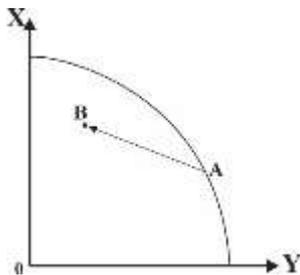




07. Which of the followings would solve the fundamental economic questions based on price that is determined by market forces?
1. Free enterprise economic system
  2. Command economic system
  3. Mixed economic system
  4. Social market economic system
  5. Market socialistic economic system
- (.....)

08. Select the economic system that government intervenes to make the economic functions efficient by solving the problem of imperfect information?
1. Planned economy
  2. Market economy
  3. Social market economy
  4. Market socialist economic system
  5. Indicative planning economy
- (.....)

09. What would be the statement which can be agreed, when the point related to a production possibility curve shifts from A to B?



1. An opportunity cost is created
  2. Economy faces for a recession
  3. Economy faces for a depression
  4. Increase in employment level
  5. Increase in efficiency
- (.....)

10. Assume. in a PPC which is concave to the origin, vertical axis is for consumer goods and horizontal axis is for capital goods. When the production point of the economy moves towards vertical axis,

Future living condition	Economic growth
1. Increase	Decrease
2. Decrease	Increase
3. Increase	Increase
4. Decrease	Slowly increase
5. Decrease	rapid increase

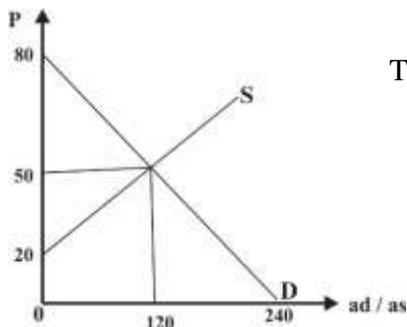
(.....)

11. What would be the reason to shift the demand curve leftward of a certain good?
1. Decrease in price of complement good.
  2. Increase in price of substitute good.
  3. Supplying a subsidy for consumers by the government
  4. Decrease in price of considerable good
  5. Increase in income if the good is an inferior.
- (.....)

12. If the given supply equation for a certain good is,  $Q_s = 200 + 20p$ , what can you say about the elasticity of this commodity?
1. Supply is elastic and elasticity increases when price reduces.
  2. Supply is inelastic and elasticity decreases when price increases
  3. Supply is inelastic and elasticity increases when price increases
  4. Supply is elastic and elasticity increases when price increases.
  5. Supply is elastic and unchanged supply elasticity for price changes.
- (.....)

13. Which of the followings would not cause to shift the supply curve?
1. Input price
  2. Technological Improvement
  3. Imposing tax by the government
  4. Price of the considerable good.
  5. Number of producers (.....)
14. What would be the consumer surplus when the commodity price is Rs. 4.00 of a certain good that the demand equation is given as,  $Q_d = 250 - 25p$ ?
1. Rs. 1600.00
  2. Rs. 35.00
  3. Rs. 1250.00
  4. Rs. 450.00
  5. Rs. 1050.00 (.....)
15. Assume, the price demand elasticity for rice is. -0.8. What would be the increases or decreases of quantity demanded when rice price is raised 50% by producers?
1. Decreased by 40%
  2. Increased by 40%
  3. Increased by 80%
  4. Decreased by 80%
  5. Increased by 25% (.....)
16. What would happen for the production revenue of a firm if the quantity supply of the good is decided to be increased and given price demand elasticity is  $-0.6$ ?
1. Increase
  2. Remains constant
  3. Decrease
  4. Increased by 60%
  5. Decreased by 60% (.....)
17. What would be the reason to change the given supply equation for a certain good from  $Q_s = -200 + 10P$  to  $Q_s = -100 + 10P$ ?
1. Imposing a tax by the government on the commodity.
  2. Subsidy reduction for the given commodity
  3. Increase in number of producers of the good
  4. Increases in input prices of the good.
  5. Unfavorable weather condition for the produce for of good. (.....)
18. What would be the producer surplus at Rs. 80.00 when the given supply equation of the good is,  $Q_s = -200 + 5P$ ?
1. 16000
  2. 4000
  3. 8000
  4. 6000
  5. 3000 (.....)
19. Select the correct statement regarding the change in equilibrium price and quantity due to increase in both demand and supply at the equilibrium coconut market?
1. Increase in both equilibrium price and quantity.
  2. Increases in equilibrium price and equilibrium quantity can be increased or decreased.
  3. No change in equilibrium price and increase in quantity
  4. Increase in equilibrium price and decrease in quantity
  5. Increase in equilibrium quantity but uncertainty of the change in equilibrium price. (.....)
20.  $Q_d = 20 - 2P$   
 $Q_s = -4 + 2P$   
 The equilibrium price and quantity related to the given market conditions are;
- |    | <b>Equilibrium price</b> | <b>Equilibrium quantity</b> |         |
|----|--------------------------|-----------------------------|---------|
| 1. | Rs. 6.00                 | 12 units                    |         |
| 2. | Rs. 5.00                 | 10 units                    |         |
| 3. | Rs. 4.00                 | 12 units                    |         |
| 4. | Rs. 6.00                 | 8 units                     |         |
| 5. | Rs. 8.00                 | 12 units                    | (.....) |

21. The equilibrium market condition for rice is given as below,



The total economic surplus is,

1. Rs. 3600      2. Rs. 7200      3. Rs. 1800  
4. Rs. 2600      5. Rs. 4200      (.....)

22. The related table for a certain good is given as below,

P	Qs
80	900
70	800
60	700
50	600

The related supply equation is,

1.  $Q_S = -100 + 10 P$       2.  $Q_S = 100 + 10 P$       3.  $Q_S = -600 + 10 P$   
4.  $Q_S = 600 + 10 P$       5.  $Q_S = 200 + 10 P$       (.....)

23. Among following, what would cause to decrease the market equilibrium price?

1. Supplying production subsidy when the demand is perfectly inelastic.  
2. Imposing production tax when the demand is perfectly elastic  
3. Price increase of complement good in a perfectly elastic supply  
4. Imposing production tax by the government when the demand is perfectly inelastic.  
5. Price increase of substitute goods in a perfectly elastic supply      (.....)

24. The supply curve of X good is given in equation form as follows,

$$Q_S = 5 P_X$$

What can you say about the price supply elasticity of this good?

