INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

11th March 2022

Subject CB2 – Business Economics

Time allowed: 3 Hours 30 Minutes (9.30 - 13.00 Hours)

Total Marks: 100

Q. 1) Rekha owns an online store. She had sold a part of her stake in the business to another investor and received proceeds of INR 100 Crores. She wanted to invest the proceeds of stake sale in her business and she expects to earn a return of 20% p.a. on this investment. However due to pandemic, she could not invest this money in her business for next 6 months and had to park the entire money in her bank account which gave her an interest rate of 6% p.a. What is the opportunity cost of her new investment due to the delay?

A. 20 Crores

B. 6 Crores

C. 14 Crores

D. 7 Crores **[1.5]**

Q. 2) Which one of the following is a FALSE statement about economic school of thoughts?

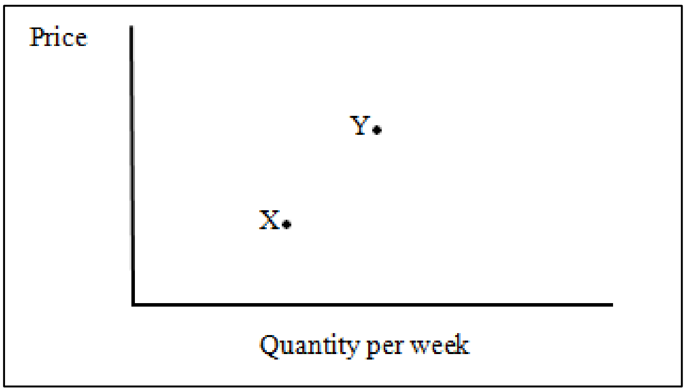
A. Marxian: Concept of surplus value.

B. Keynesian: Government to increase expenses to boost demand.

C. Austrian: Primarily emphasized on money supply controls to steer economic growth.

D. New Classical: Customers use all available information to form rational expectations. **[1.5]**

Q. 3) In the diagram below, points X and Y represent the equilibrium price and quantity traded of a good in two successive periods.



Which of the following is NOT a possible explanation?

A. An input in the production process became cheaper.

B. The price of a close substitute for the good decreased.

C. An input in the production process became cheaper and the price of a close substitute for the good increased.

D. An input in the production process became cheaper and the price of a complement good decreased. **[1.5]**

Q. 4) Which of the following is TRUE about a straight line demand curve?

A. Demand is perfectly elastic where the price is zero.

B. Elasticity decreases as the price falls and the quantity demanded rises.

C. Elasticity increases as the price falls and the quantity demanded rises.

D. When quantity demanded is zero, price elasticity of demand is perfectly inelastic. **[1.5]**

Q. 5) Consumer A uses its entire income to purchase Good X and Good Y. If consumer A's income is held constant and prices of Good X fall and price of Good Y rises, then Consumer A's budget line, with the quantity of Good X represented horizontal axis and quantity of Good Y on vertical axis would:

A. Shift the entire budget line to the left.

B. Shift the entire budget line to the right.

C. Make the budget line steeper.

D. Make the budget line less steeper. **[1.5]**

Q. 6) If the demand for Good X is price-inelastic and the supply of Good X is price –elastic, then the burden of a Goods and Services Tax (GST) on Good X will be borne:

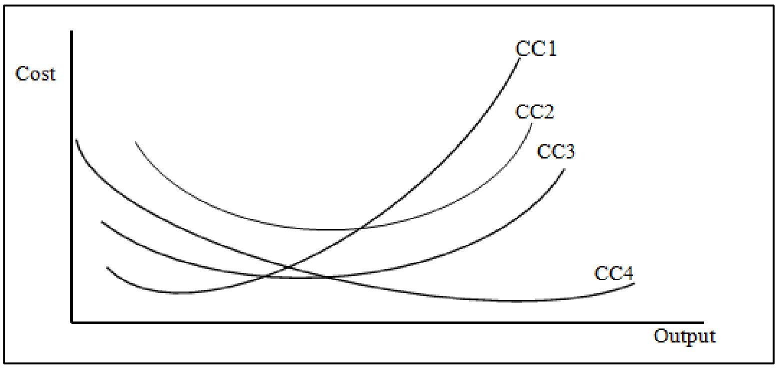
A. Equally by buyers and sellers.

B. More heavily by buyers.

C. More heavily by sellers.

D. By neither buyers nor sellers. **[1.5]**

Q. 7) Which of the following is TRUE for the short-run cost curves?



A. CC1 = Average Variable Cost; CC2= Average Cost; CC3 = Average Fixed Cost; CC4= Marginal Cost

B. CC1 = Marginal Cost; CC2= Average Cost; CC3 = Average Fixed Cost; CC4= Average Variable Cost

C. CC1 = Marginal Cost; CC2= Average Cost; CC3 = Average Variable Cost; CC4= Average Fixed Cost

D. CC1 = Average Cost; CC2= Marginal Cost; CC3 = Average Variable Cost; CC4= Average Fixed Cost **[1.5]**

Q. 8) If labour is a variable factor, and capital is a fixed, which of the following statements describes the law of diminishing returns?

