elastic Supply (b) Perfectly Elastic Supply (c) Perfectly Inelastic Supply (d) Perfectly Elastic Demand	1
21	The factor causing contraction in supply of a good is (a) decrease in number of firms. (b)increase in tax rate (c) using outdated technology (d) decrease in the price of the good	1
22	Co-efficient of perfectly inelastic supply is (a) zero (b) greater than one (c) less than one (d) infinity Categories	1

23	Statement 1. When percentage change in quantity supplied is less than percentage change in price of the good, elasticity of supply is said to be less than unitary elastic.	1
	Statement 2.Less than unitary elastic supply curve start from positive Y axis	
	Mark the correct choice: (a) Both the statements are true.	
	(b) Both statements are False.	
	(c) Statement 1 is true and statement 2 is false(d) Statement 2 is true and statement 1 is false.	
24	Statement 1.Decrease in number of firms decreases market supply of the good and market supply curve shifts towards right.	1
	Statement 2. Market supply schedule refers to supply of all the firms/producers in the market producing a particular good. Mark the correct choice:	
	(a) Both the statements are true.	
	(b) Both statements are False.	
	(c) Statement 1 is true and statement 2 is false(d) Statement 2 is true and statement 1 is false.	
25	Statement 1: Due to decrease in price of inputs, supply curve shifts towards left. Statement 2: Due to use of advance technology, supply curve shifts towards	1
	right Mark the correct choice:	
	(a) Both the statements are true.	
	(b) Both statements are False.	
	(c) Statement 1 is true and statement 2 is false(d) Statement 2 is true and statement 1 is false.	
	(d) Statement 2 is true and statement 1 is faise.	
26	Assertion (A): supply is a stock concept Reason (R): Stock of a commodity refers to the total quantity of that	1
	commodity which is available with the producer at a point of time.	
	(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct	
	explanation of Assertion (A). (b) Both Assertion (A) and Reason (R) are true and Reason but (R) is not the	
	correct explanation of Assertion (A).	
	(c) Assertion (A) is true but Reason (R) is false	
	(d) Assertion (A) is false but Reason (R) is true.	
27	Assertion (A): Increase in number of firms is one of the causes of rightward	1
	shift in supply curve. Reason (R): Increase in price of other goods is also one of the causes of	
	rightward shift in supply curve.	
	(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct	
	explanation of Assertion (A). (b) Both Assertion (A) and Besser (B) are true and Besser but (B) is not the	
	(b) Both Assertion (A) and Reason (R) are true and Reason but (R) is not the correct explanation of Assertion (A).	
	(c) Assertion (A) is true but Reason (R) is false	

	(d) Assertion (A) is false but Reason (R) is true.	
28	What is meant by perfectly inelasticity of supply?	1
	what is inealt by perfectly inelasticity of suppry:	_
29	Price (Rs.) Supply (Units) 6	1
20	(d) None of the above	
30	10. What causes a movement along the supply curve?	1
31	Explain the reaction of the producer, when a- Price of his product rises by 12.5%, but other factors are constant. b- Government increases the tax rate by 7.5 % on production of the good. c- Increase in electricity duty.	3
32	Calculate prise elasticity of supply, when the price of a commodity rises from Rs 10 per unit to Rs 15 per unit and the quantity supplied increases from 50 units to 100 units.	3
33	Draw supply curve, when i- Elasticity of supply is one ii- Elasticity of supply is greater than one Elasticity of supply is less than one	3
34	The supply curve of a given commodity is given to be So. On the basis of given diagram, answer the following questions from 11.1 to 11.3: Price S1 S0 S2 S2 Supply	3
	11.1. Movement from S0, to S1, is termed as: (a) Contraction in Supply (b) Expansion in Supply (c) Decrease in Supply (d) Increase in Supply 11.2. Movement from S0 to S2, is caused by: (a) Increase in price of given product (b) Increase in the price of inputs	