1. Price supply elasticity is 2.0      2. Price supply elasticity is 0.1  
3. Price supply elasticity is 1.0      4. Price supply elasticity 0 (Zero)  
5. Price supply elasticity is 0.8      (.....)

25. The price elasticity of demand for mobile phone is -2.0 when the phone price is Rs. 2000.00, 300 phones are demanded. When the phone price is reduced up to Rs. 1500.00 the demand would be,

1. 150 units      2. 600 units      3. 500 units      4. 900 units      5. 450 units      (.....)

26. What would be the revenue of the firm due to increase in price of a product that the elasticity is -2.5

1. Increased      2. Decreased      3. Maximized      4. Minimized      5. unchanged      (.....)

27. In an equilibrium market, identify the relevant factor to decline the equilibrium quantity and increase the equilibrium price?

1. Demand reduction of the good  
2. Imposing maximum price by the government  
3. Increase in number of producers  
4. Cutting – off of production subsidy by the government  
5. Supplying production subsidy by the government      (.....)

28. What should be the type of elasticity of the commodity if a supplier decides to raise his revenue by decreasing the product price from Rs. 100.00 to Rs. 80.00?
1. The demand elasticity should be -1.0
  2. The demand elasticity should be zero
  3. The demand elasticity should be -2.5
  4. The demand elasticity should be -0.8
  5. The demand elasticity should be -0.1 (.....)

29. The estimated price demand elasticity for pineapple is - 0.5. What would be the price that 300 units are demanded if 500 pineapples can be bought at Rs. 25.00
1. Rs. 45.00
  2. Rs. 20.00
  3. Rs. 40.00
  4. Rs. 80.00
  5. Rs. 105.00 (.....)

30. Assume, the supply equation of a goods market is,  $Q_s = a + bp$  and Rs. 4.00 at unit tax is being imposed by the government of this commodity.

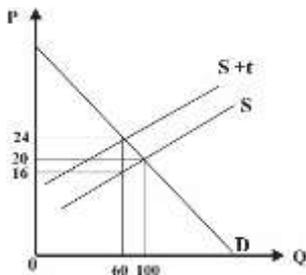
The relevant supply curve of this good would be,

1.  $Q_{s_t} = a + 2bP$
2.  $Q_{st} = a + b(P+4)$
3.  $Q_{st} = a + b(P-4)$
4.  $Q_{st} = a - b(P-4)$
5.  $Q_{st} = a - b(P+4)$  (.....)

31. Identify the situation in which the social welfare is not being affected even though the unit tax is imposed by the government on a certain commodity.

1. In unitary demand
2. When supply elasticity is infinite
3. When cross demand elasticity is zero
4. When the entire tax burden is taken by the consumer
5. When the supply curve shifts to left from the total amount of taxation (.....)

32.



Above curve illustrates the changes created in an equilibrium market due to impose in unit tax by the government.

Find the correct answer related to consumer expenditure, producer's price and price paid by the consumer after the tax.

	<b>Consumer expenditure (Rs.)</b>	<b>Price received by producer (Rs.)</b>	<b>Price paid by consumer</b>
1	1200	16	20
2	2000	20	20
3	1440	16	24
4	1200	24	16
5	1440	24	16

(.....)

33. Select the statement which cannot be agreed, when a unit tax is imposed on the consumer,

1. No any change in the supply curve of the relevant good.
2. The demand curve shifts to left under the existed price.
3. Equilibrium price and quantity of the good are reduced.
4. The supply curve of the good shifts to right and demand curve shifts to left.
5. The legal bond of paying the entire tax is with the consumer. (.....)

34. Assume a commodity which has elastic supply and inelastic demand lies at the equilibrium at Rs. 10.00 and if government decides to provide a production subsidy on that good, the advantage of subsidy is gained,
1. Only by the consumer
  2. Only by the producer
  3. Both consumer and producer equally
  4. More by consumer than producer
  5. More by producer than consumer
- (.....)

35. The market demand and supply table for X good with the given time period is as follows.

Unit price	Quantity demanded	Quantity supplied
80	500	900
70	600	800
60	700	700
50	800	600
40	900	500

If Rs. 20/- of unit subsidy is given for producer, the new equilibrium price is,

1. Rs. 40.00
  2. Rs. 50.00
  3. Rs. 60.00
  4. Rs. 65.00
  5. Rs. 80.00
- (.....)
36. What would be the reason to identify the new equilibrium output level as inefficient, after the specific subsidy given on producer?
1. As a cost has to be borne by the government
  2. As marginal benefit is greater than the marginal cost
  3. As the social marginal cost is greater than the social marginal benefit at each unit
  4. As there is an opportunity cost of the expenditure made on subsidy.
  5. As consumer is able to consume more at a lower price than earlier.
- (.....)

37. The expected quantities which suppliers are ready to supply for the market at different prices are given in a table below.

Price	20	30	40	50	60	70
Quantity supply	0	50	90	120	140	150

What would be the quantity supply at Rs. 50/-, when Rs. 20/- of unit tax is imposed on this commodity and instead of tax if Rs. 20/- of unit subsidy is given?

	The quantity supply at 50/- after the Rs. 20/- tax	The quantity supply at Rs. 50/- after the Rs. 20/- subsidy
1	0	90
2	50	150
3	40	120
4	120	140
5	140	50

(.....)

38. The demand and supply equations of a certain market given as below,

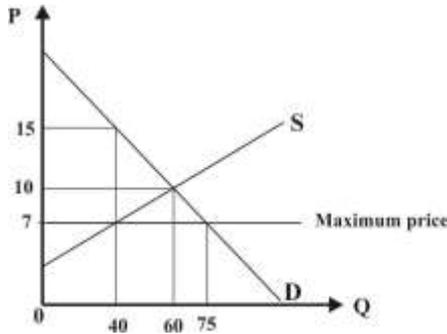
$$Q_d = 100 - 4P$$

$$Q_s = -20 + 4P$$

What would be the excess demand at Rs. 8.00

1. 0
  2. 15
  3. 56
  4. 40
  5. 60
- (.....)

39. The market conditions after imposing the maximum price is given below.



After imposing the maximum price, if maximum price is successfully proceeded, what would be the producer revenue and excess demand units?

	Market excess demand	Production revenue	
1.	20	350	
2.	75	525	
3.	15	600	
4.	40	525	
5.	35	280	(.....)