I. The relative shortage of capital will eventually cause increase in total product to become progressively smaller.
II. The cost of the product will eventually rise as increasingly scarce labour will force the wage rate upwards.
III. The marginal revenue obtained from each additional unit produced will decline.

A. Only I

B. II and III

C. III Only

D. All of the above. **[1.5]**

Q. 9) Which of the following is a FALSE statement?

A. For a profit-maximising monopolist, marginal revenue is negative.

B. For monopolistic competition, each firm has a small degree of control over price.

C. Oligopolists are likely to make supernormal profits in the long-run.

D. In perfect completion markets, all firms produce identical products. **[1.5]**

Q. 10) In the long run, a firm operating under conditions of monopolistic competition will produce an output at which:

A. Average total cost equals average revenue

B. Average total cost is less than average revenue

C. Average total cost is at minimum

D. Marginal cost is equal to average total cost **[1.5]**

Q. 11) Which of the following statement(s) is TRUE?

I. Limit pricing is where firm sets price below its average cost.
II. Predatory price is where firm deliberately keeps its price below the short run profit maximising level.
III. First Degree Price Discrimination is where firm adds a mark-up to average cost

A. I and II

B. II and III

C. II Only

D. III Only. **[1.5]**

Q. 12) Which of the following statement is TRUE?

A. Socially efficient level of output occurs when marginal social benefit exceeds marginal social cost.

B. Exploitative abuse is a business practice that limits or prevents effective competition.

C. A merit good provides benefits that are not fully appreciated by the prospective user.

D. All of the above. **[1.5]**

Q. 13) Which of the following statement(s) is TRUE?

I. Investment, consumer spending and imports are injections in the circular flow of income model.

II. A rise in Government expenditure is likely to shift country's demand curve outward to the right, other things being equal.

III. A rise in imports will result in decrease in aggregate demand, other things being equal.

A. I and II

B. II and III

C. I Only

D. All of the above. **[1.5]**

Q. 14) The World Trade Organization aims to reduce barriers to trade between countries. Which of these measures does not support this aim?

A. Reducing tariffs on imports

B. Lifting restrictions on the amount of goods a nation can import

C. Excessive paperwork for importing goods to promote local goods

D. All of the above **[1.5]**

Q. 15) Country A has a consultancy that provides advisory services to a company in Country B. The payments from Country A to B would figure in the Balance of Payment under

A. The trade in goods account

B. The trade in service account

C. Income flows

D. Current transfers **[1.5]**

Q. 16) Which of the following statements about the Austrian school of economists is NOT true

A. The Austrian school believes that supply side shocks are the key drivers of economic growth

B. They believe that businesses pursue a number of ventures to deal with uncertainty

C. The Austrian school believes markets regulate themselves

D. Followers of this school of thought believe that competitive markets cope with changing customer preferences **[1.5]**

Q. 17) Which of the following statements about exchange rate policies is correct?

I. A system implies the Government allows a gradual adjustment of exchange rates is called an exchange rate band.

II. A crawling peg system where a fixed exchange rate prevails for some time and then it is revalued/ devalued in line with BOP surplus/ deficit.

III. A system where currency exchange rate can float between upper and lower limit is an adjustable peg system.

A. I and II

B. I and III

C. I only

D. None of these **[1.5]**

Q. 18) Quantitative easing is likely to cause

A. An increase in exchange rates and decrease in inflation

B. A fall in asset prices and an increase in money supply

C. An increase in money supply and fall in inflation

D. A fall in interest rates and an increase in asset prices **[1.5]**

Q. 19) Which of these measures is not a supply side policy aimed at increasing economic growth?

A. Reducing social security benefits that would encourage more people to take up work

B. Deregulation

C. Tariffs to increase domestic production

D. Investment in vocational training to improve employability **[1.5]**

Q. 20) If a country with a fixed exchange rate, experiences high domestic inflation compared to its trade partners, the effect of inflation will be to

A. decrease the country's exports

B. increase the country's exports

C. shift the currency supply curve to the right, requiring the central bank to purchase the domestic currency to maintain fixed exchange rate

D. shift the demand curve for foreign currency to the right, requiring the central bank to purchase the domestic currency to maintain fixed exchange rate **[1.5]**

Q. 21) Which of these statements about cost-push inflation is true?

A. For cost push inflation to occur the demand for goods must be static or inelastic.

B. Supply of goods and services increases due to cheaper raw materials and labour.

C. Exchange rate appreciation benefits imports and could cause cost-push inflation.

D. An increase in supply of goods due to benefit from increased prices causes cost-push inflation. **[1.5]**

Q. 22) If the central bank of a country wants to prevent its currency appreciating, then its

A. foreign exchange reserves will have to decrease and domestic money supply will rise

B. foreign exchange reserves will have to decrease and domestic money supply will fall

C. foreign exchange reserves will have to increase and domestic money supply will rise

D. foreign exchange reserves will have to increase and domestic money supply will fall **[1.5]**

Q. 23) What happens to the Phillips curve and non-accelerating inflation rate of unemployment if an economy suffers from hysteresis?