	(c) Technological Upgradation (d) Decrease in price of given product 11.3. Increase in cost of production of this commodity will lead to: (a) Movement from So to S1, (b) Movement from S0 to S2 (c) Upward movement along the S0 (d) No change at all	
35	Consider the supply curve for sedans in an imaginary market. For simplicity, assume that all sedans are identical and sell for the same price. Two factors that affect the supply of sedans are the level of technical knowledge – in this case, the speed with which manufacturing robots can fasten bolts, or robot speed – and the wage rate that auto manufacturers must pay their employees. Initially, the robots can fasten 2500 bolts per hour, autoworkers earn \$25 per hour, the price of a sedan is \$30,000 and the quantity supplied (Sedans per month) is 250.	3
	Suppose that the price of a sedan decreases from \$30,000 to \$25,000. This would cause theof sedans to decrease, which is reflected on the graph by a supply curve. Following a technological decline – for example, a decrease in the speed with which robots can attach bolts to cars – there is ashift of the supply curve because the technological decline makes cars more expensive to build.	
36	Due to of heavy rainfall and consequent landslides, transportation of apples from Himachal Pradesh to Delhi gets disrupted. Show the situation with the help of a supply curve.	3
37	State giving reasons whether the following statements are true or false? (a) Extension of supply occurs due to change in factors other than price of the given commodity. (b) In case of perfectly elastic supply, supply curve is a vertical straight line. (c) When the technique of production becomes obsolete, the supply curve shifts towards left.	3
38	(a) At the point of intersection of two supply curves the flatter curve shows higher elasticity of supply. State whether the statement is true or false. Give reason.(b) Supply may remain constant even when quantity supplied change.(c) How will the supply curve of Tea be affected when price of the coffee decreases?	3
39	'Supply curve is the rising portion of marginal cost curve over and above the minimum of Average Variable cost curve.' Defend or Refute.	3
40	1. Read the following passage and answer the questions that follow: Price elasticity of Supply refers to reaction of the sellers to a particular change in the price of the commodity. Price elasticity of supply of a commodity quantifies the responsiveness of quantity supplied to change in its price. It is a percentage change in quantity supplied in response to a percentage change in price of the commodity. Es= % change in Quantity Supplied / % change in price Categories of price elasticity of supply: i) Perfectly Inelastic supply: When quantity supplied remains unaffected due to change in price. Degree of Es=0. ii) Less than unitary supply/ Inelastic supply	4