40. Which of the following step that can be taken by the government if maximum price is fixed on rice market?

- |                                  |   |
|----------------------------------|---|
| 1. Controlling the excess demand | 2. Imports and rationing                  |
| 3. Nationalizing rice mills      | 4. Introducing by – products on producers |
| 5. Increasing import tariff      | (.....)                                   |

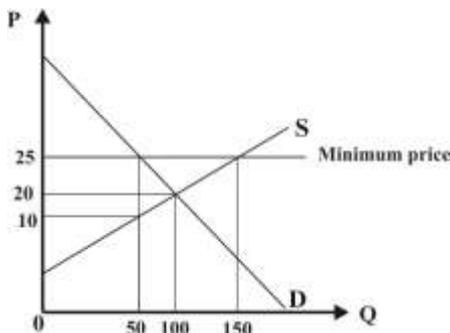
41. Due to minimum price imposed by the government

1. Excess supply is created
2. Excess demand is created
3. Doing trade at equilibrium price
4. Any quantity can be sold by the supplier according to his willingness
5. Increase in consumer surplus (.....)

42. If the minimum price is practiced in the market and if the surplus production is purchased by the government.

1. Consumer surplus reduces and production surplus increases.
2. Both consumer surplus and producer surplus reduce
3. Consumer surplus increases and production surplus reduces
4. Producer surplus increases more than of consumer surplus
5. Consumer surplus and producer surplus increase equally. (.....)

43. Following curve shows the market condition of a certain good after imposing minimum price.



Among followings which would be accurate if the production is limited at 50 units due to minimum price?

1. Consumer surplus can be increased
2. The unit price equals to the marginal cost
3. consumers maximized their utility by purchasing 50 units at Rs. 10.00/=
4. Rs. 15/- of extra profit per unit can be earned by producers selling 50 units
5. Only the consumer surplus is reduced although producer surplus remains constant (.....)

44. Select the statement which cannot be agreed on production function.
1. It shows the possible average quantity output per input.
  2. It shows the technical relationship between input and output
  3. The production can be increased by increasing variable input of the function in short run
  4. The short run production function consists with both fixed and variable inputs
  5. A positive relationship between inputs and outputs is obtained if the technology and capacity of the firm are constant. (.....)
45. By mixing fixed inputs if the variable inputs are further increased even after the maximum marginal production level,
1. Marginal cost reduces
  2. Marginal production remains constant
  3. Average cost increases
  4. Average variable cost increases
  5. Average production further increases (.....)
46. The expenditure done by a firm in a short run to purchase fixed assets is,
1. Considered as an average fixed cost
  2. Considered as cost added to the total fixed cost
  3. Considered as a sunk cost
  4. Considered as an economic cost
  5. Considered as a variable cost (.....)
47. Which of the following would not be a factor for increasing economies of scale in the long run production process?
1. Ability of using machineries
  2. Inability of changing certain production factors
  3. Possibility of having expenses which should bear only in a single time
  4. Ability of specialization through division of labour
  5. Indivisible quality of production factors. (.....)
48. A shoe factory produces 60 pairs per day. In the production process if the cost on leather is Rs. 32000. Labour charges is Rs. 1600, electricity and fuel is Rs. 500 and the deprived wage income is Rs. 3500 per day, what would be the daily accounting profit if a pair is sold at Rs. 800?
1. Rs. 10400
  2. Rs. 18900
  3. Rs. 13900
  4. Rs. 1600
  5. Rs. 48000 (.....)
49. This is not a component in indirect cost in a firm,
1. Forgone wage income
  2. Forgone interest income of producers
  3. Economic depreciations
  4. Normal profit
  5. Expenses on fuel and electricity (.....)
50. In the short run, if none is produced by the firm,
1. The total cost is zero
  2. The total fixed cost is zero
  3. The total variable cost is zero
  4. The opportunity cost is zero
  5. The average total cost is zero (.....)



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**Second Term Test - Grade 12 - 2018**

Index No : ..... **Economics II** **Three Hours**

**Important**  
♦ **Select at least two questions from each section and answer for five questions.**

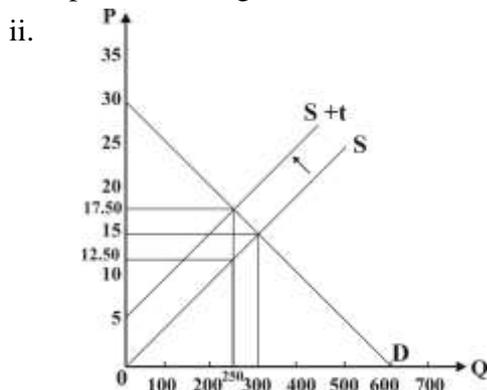
**Part A**

- 01). i. Distinguish between economic resources and non - economic resources (4 marks)
- ii. What is meant by capital? Explain using examples (4 marks)
- iii. Discuss the difference between human capital and social capital. (4 marks)
- iv. What is meant by the scarcity of resource? Give reasons for resource scarcity. (4 marks)
- v. Define the productivity of production resources and name factors affect on productivity. (4 marks)
- 02). i. What is meant by an economic system? (2 marks)
- ii. Who are the decision makers in an economic system? (2 marks)
- iii. What are the draw backs of a market economy? (2 marks)
- iv. What are the new trends of economic systems? (2 marks)
- v. Define the law of increasing opportunity cost and discuss reasons for increasing opportunity cost? (4 marks)
- vi. Illustrate following economic concepts using relevant production possibilities curves. (8 marks)
  - a. Economic efficiency
  - b. Economic recession
  - c. Economic growth
  - d. Production possibility due to a huge drought
- 03). i. Define the law of demand. (2 marks)
- ii. Explain reasons for increasing quantity supply due to increase in price of the considerable good. (4 marks)
- iii. Using a numerical illustration, explain the nature of price and consumer expenditure in an inelastic condition (6 marks)
- iv. Using graphical illustration distinguish Giffen goods and inferior goods. (4 marks)
- v. What are the determinants of price supply elasticity? (4 marks)