A. Phillips curve shifts to the left and NAIRU increases

B. Phillips curve shifts to the right and NAIRU decreases

C. Phillips curve shifts to the right and NAIRU increases

D. Phillips curve shifts to the left and NAIRU decreases **[1.5]**

Q. 24) A bank holds its liquid assets constant, but reduces its advances to customers and increases its reserve at the central bank. Then,

A. It's liquidity ratio remains unchanged but maturity gap increases

B. It's liquidity ratio remains unchanged but maturity gap decreases

C. It's liquidity ratio increases and maturity gap decreases

D. It's liquidity ratio increases and maturity gap increases **[1.5]**

Q. 25) A country's population is 505 million out of these 374 million are actively employed. 29 million are unemployed or actively looking for work. What is the unemployment rate?

A. 25.94%

B. 5.74%

C. 7.20%

D. 7.75% **[1.5]**

Q. 26) A possible long-term solution for structural unemployment is

A. Education and training

B. Increase in money supply

C. Expansionary fiscal policy

D. Reducing trade union powers **[1.5]**

Q. 27) **i)** Explain mark-up pricing and limit pricing. (3)

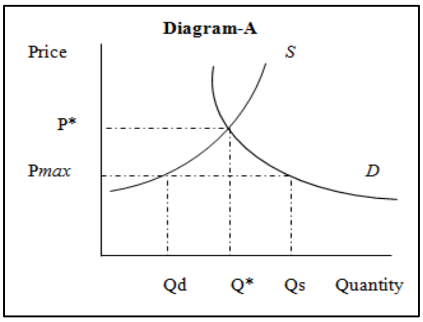
ii) Define stages of product cycle. (2)

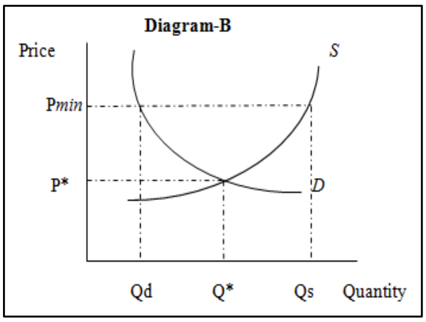
[5]

Q. 28) Using the appropriate diagram from the two diagrams given below, discuss the impact of the following actions by the Government on the demand and supply. State any two advantages and any two disadvantages for each of the actions.

i) Introducing minimum support price (floor) for agriculture produce that it will procure the harvest. (4)

ii) A maximum price (ceiling) set below the free market price. (4)





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Q. 29) Using appropriate example, distinguish between the substitution and income effects of a change in the price of a good. **[3]**

Q. 30) **i)** Explain what is meant by "bounded rationality"? (2)

ii) Describe strategies that individuals use to cope with this situation and the factors that might determine how they behave. (4)

[6]

Q. 31) Define what is equilibrium and disequilibrium unemployment. Explain what are the various reasons for both? **[4]**

Q. 32) For Country A,

- Investment spending is INR 200 Cr

- Government spending on goods and services is INR 700 Cr
- Exports are INR 500 Cr
- Tax revenues are at a uniform rate of 40%
- Consumption C= 0.8Yd, Yd is the disposable national income less taxes
- Import expenditure is Z = 0.1Y, Y is national income

Calculate the following

i) Equilibrium national income (1)

ii) Current account balance at this equilibrium national income (1)

iii) Fiscal deficit/ surplus at this equilibrium national income (1)

iv) Effect of increase in Government spending of INR 140 Cr on current account balance (1)

[4]

Q. 33) There are only two countries in the world – A and B and the only factor of production is labour. There are two goods X and Y produced in both countries. In country A it takes 50 hours to produce Good X and 25 hours to produce Good Y. In country B it takes 40 hours to produce Good X and 10 hours to produce Good Y.

i) Which country has a comparative advantage in producing Good X? (1)

ii) What is opportunity Cost? (1)

iii) What is the opportunity cost of producing Good X in Country B? (1)

iv) What should be the terms of trade for Good X: Good Y if there should be mutually beneficial trade between the countries & why? (2)

[5]

Q. 34) In light of the current Covid-19 pandemic situation and resulting lockdowns that have dampened the economy of countries, the Government of a Country A is planning to implement quantitative easing to help ease economic distress.

i) What is quantitative easing and how does a Government implement this? (2)

ii) How does it affect bond yields? (2)

iii) What would be the impact on exchange rates, given that the main trading partner of this country

a) does not similarly implement QE (1.5)

b) Implements a similar programme to boost its own economy? (1.5)

iv) How would you expect this to boost the economy? (3)

v) What would be impact on inflation in this country? (2)

vi) Would QE alone be effective in boosting the economy in such a situation? What would be the major challenges that countries would face in making the QE successful in boosting economic growth? (2)

[14]

Q. 35) **i)** Explain what is meant by the Pareto optimum (or socially efficient) level of output and explain the condition for Pareto optimality. (4)

ii) Explain whether or not a monopolist produces at the Pareto Optimum level. (2)

iii) Explain characteristics of a merit good. Give four examples of merit goods and explain why that good is considered as a merit good. (3)

iv) What are the possible ways Government can regulate monopolies and oligopolies? (3)

[12]

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