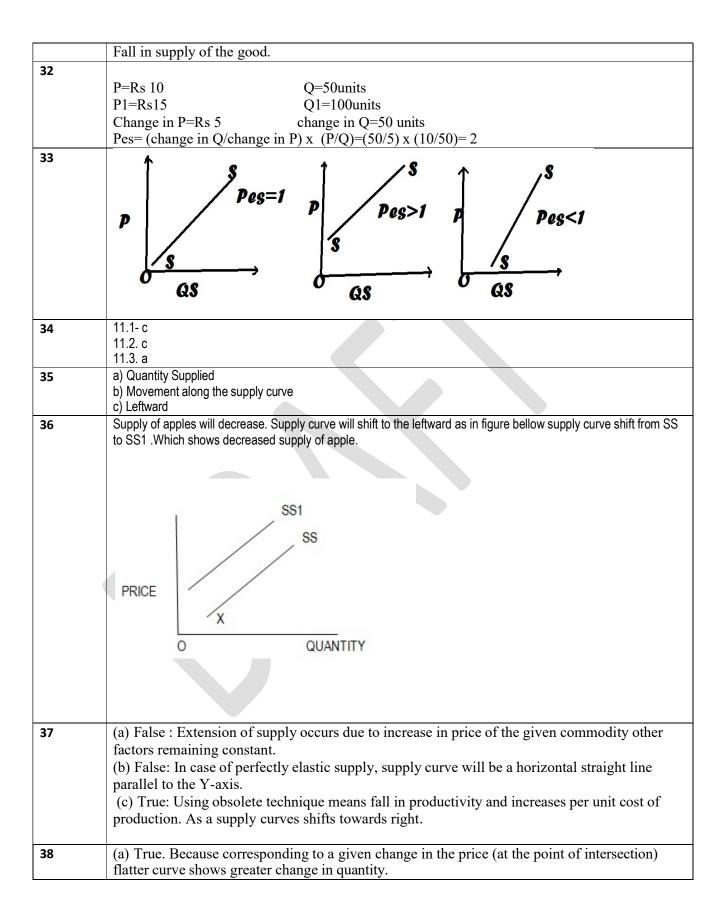
	In this case percentage change in quantity supplied is less than percentage	
	change in price. Es<1	
	iii) When the percentage in quantity supplied exactly equal to percentage	
	change	
	in price. Es=1	
	iv) Greater than unitary Elastic Supply- When percentage in supply is greater	
	than percentage change in price. Ed>1	
	v) Perfectly Elastic Supply- Any quantity of the quantity is supplied at the same	
	price. Price elasticity is infinite.	
	Answer the following questions.	
	(a) A seller rises supply of a good from 100 units to 200 units at a price of	
	Rs.10 per unit. What will be Es?	
	(i) Infinity (ii) zero (iii)One (iv)less than 1	
	(b) If quantity supplied of a good increases by 80% due to a 40% rise increase	
	in its price, then Es is:	
	(i) $(+)2$ ii) $(-)$ 2 (iii) $(+)$ 0.5 (iv) $(-)$ 0.5	
	(c) When the supply of	
	the commodity is not responsive to the change in its price, it is (unitary elastic supply/perfectly inelastic	
	supply/inelastic supply)	
	(d). State whether the given statement is true or false:	
	In perfectly elastic supply, price is responsive to the change in supply.	
41	Read the following passage and answer the questions that follow:	4
	Production activities and demand in the whole world affected in the year 2020	
	due to outbreak of	
	Corona Virus Pandemic. Since the pandemic started in November 2019 in	
	China, till present time our trading relation with China affected.	
	India had to impose lockdown for the safety of the people. It adversely affected	
	production and supply of essential goods and services. Employment was also	
	effected.	
	Slowly and gradually impact has been on the market as India's fuel demand is	
	increased during September2020.	
	(a) What was the impact of lockdown in India on supply of essential goods and	
	services?	
	(i) Remain constant (ii) Increased	
	(iii) Decreased (iv) None of the above	
	(b) What will be impact on supply of fuel, if demand increases?	
	(i) Increase (ii) Decrease	
	(iii) Remain constant (iv) Depends upon availability of fuel in the	
	international market (c) Define Supply	
42	(d) Mention any two determinants which affect supply. We know that there is a need to ignore the negative sign in calculation of price	4
42	elasticity of demand. Do you think this is also applicable in calculation of Price	4
	elasticity of demand. Do you think this is also applicable in calculation of Price elasticity of supply? Give reason.	
43	The coefficient of elasticity of supply of a commodity is one. What quantity of	4
7.5	the commodity will the seller supply at a price of Rs 20 per unit, if he supplies]
	210 units of it at Rs 7 per unit?	
	· · · · · · · · · · · · · · · · · · ·	1