- 04).  $Q_d = 250 - 5P$   
 $Q_s = 50 + 5P$
- i. Derive the equilibrium price and quantity for the given market, using demand and supply curves (4 marks)
  - ii. Derive the excess demand equation (4 marks)
  - iii. Calculate the total economic surplus of this economy (4 marks)
  - iv. (a) What would be the excess demand at 8.00? (2 marks)  
 (b) What would be the excess demand price at Rs. 8.00? (2 marks)
  - v. Calculate the maximum demand price of this good. (2 marks)
  - vi. What would be the nature of the supply elasticity of the given commodity? (2 marks)
- 05). i. What is meant by the production surplus? Explain using a relevant diagram. (4 marks)
- ii. What are the conditions in a market equilibrium? (4 marks)
  - iii.  $Q_d = 50 - 2P$   
 $Q_s = -10 + 2P$ 
    - a) Calculate the price demand elasticity at the equilibrium (2 marks)
    - b) Calculate the minimum supply price of the given good. (2 marks)
  - iv. Graphically illustrate the changes in equilibrium rice market due to following incidents,
    - a) Increase in bread price
    - b) Increase in rice consumption
    - c) Providing a production subsidy by the government for rice.
    - d) Increase in production cost of rice and reduction of desire towards rice consumption (8 marks)

### Part B

- 06). i. Name the alternative ways that the free market is intervened by the government and mention possible changes created in the market due to the government intervention. (4 marks)



Answer for following questions based on the given diagram which illustrates the free market intervention of the government through the unit tax

- a) Consumer surplus before the taxation (2 marks)
  - b) Producer surplus after the taxation (2 marks)
  - c) Government revenue due to taxation (2 marks)
  - d) Total tax burden of both consumer and producer (2 marks)
  - e) Dead Weight loss of the society. (2 marks)
- iii. Graphically illustrate two market situations that the entire tax burden is born by consumer due to the unit tax imposed on producer. (6 marks)

- 07). Mention the specific demand elasticity type for given situations, due to the imposition of unit tax.
- More tax burden is on consumer
  - More tax burden is on producer (2 marks)
- ii. Using a diagram, explain the type of elasticity which the supply curve remains constant even after imposing a unit tax on a certain good. (4 marks)
- iii. The given demand and supply equations for a certain market are as follows.
- $$Q_d = 120 - 4P$$
- $$Q_s = 60 + 4P$$
- Calculate the change in equilibrium price and quantity, if Rs. 2.00 of unit tax is imposed on producer by the government. (6 marks)
- Write 04 effects of imposing a unit tax on producer (4 marks)
  - Write 04 effects of imposing a unit tax on consumer (4 marks)
- 08). i. The demand and supply equations of a certain good are given as below,
- $$Q_d = 100 - 4P$$
- $$Q_s = -30 + 6P$$
- Government decides to provide Rs. 5.00 of unit subsidy on this commodity
- Calculate the equilibrium price and quantity after the subsidy (4 marks)
  - What would be the cost that has to be made by the government due to subsidy (2 marks)
  - What would be the buyer price and sellers price after the subsidy (4 marks)
- ii. Estimated demand and supply equations for coconut are given as below.
- $$Q_d = 500 - 10P$$
- $$Q_s = -100 + 20P$$
- Draw the demand and supply curves in a diagram (4 marks)
  - Mark the equilibrium price and quantity in the diagram. (2 marks)
  - What would be the quantity supply of coconut if Rs. 25.00 of guaranteed price is planned to be offered by the government on coconut production? (2 marks)
  - What would be the market price if entire coconut amount is supplied to the market? (2 marks)
- 09). i. Mention effects of imposing maximum price towards the competitive rice market. (4 marks)
- ii. The quantity demand of a certain good is 600 for zero price. When price is changed up to Rs. 15/- the related quantity demanded is 300.00
- The supply elasticity is unitary and the market is in equilibrium at Rs. 15.00
- If a maximum price is determined at Rs. 10.00, what would be the excess quantity demand and maximum black market price for this good?
- Include all given information in a relevant diagram. (5 marks)
- According to the direct government controlling techniques, explain the minimum price using examples. (3 marks)
  - What measures can be taken by the government to make minimum price meaningful? (3 marks)
  - What are the economic effects of minimum price (2 marks)
  - What is meant by the deficiency payment system? (3 marks)
- 10). i. Explain the law of diminishing marginal returns and mention assumptions behind it (4 marks)
- Explain the behavior of short run production curves which are of total production, Average production and marginal production using curves. (5 marks)
  - Explain the law of returns to scale (3 marks)
  - Distinguish fixed cost and variable cost using examples (4 marks)
  - How to differ economic cost from accounting cost? Explain (4 marks)

**Second Term Test**  
**Economics – 12 - 2018 - Answer Sheet**

**Paper- I**

1) 3	11) 5	21) 1	31) 4	41) 1
2) 1	12) 1	22) 2	32) 3	42) 1
3) 2	13) 4	23) 1	33) 4	43) 4
4) 4	14) 4	24) 3	34) 4	44) 1
5) 2	15) 1	25) 5	35) 2	45) 5
6) 3	16) 3	26) 2	36) 3	46) 3
7) 1	17) 3	27) 4	37) 2	47) 2
8) 5	18) 2	28) 3	38) 3	48) 3
9) 2	19) 5	29) 1	39) 5	49) 5
10) 4	20) 4	30) 3	40) 2	50) 3

**Paper- II**

- 01). i. **Distinguish between economic resources and non - economic resources** (4 marks)
- ii. **What is meant by capital? Explain using examples** (4 marks)
- iii. **Discuss the difference between human capital and social capital.** (4 marks)
- iv. **What is meant by the scarcity of resource? Give reasons for resource scarcity.** (4 marks)
- v. **Define the productivity of production resources and name factors affect on productivity.**
- iii. - Human capital is the skills and knowledge edenobodied in the labour force. It is the stock of knowledge, habits, social and personality attributes which is being productive throught education, training experiments, experience. (2 marks)
- The network of relationships among people who live and work in a particalor society, enabling that society to function effectively. (2 marks)
- ex: Dead donation sociely.
- iv. - The deficiency or insufficiency of reourcens compared with unlimited wants called as scarcity of resourees.
- This is a common problem for each society but this does not mean that no resurces are available in the society.
- So no economy can be presented without resource scarcity. (2 marks)
- Reasous - Unlimited human wants.
- Limited availability of resources.
- Alterative uses of resources.
- v. -The number of output per an input unit is the produchivity.
- It can calalated as follows.
- productiviy  $\frac{\text{Output unit}}{\text{Input Unit}}$
- 02). 02). i. **What is meant by an economic system?** (2 marks)
- ii. **Who are the decision makers in an economic system?** (2 marks)
- iii. **What are the draw backs of a market economy?** (2 marks)
- iv. **What are the new trends of economic systems?** (2 marks)
- v. **Define the law of increasing oppportunity cost and discuss reasons for increasing oppportunity cost?** (4 marks)
- vi. **Illustrate following economic concepts using relevant production possibilities curves.**
- a. **Economic efficiency**
- b. **Economic recession**
- c. **Economic growth**
- d. **Production possibility due to a huge drought** (8 marks)

i. - The mechanism or institutional structure which is made by human beings of the society to solve the basic economic questions.

ii. Household - Government - Business sector (firm) - Labour organizations

iii. Inefficient resource distribution

Insufficient resource allocation of supplying public goods and welfare goods.

Neglect of externalities

Inequity

macro economic imbalance.

(1 for each and total is 2)

iv. - Social market economy

- Market socialist economy

- Indicative planned economy

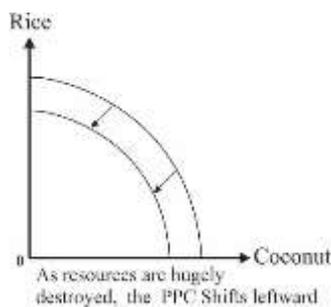
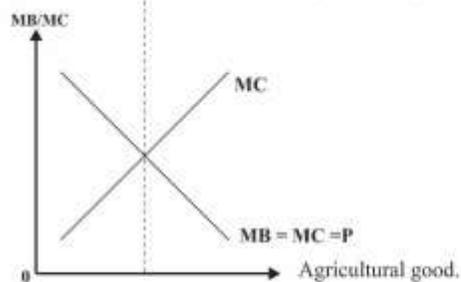
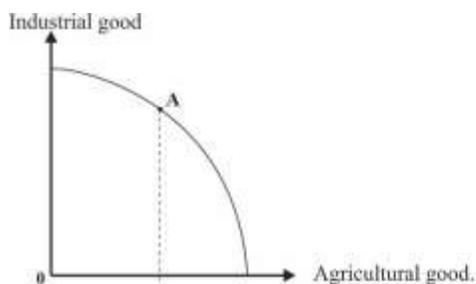
(1 for each and total 2 marks)

When one production is increased by one unit the situation that the number of items which are being sacrificed from the other is increasing it is known as the increasing opportunity cost.

Reasons - Non-homogeneity of production factors.

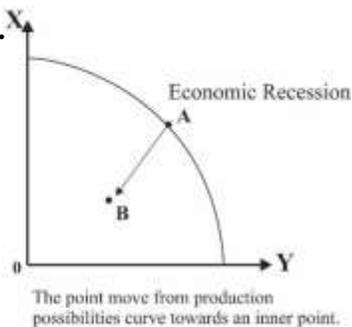
Resources which are used in one production are not fully substitute for the other product (2 marks)

v. a

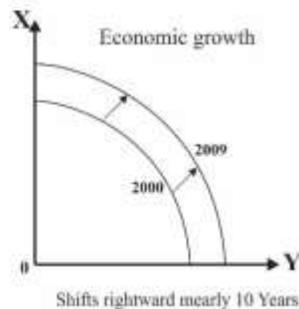


d.

b.



c.



03). i. Define the law of demand. (2 marks)

ii. Explain reasons for increasing quantity supply due to increase in price of the considerable good. (4 marks)

iii. Using a numerical illustration, explain the nature of price and consumer expenditure in an inelastic condition (6 marks)

iv. Using graphical illustration distinguish Giffen goods and inferior goods. (4 marks)

v. What are the determinants of price supply elasticity? (4 marks)

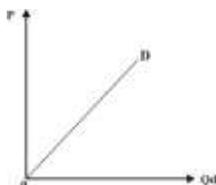
- i. The inverse relationship between price and quantity supply of the considerable good when other factors remain constant is the law of supply. (2 marks)
- ii. The reason is increasing marginal opportunity cost. (illustration) (2 marks)
- iii.

Price	Qd	Consumer expenditure
10	10	100
12	9	108

When there is an inelastic elasticity, due to increase in price, consumer expenditure increases. and due to reduction of price, consumer expenditure reduces. (illustration using inelastic table - 3 marks)

- iv. Giffen goods are the goods which have positive price elastic demand due to increase in quantity demand with an increase in price of the considerable good when other factors remain constant and vice versa.

This can be illustrated follows.

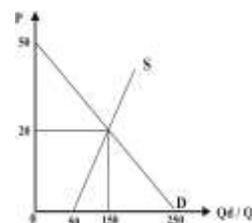


Inferior goods are the goods that quantity demand increases due to decrease in consumer income when other factors remain constant and vice versa.

The income demand elasticity of these goods are negative. (1 marks)

The demand curve for inferior good is as follows.

Slopes downward from left to right



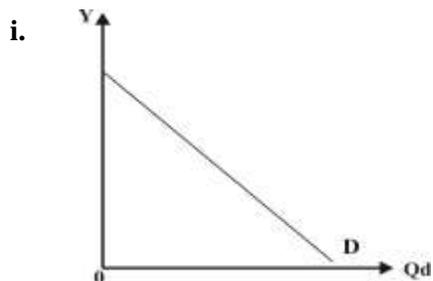
- v. Ability of factor unibility
- Ability of maintain stocks
- Time after the price change
- Ability of supply input

(input availability)

(4 marks)

04).  $Q_d = 250 - 5P$   
 $Q_s = 50 + 5P$

- i. Derive the equilibrium price and quantity for the given market, using demand and supply curves (4 marks)
- ii. Derive the excess demand equation (4 marks)
- iii. Calculate the total economic surplus of this economy (4 marks)
- iv. (a) What would be the excess demand at 8.00? (2 marks)
- (b) What would be the excess demand price at Rs. 8.00? (2 marks)
- v. Calculate the maximum demand price of this good. (2 marks)
- vi. What would be the nature of the supply elasticity of the given commodity? (2 marks)



(Accurate diagram - 4 marks)

- ii.  $Q_d - Q_s$   
 $250 - 5P - (50 + 5P)$   
 $200 - 10P$

(4 marks)

iii. Economic surplus = Consumer surplus + Producer surplus

$$= \frac{30 \times 150}{2} + \frac{50 + 150 + 20}{2}$$

$$= 2250 + 2000 = \underline{4250} \quad (4 \text{ marks})$$

iv. Excess quantity demanded at Rs. 8.00

$$Q_d - Q_s \quad E_d = 200 - 10P$$

$$250 - 5P - (50 + 5P)$$

$$250 - 5 \times 8 - 50 + 5 \times 8$$

$$210 - 90 = \underline{120} \quad (2 \text{ marks})$$

v. Maximum demand price

$$Q_d = 250 - 5P$$

$$0 = 250 - 5P$$

$$\frac{5P}{5} = \frac{250}{5}$$

$$P = \frac{250}{5}$$

$$\underline{P = 50} \quad (2 \text{ marks})$$

- vi.
- The elasticity of the given supply curve is inelastic.
  - As the quantity supply at zero price is 50 and as the supply curve gets a deep slope, it can be proved that the elasticity of the supply curve as inelastice.
  - When point is moving along the supply curve duce to increases in output, the elasticity valeces also are increasing. (2 marks)