44	•		Z in a market. To a market supply		. •	4
	supply curve.	ociow. i repare	a market suppry	scriedure. Draw ti	ic market	
	Price (in Rs)	Firm X	Firm Y	Firm Z		
	2	0	5	2		
	3	2	7	3		
	4	4	10	5		
	5	7	15	8		
	6	10	20	10		
45	plus sign to the	elasticity of su sign with the e	to the elasticity of pply. But he does lasticity. Can you	not know the sig	nificance of	4
46	the basis of the sa Agriculture provide agriculture is high extremes such as climate extremes presented in this p area under the for After mid-eighties in production of fo policy. There is me under food grain. more than that of than Kharif food g Among the various events. Wheat and most sensitive cro subcontinent, mar attention for food s 14.1 Natural calar (Right/ Left/Upwar 14.2 When supply (Extension/ Contra 14.3 Rice and Joy	ame. les livelihood to a ly dependent or drought and flo viz. drought and paper. There are od grain. In secu there is decline od grain sugges ore temporal flu The analysis rev flood. Rabi food rain production, as food crops and d jowar perform p to the extreme hagement of rice security and Sus mities such as d rd/downward). Increases due action/Increase/ var are	rought and floods let to increase in price	of population of Increal distribution of rall distribution of rall e severely. An according of grain production on a in food grain property of the production of grain while maintained in agricultural teleption of food grain drought on Indian epicts better adaptate access to irrigation of grain epicts better adaptate access to irrigation of grain drought events incerice is staple for st climate extremes and the supply curve only, it is termed a postitute/ Complement	lia. Indian infall. Climate unt of impact of has been oduction and o mid-eighties. In ing an increase inchnology and of than the area agriculture is ability to drought on infrastructure. If ace flood in the condingtion in the seneds special eshift to	4
47	"Import duty on cruc	de & refined edible economic theory	to analyse the impac	t of the statement on	the supply of	4
48	When the price of supply rises from elastic? Give reas	a commodity ch 500 units to 650 on	nanges from ₹ 12 p units. Calculate the	e price elasticity of	supply. Is supply	4
49	Countries. How wou	uld you analyse th	ssia has banned the ne impact of this deci nestic supplies of sea	sion (i) on the export		6

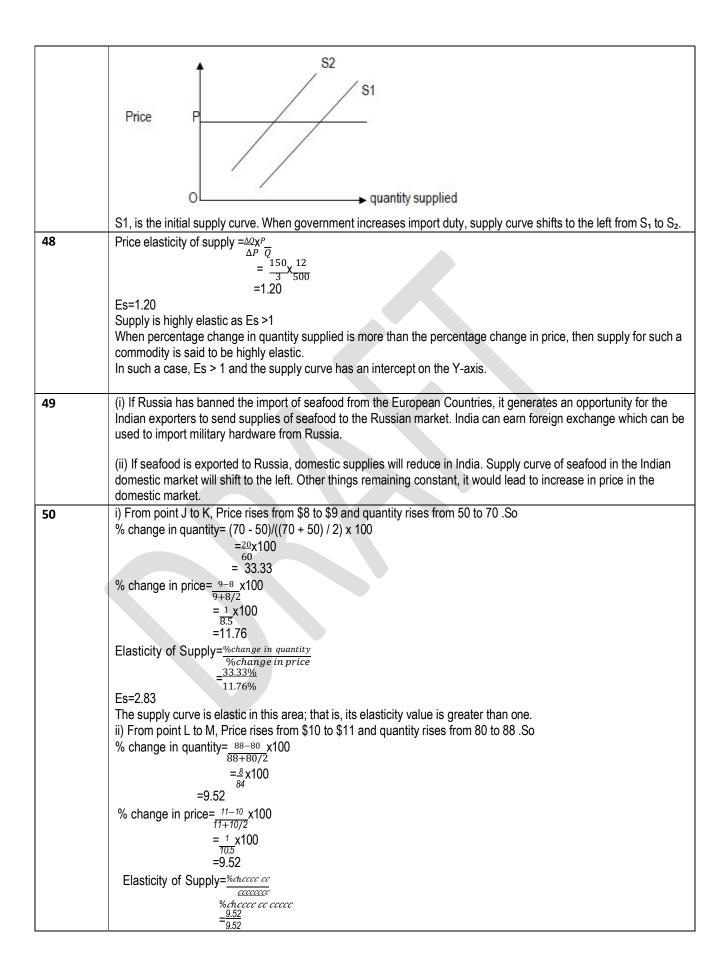
50	of supply from: i)p	From the data shown in given Table about supply of alarm clocks, calculate the price elasticity of supply from: i)point J to point K, ii) point L to point M, and iii)point N to point O. Classify the elasticity at each point as elastic, inelastic, or unit elastic.				
	Point	Price	Quantity supplied			
	J	\$8	50			
	K	\$9	70			
	L	\$10	80			
	M	\$11	88			
	N	\$12	95			
	0	\$13	100			
51	Explain the disting diagram.	ction between "change in qua	ntity supplied" and "change in supp	oly". Use	6	
52	The price of a commodity is Rs.10 per unit and total revenue from it is Rs.1000. Its price elasticity of supply is 0.8. Its price falls by 10 percent .Calculate the total revenue at the reduced price.					
53	Differentiate b	etween Contraction of s	upply and Decrease in supply	7.	6	
54	i) Identity two situations when Es is low even when there is a substantial rise in price due to rise in demand for a commodity. (ii) Owing to political consideration, Russia has banned the import of sea food from the European countries. How would you analyse the impact of this decision (a) on export of sea food from Indian market and (b) on domestic supplies of seafood in India?					
55		oduces pens. It finds tha Explain any three proba	t the supply curve of supplying ble causes.	ng pens	6	
56		THE ECONOMIC TIMES			6	
	9,0 SM Seve (\$1.2k acco gove com repu	n electric two-wheeler companies in In	dia have collectively lost over Rs 9,000 crore or their subsidies were stopped last year, f Electric Vehicles (SMEV). The Indian nd the subsidies availed by them. The s, interest, debt, loss of market share,			
	What may be t	he reason of loss of the	firms? Explain its effect using	g a diagram.		
57	Indicate true of a- Supply b- Supply Supply of entry	r false. Give reasons of y of cabbage and cauliflo of railway service is elay tickets in an internation	your answer. wer is inelastic. astic. nal cricket match between Inc		6	
	Pakistan in a s	tadium in New Delhi is	elastic.			