05). i. **What is meant by the production surplus? Explain using a relevant diagram.** (4 marks)

ii. **What are the conditions in a market equilibrium?** (4 marks)

iii.  $Q_d = 50 - 2P$

$Q_s = - 10 + 2P$

a) Calculate the price demand elasticity at the equilibrium (2 marks)

b) Calculate the minimum supply price of the given good. (2 marks)

iv. **Graphically illustrate the changes in equilibrium rice market due to following incidents,**

a) Increase in bread price

b) Increase in rice consumption

c) Providing a production subsidy by the government for rice.

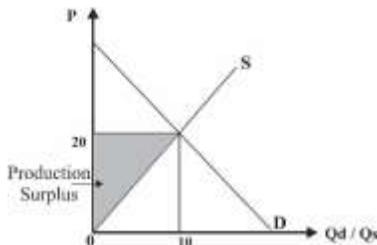
d) Increase in production cost of rice and reduction of desire towards rice consumption (8 marks)

i. -Production surplus is and economic measure of the difference between the price a producer of a good receives and the minimum price (marginal cost) the producer is willing to accept for the good rat the equilibrium.

- The difference or suplus amount, is the benegit the proudcer receires for selling the good in the market.

- Production

surplus can obtain by deduction total variable cost from the total revenue of the producer.



Poducer surplues =  $\frac{Aq \times \Delta P}{2}$

$$= \frac{10 \times 20}{2}$$

$$= \underline{100}$$

(2 marks)

(2 marks)

- ii. Expected demand price and expected supply price should be equal.  
 Expected quantity demand equals to the expected supply quantity.  
 Excess demand equals to the excess supply equal zero.  
 Excess demand price equals to the excess supply price.  
 Consumer expenditure equals to the producer revenue. (4 marks for four factors)

iii. a  $Q_d = 50 - 2P$   
 $Q_s = -10 + 2P$

$P = 15$

$Q_d = 20$

$E_{dp} = b \times \frac{P}{Q}$

$= -2 \times \frac{15}{20}$

$= \underline{-1.5}$  (2 marks)

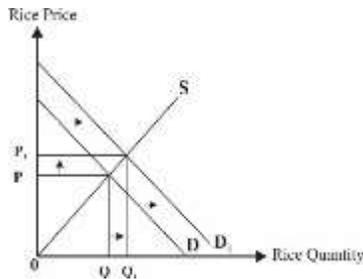
b. Minimum supply price

$Q_s = -10 + 2P$

$\frac{-2P}{-2} = \frac{-10 + 2P}{-2}$

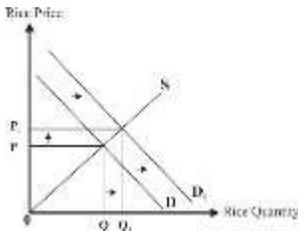
$P = 5$  (2 marks)

iv. a



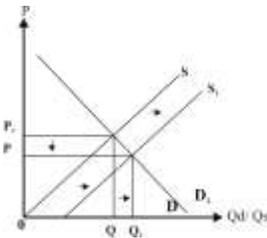
In the nice rice market, due to increase in bread price rice demand increases and shifts to right as bread and rice are substitute good. The equilibrium price and quantity of rice increase and above. (1 marks)

b



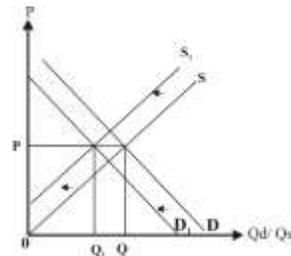
In the rice market, due to increase in rice consumers rice demand increases and demand curve shifts to right. Both equilibrium price and quantity increase.

c



Due to production subsidy given by the producer, supplier is encouraged and increases the supply. Supply curve shifts to right.

d



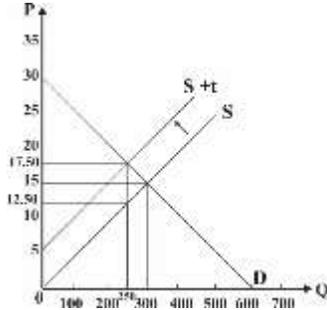
What the production cost increases in an equilibrium rice market, the supply reduces and then the supply curve shifts to left.

- Due to reduction of the desire of rice consumption, the demand curve shifts leftward.
  - If this demand and supply changed with an equal amount (%) the equilibrium price remains constant but quantity reduces.
  - If the demand and supply changed with different amount (%) although the quantity reduces, price change is not certain
- (1 marks)

**Section B**

- 06). i. Name the alternative ways that the free market is intervened by the government and mention possible changes created in the market due to the government intervention. (4 marks)

ii.



Answer for following questions based on the given diagram which illustrates the free market intervention of the government through the unit tax

- a) Consumer surplus before the taxation (2 marks)
  - b) Producer surplus after the taxation (2 marks)
  - c) Government revenue due to taxation (2 marks)
  - d) Total tax burden of both consumer and producer (2 marks)
  - e) Dead Weight loss of the society. (2 marks)
- iii. Graphically illustrate two market situations that the entire tax burden is born by consumer due to the unit tax imposed on producer. (6 marks)