ANSWER

1	b- Supply will decrease
2	Fall
3	There is direct relation between price and supply.
4	Increase in supply
5	Market supply of bread will expand.
6	a- Perfectly inelastic
7	a- Fall in price.
8	a- Perfect elastic supply
9	a- Expansion of supply
10	d- 450 units
11	(d) Es > 1
12	a. movement along a supply curve.
13	d. A price change alone does not shift the supply curve
14	(c) Assertion (A) is True but Reason (R) is False.
15	(c) Statement 1 is true and Statement 2 is false.
16	(i)-(c),(ii)-(e),(iii)-(a),(iv)-(b),(v)-(d)
17	a. Several rug makers have left the market, making handmade rugs more scarce.
18	₹ 2000
19	(a) Indicates the magnitude of change in supply due to change in price
20	(c) Perfectly Inelastic Supply
21	(d) decrease in the price of the good
22	(a) zero
23	(c) Statement 1 is true and statement 2 is false.
24	(d) Statement 1 is false and statement 2 is true.
25	(d) Assertion (A) is false but Reason (R) is true.
26	(d) Statement I False but Statement II is true.
27	(c) Assertion (A) is true but reason(R) is false.
28	When quantity supplied does not respond to any change in price
29	(c) Upward sloping from left to right.
30	Change in own price of the good causes a movement along the supply curve.
31	a- Increase in quantity supplied and supply will expand.b- Fall in supply of the good.



		ers to a speciodity.	cific point	on the sup	ply curve which changes	oply curve) while quantity with change in own price	
39		f he is not a	ble to reco	ver AVC a	eller) would be prepared as it would bring losses to		
40	Ans. a (i)Infinity Ans. b (i) (+2) Ans. c Perfectly inelastic supply Ans. d False						
41	Ans. a (iii) Decreased Ans. b (iv) Depends upon availability of fuel in the international market Ans. c Supply of a commodity refers to various amounts of a commodity that the producers are willing and able to sell at different possible prices of that commodity at a point of time. ANS d (i) Own price of the commodity (ii) Price of related goods						
42	The actual value of price elasticity of demand is always in negative sign as an inverse relationship existing between Price and Demand. It will be not possible to categorize price elasticity of demand into five categories if the negative sign is not ignored. It is not required in case of price elasticity of supply because they have positive relationship.						
43	P=Rs 7 P1=Rs 20 Change in P Pes= (chang Or 1= (chan Or change in P Or Q1=Q+	= Rs13 e in Q/char age in Q/13 in Q= (13x	Q=210 Q1=? change age in P) x) x (7/210) (210)/7= 3	units e in Q=? (P/Q)			
44	Price (in Rs) 2 3 4 5 6	Firm X (QX) 0 2 4 7	Firm Y (QY) 5 7 10 15 20	Firm Z (QZ) 2 3 5	Market supply(QX+QY+QZ) 7 12 19 30 40		
45	Minus sign is attached to elasticity of demand because there is inverse relation between price and demand of a goo. But there is no minus sign with the elasticity of supply because of direct relationship between price and supply of a good.						
	relationship	between pr	ice and sa		004.		
46	14.1 Left 14.2 Extension 14.3 Substitute 14.4 Inelastic	between pr	ice dila sa				