- i. Imposing tax - Providing subsidies - Price controls - Price stability (2 marks)  
 Change occurred in the market.  
 - Change in equilibrium price and quantity.  
 - Change in consumer surplus.  
 - Change in producer surplus. (2 marks)

ii. a) Consumer surplus before taxation-

$$\frac{(\text{Maximum demand price} - \text{equilibrium price}) \times \text{equilibrium quantity}}{2}$$

$$\frac{(30 - 15) \times 300}{2} = 2250$$

a. Producer surplus after taxation  $\frac{12.50 \times 250}{2} = 1562.50$

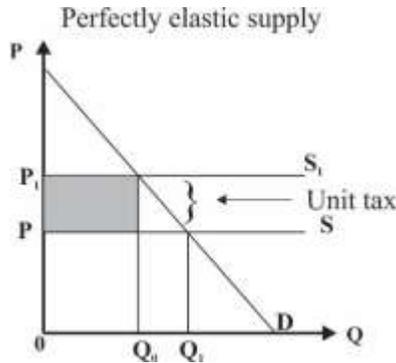
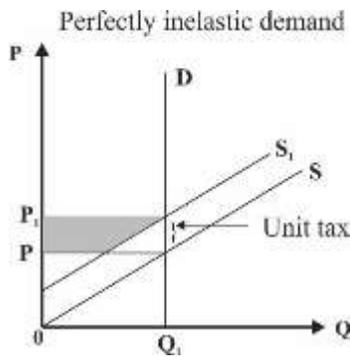
b. Government revenue  $5 \times 250 = 1250$

c. Consumer tax burden  $17.50 - 15 = 2.50$

producer tax burden

Dead weight loss =  $\frac{\text{unit tax} \times \text{change in equilibrium}}{2} = \frac{5 \times 50}{2} = \frac{250}{2} = 125$

- iii. Situations where entire tax burden (2x5 = 10 marks)



(3 marks x 2 = 6 marks)

07). Mention the specific demand elasticity type for given situations, due to the imposition of unit tax.

a) More tax burden is on consumer

b) More tax burden is on producer

(2 marks)

ii. Using a diagram, explain the type of elasticity which the supply curve remains constant even after imposing a unit tax on a certain good. (4 marks)

iii. The given demand and supply equations for a certain market are as follows.

$$Q_d = 120 - 4P$$

$$Q_s = 60 + 4P$$

Calculate the change in equilibrium price and quantity, if Rs. 2.00 of unit tax is imposed on producer by the government. (6 marks)

iv. Write 04 effects of imposing a unit tax on producer (4 marks)

v. Write 04 effects of imposing a unit tax on consumer (4 marks)

i. More tax burden is taken by consumer,

- When the demand elasticity is less than one.

(inelastic demand)

(1 marks)

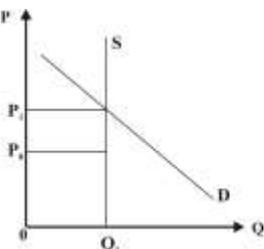
More tax burden is taken by producer,

- when the demand elasticity is greater than one.

(Elastic demand)

(2 marks)

ii. No Change in supply curve due to taxation, if the supply is perfectly inelastic. (2 marks)



- When the supply is perfectly inelastic, no change in equilibrium before and after the taxation. (2 marks)

- The entire tax burden has to be taken by the producer (2 marks)

iii. Equilibrium price and quantity before the unit tax

$$Q_d = Q_s$$

$$120 - 60 = 4P + 4P$$

$$60 = 8P$$

$$\underline{P = 7.50}$$

$$Q_d = 120 - 4P$$

$$= 120 - 4 \times 7.50$$

$$\underline{Q_d = 90}$$

(2 marks)

**Equilibrium price and quantity after Rs. 2.00 of taxation**

$$Q_s = 60 + 4P$$

$$Q_{st} = 60 + 4(P - 2)$$

$$= 60 + 4P - 8$$

$$Q_{st} = 52 + 4P \text{ Supply curve after taxation}$$

(1 marks)

$$\begin{aligned}
 & - Q_d = Q_s \\
 & 120 - 4P = 52 + 4P \\
 & 120 - 52 = 4P + 4P \\
 & \quad 68 = 8P \\
 & P = \frac{68}{8} = 8.50
 \end{aligned}
 \qquad
 \begin{aligned}
 Q_d &= 120 - 4 \times 8.50 \\
 & 120 - 34 \\
 & \underline{\underline{Q_d = 86}}
 \end{aligned}
 \qquad (2 \text{ marks})$$

Equilibrium price before taxation = Rs. 7.50  
 Equilibrium price after taxation = Rs. 8.50  
 Equilibrium price is changed by = Rs. 1.00  
 Equilibrium quantity before taxation = 90 units  
 Equilibrium quantity after taxation = 86 units  
 Equilibrium quantity is changed by 4 units. (2 marks)

- iv. - Supply cost increases.  
 - Supply curve shifts to left  
 - Equilibrium price increases and equilibrium quantity reduces  
 - Consumer surplus and producer surplus reduces (4 marks for 4 factors)
- v. - No change in supply curve  
 - Demand curve shifts to left  
 - Equilibrium price reduces.  
 - Equilibrium quantity increases (4 marks for 4 factors)

08). i. The demand and supply equations of a certain good are given as below,

$$Q_d = 100 - 4P$$

$$Q_s = -30 + 6P$$

Government decides to provide Rs. 5.00 of unit subsidy on this commodity

- a) Calculate the equilibrium price and quantity after the subsidy (4 marks)  
 b) What would be the cost that has to be made by the government due to subsidy (2 marks)  
 c) What would be the buyer price and seller price after the subsidy (4 marks)

ii. Estimated demand and supply equations for coconut are given as below.

$$Q_d = 500 - 10P$$

$$Q_s = -100 + 20P$$

- a) Draw the demand and supply curves in a diagram (4 marks)  
 b) Mark the equilibrium price and quantity in the diagram. (2 marks)  
 c) What would be the quantity supply of coconut if Rs. 25.00 of guaranteed price is planned to be offered by the government on coconut production? (2 marks)  
 d) What would be the market price if entire coconut amount is supplied to the market? (2 marks)

i. a. Equilibrium price and quantity due to subsidies.

$$Q_d = 100 - 4P$$

$$Q_s = -30 + 6P$$

$$\begin{aligned}
 Q_s &= -30 + 6(P+5) \\
 &= -30 + 6P + 30
 \end{aligned}
 \qquad (1 \text{ mark})$$

$$Q_s = 6P$$

$$Q_d = Q_s$$

$$100 - 4P = 6P$$

$$100 + 6P = 4P$$

$$100 = 10P \quad \Rightarrow \quad P = 10 \quad (2 \text{ marks})$$

$$Q_d = 100 - 4 \times 10$$

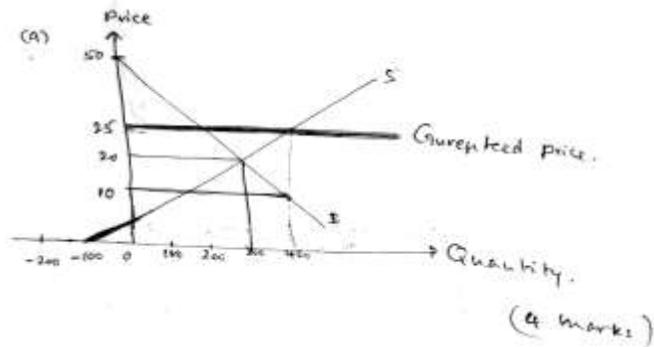
$$100 - 40 = Q_d = \underline{60} \text{ (1 marks)}$$

b. Cost of the government =  $5 \times 60 = \text{Rs. } 300$  (2 marks)

c. buyer's price after subsidy = Rs. 10.00 (2 marks)

price received by supplier due to subsidy Rs. 10 + 5  
Rs. 15.00 (1 marks)

ii. a.