=1

The supply curve is unitary elastic in this area.

ii) From point N to O, Price rises from \$12 to \$13 and quantity rises from 95 to 100 .So

Elasticity of Supply= $\frac{\Delta c}{\Delta c} \frac{x^c}{c}$ = $\frac{5}{7} \frac{12}{95}$

=5x.12=.64

The supply curve is inelastic in this region of the supply.

51	Basis	Change in Quantity Supplied	Change in Supply
	Meaning	When the quantity supplied changes due to	When the supply changes due to
		change in price, keeping other factors constant,	change in any factor other than the
		it is known as change in quantity supplied.	own price of the commodity, it is known
			as change in supply.
	Effect on supply curve	It leads to a movement along the same supply curve (either upward (known as Expansion in supply) or downward (known as Contraction in supply).	It leads to shift in the supply curve (either rightward (known as Increase in supply) or leftward (known as decrease in supply).
		Price P P2 0	Price P S1 S S2 Quantity Supplied
	Davis	Q1 Q Q2 Quantity Supplied	
	Reason	It occurs due to an increase or decrease in the price of the given commodity.	It occurs due to a change other factors, like change in the price of inputs, change in taxes, change in technology etc.

Q=TR/P=1000/10=100

If price falls by 10% i.e., 10% of Rs.10 is Re.1

Therefore the new price is Rs.9

Thus, Es' = Change in Quantity supplied/ Change in price x P/Q

0.8=Change in Quantity/1 x 10/100

Change in Quantity= 8

As price falls quantity supply will rise

	Therefore Q1=Q + Change in Quantity=100+8 TR=P1 X Q1 =9 x 108= Rs. 972	3=108		
53	Contraction of Supply	Decrease in Supply		
	i)Contraction of supply refers to decrease	Decrease in supply refers to decrease in		
	in quantity supplied due to decrease in own	quantity supplied even when own price of the		
	price of the commodity.	commodity is constant.		
	ii) Other determinants remaining constant.	ii) Own price of the commodity remaining		
		constant,		
	iii) It leads to downward movement along	iii) It leads to leftward/backward shift of		
	the supply curve.	supply curve.		
54	(a) When existing stocks of the supplier are low.			
	b) When owing to non-availability of factor and non-factor inputs, it is difficult to increase			
	output in a given time period.			
	(ii) (a)If Russia has banned import of the sea food from European countries, it gives an			
	opportunity for the Indian exporter to send supplies of sea food to Russia.			
	(b) If sea food is exported to Russia, domestic supplies will reduce in India.			
	The supply curve of sea food in the Indian domestic market will shift to the left.			
55	i- Decrease in input cost.			
	ii- Decrease in tax rate.			
	iii- Advancement of technology.			
	Rise in subsidy.			
56	It is because of decrease in the subsidies.			
	As subsidies by the government reduced, the supply of the vehicles reduced.			
	The supply curve of the vehicles will shift to the left.			
	 			
	o QS			
	D 82			
57	a) True. Because vegetables are perishable goods.			
	b) False. There is no close substitute of railway service. The supply is not affected by the			
	change in price.			
	c) False. It is inelastic. It is a rare occasion. So, supply is not affected by price of			
		tickets.		