b. Equilibrium price Rs. 20.00 (1 marks)

Equilibrium quantity 300 units (1 marks)

c. 400 Coconuts (2 marks)

d. Rs. 10.00 (2 marks)

- 09). i. **Mention effects of imposing maximum price towards the competitive rice market. (4 marks)**
- ii. **The quantity demand of a certain good is 600 for zero price. When price is changed up to Rs. 15/- the related quantity demanded is 300.00**  
**The supply elasticity is unitary and the market is in equilibrium at Rs. 15.00**  
**If a maximum price is determined at Rs. 10.00, what would be the excess quantity demand and maximum black market price for this good?**  
**Include all given information in a relevant diagram. (5 marks)**
- iii. **According to the direct government controlling techniques, explain the minimum price using examples. (3 marks)**
- iv. **What measures can be taken by the government to make minimum price meaningful? (3 marks)**
- v. **What are the economic effects of minimum price (2 marks)**
- vi. **What is meant by the deficiency payment system? (3 marks)**

- i. - Excess demand of rice created.  
 - Rice deficit is created in the market  
 - Black market for rice is created.  
 - Selling rice at a higher price than equilibrium price  
 - Adverse effects towards consumer surplus and producer surplus. Then deadweight loss is created.  
 - Investments related to rice production are limited. (4 marks for 4 reasons)

ii.

(Accurate diagram = 3 marks)

- Excess quantity demanded =  $400 - 200 = 200$  (1 marks)
- Maximum black marked price = Rs. 10.00 (1 marks)

iii. Minimum price is the legal price which is imposed by the government that is fixed above the equilibrium to facilitate the producer in a situation where the government thinks the market determined equilibrium price is not reasonable for the producer.

- The minimum price which is fixed above the equilibrium is known as effective minimum price.

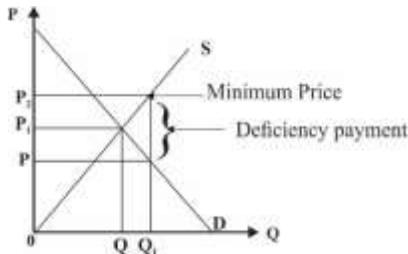
Ex: Imposing a minimum price for rice  
 Imposing a minimum wage rate  
 (Illustration = 2 marks)  
 (Example = 1 marks)

iv. Storing the surplus producing by - products.  
 Motivating the demand.  
 Export the surplus.

(3 marks for 3 reasons)

- v. - Stock accumulation
  - Selling goods at lower price
  - Excess investment situation
  - unemployment
  - Effects to words consumer surplus and producer surplus as well as dead weight loss
- (2 marks for 2 reasons)

vi. The extra payment done by the government on producer to fill the gap that is created between producer when maximum supply amount is released at minimum price and the consumer - when maximum or total quantity supplied by producer is purchased by consumer willing price. (3 marks)



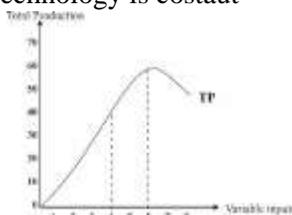
10. i. Explain the law of diminishing marginal returns and mention assumptions behind it (4 marks)
- ii. Explain the behavior of short run production curves which are of total production, Average production and marginal production using curves. (5 marks)
- iii. Explain the law of returns to scale (3 marks)
- iv. Distinguish fixed cost and variable cost using examples (4 marks)
- v. How to differ economic cost from accounting cost? Explain (4 marks)

- i. - The short run behaviour of the production is illustrated by the law of diminishing marginal returns.
- By mixing fixed input when variable inputs are increased, after a certain point, the average production and marginal production start to decline due to increase in total production in decreasing rate. It is the law of diminishing marginal returns. (2 marks)

**Assumptions.**

- Homogeneous quality of all - the variable inputs.
- Technology is constant (2 marks)

ii.



- units a certain point the total production increases in increasing rate but due to the further increase of variable inputs total production starts increase in decreasing rate.
- Due to further increase in variable inputs total production reaches its maximum and then declines.
- while the total production increases in increasing rate, both average and marginal productions increase and when the average production is maximized, the marginal production declines by touching the maximum average production.
- After the average production is being maximized, both average and marginal productions decline.
- when the total production is maximized, the marginal production would be zero.
- when marginal production starts to decline, the average production further increases due to increase in variable inputs. But after being maximized, both AP and MP declines.

(Accurate curve = 3 marks)

(Accurate illustration = 2 marks for two reasons.)

- iii.** The law of return to scale means, the behaviour of output in the long run due to change in all the inputs and the inputs become variable inputs.

In the long run, the firm is capable to change the entire scale of the firm.

The law of return to scale is there types,

- Increasing return to scale
- Decreasing return to scale.
- Constant return to scale.

(3 marks)

- iv.** The cost made on fixed factor inputs of the production is the fixed cost.

In the short run, the fixed cost remains unchanged and unavoidable.

variable cost means the cost made on variable factor inputs.

The variable cost is changed with the change of variable inputs.

Examples

Fixed cost - Amortization payment property tax

Licence payments interest a capital normal profit.

(1 marks)

Variable cost - Raw material

- Wages and salaries

- Fuel cost

- Electricity water bill

(1 marks)

- v.** - Only direct costs included to accounting cost It is the financial cost.

(1 marks)

Accounting cost = Direct cost / Explicit cost

- Economic cost is the total of both direct and indirect costs.

(1 marks)

- In economics, the production cost is the opportunity cost (real cost)

Economic cost = Direct cost (Explicit cost) + (Implicit cost)

(1 marks)

In economic profit calculation, both direct and indirect costs are considered

- Accounting profit is calculated by deducting only the direct cost from total revenue.