

**INSTITUTE OF ACTUARIES OF INDIA**  
**EXAMINATIONS**

**16<sup>th</sup> July 2022**

**Subject CB2 – Business Economics**

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

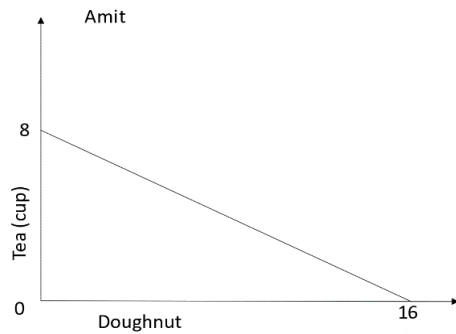
**Total Marks: 100**

- Q. 1)** Which of the following is TRUE?
- I.** First degree of price discrimination refers to the situation where a firm charges each customer the maximum price that customer is prepared to pay.
  - II.** “buy-one-get-one-free” is an example of second degree of price discrimination.
  - III.** Limit pricing refers to the situation where a firm sets its price below its average cost in order to drive competitors out of business.
- A.** Only I  
**B.** Only III  
**C.** I & II  
**D.** II & III
- [1.5]**
- Q. 2)** Which one of the following is a FALSE statement?
- A.** Stagflation can be explained in terms of Phillips loop.
  - B.** If inflation is falling, the adaptive expectations hypothesis suggests that inflation will be consistently over-estimated.
  - C.** The vertical long-run Phillips curve suggests that inflation can be reduced without a long-term increase in unemployment.
  - D.** A fall in structural unemployment will shift the Phillips curve to the right.
- [1.5]**
- Q. 3)** Shadow markets are most likely to be associated with:
- A.** Price floors which cause excess demand.
  - B.** Price floors which cause excess supply.
  - C.** Price ceilings which cause excess demand.
  - D.** Price ceilings which cause excess supply.
- [1.5]**
- Q. 4)** An increase in the average riskiness of a bank’s assets, assuming that nothing else changes, will result in:
- A.** A decrease in the capital adequacy ratio.
  - B.** An increase in the capital adequacy ratio.
  - C.** An increase in the liquidity ratio.
  - D.** A decrease in the liquidity ratio.
- [1.5]**
- Q. 5)** The central bank is concerned about rising domestic inflation. Which of the following monetary measures would NOT be suitable as a mean to try and reduce inflation?
- A.** Increasing cash reserve ratios for banks
  - B.** Reducing its lending to banks
  - C.** Funding the PSNCR with more Government bonds and fewer Treasury bills
  - D.** Buying Government bonds from banks
- [1.5]**
- Q. 6)** Which of the following is recorded as a plus in the balance of payments accounts of Country A?
- A.** The export of goods by Country A to the rest of the world

- B. Short-term lending by Country A to the rest of the world
- C. The purchase of foreign shares by residents of Country A
- D. The payment of interest by residents of Country A to residents of other countries

[1.5]

Q. 7) Refer to the figure below. Which of the following would be an efficient level of production for Amit?



- I. 8 cups of tea and 0 doughnuts
- II. 5 cups of tea and 6 doughnuts
- III. 4 cups of tea and 12 doughnuts

- A. I only
- B. II only
- C. III only
- D. I and II only
- E. II and III only

[1.5]

Q. 8) Because of which of the following, perfect competition is said to lead to **consumer sovereignty**-

- I. The combination of (long-run) production being at minimum average cost and the firm making only normal profit keeps prices at a minimum.
- II. Long-run equilibrium is at the bottom of the firm's long-run AC (Average Cost) curve. That is, for any given technology, the firm, in the long run, will produce at the least-cost output.
- III. Perfect competition is a case of 'survival of the fittest'. Inefficient firms will be driven out of business, since they will not be able to make even normal profits.
- IV. If consumer taste changes, the resulting price change will lead firms to respond (purely out of self-interest). An increased consumer demand will result in extra supply with only a short-run increase in profit.

- A. I only
- B. II only
- C. II and III
- D. I and IV

[1.5]

Q. 9) Good X has an income elasticity of demand of (-0.5) and a cross-price elasticity of demand with respect to Good Y of (+0.6). Good X is:

- A. A normal good and substitute for Good Y
- B. An inferior good and a substitute for Good Y
- C. An inferior good and a complement for Good Y
- D. A normal good and a complement of Good Y

[1.5]

**Q. 10)** A market in which firms produce differentiated products and enjoy normal profits could be described as:

- A. Monopolistically competitive
- B. A monopoly
- C. An oligopoly
- D. Perfectly competitive

[1.5]

**Q. 11)** Which of the following statements is/are TRUE?

- I. The effect of a shift in the *IS* curve on national income is greater if the *MP* curve is flatter.
- II. If both aggregate demand and potential national income increase, national income can rise without the central bank having to raise interest rates to curb inflationary pressure.
- III. An increase in inflationary expectations will cause a greater increase in interest rates if the *IS* curve is flatter.

- A. I and II
- B. II and III
- C. II Only
- D. III Only.

[1.5]

**Q. 12)** Which of the following statements about free-floating exchange rates is NOT true?

- A. They enhance the effectiveness of fiscal policy.
- B. The associated uncertainty can be reduced using forward contracts.
- C. Speculation can make them extremely volatile.
- D. There is no need to hold reserves of foreign currency.

[1.5]

**Q. 13)** Consider the following statements and select the correct one/ones:

- I. The official rate for the call Money Market in India is the current Repo Rate, which is announced by the RBI (Reserve Bank of India).
- II. Fed Rate is the US counterpart of India's Repo Rate.

- A. Only I
- B. Only II
- C. Both I and II
- D. Neither I nor II

[1.5]

**Q. 14)** The purchasing power parity theory implies that if UK inflation is persistently lower than US inflation, then over time:

- I. the UK pound will appreciate against the US dollar
  - II. the real exchange rate between UK pounds and US dollars will be unchanged
  - III. the UK pound will depreciate against the US dollar
- 
- A. I only
  - B. II only
  - C. I and II only
  - D. II and III only

[1.5]

**Q. 15)** Which of the following statements is/are FALSE?

- A. When the economy is growing, public sector net borrowing is likely to be falling.
- B. When the economy is growing, net taxes are likely to be increasing.
- C. When the economy is contracting, investment by firms is likely to be low.
- D. When the economy is growing, the structural deficit is likely to be falling.

[1.5]

**Q. 16)** Which of the following will reduce the effectiveness of pure fiscal expansion?

- I. Crowding out
- II. Injections multiplier
- III. A lack of confidence on behalf of businesses and banks

- A. I only
- B. I and II only
- C. I and III only
- D. I, II and III

[1.5]

**Q. 17)** Which of the following is NOT a supply-side economic policy aimed at promoting economic growth?

- A. Cuts in social security benefits designed to encourage more workers to take work
- B. Measures designed to reduce trade union powers
- C. Deregulation
- D. Tariffs designed to increase the production of domestic goods

[1.5]

**Q. 18)** Which of the following approaches would NOT be used by a central bank that wishes to avoid increasing the money supply?

- A. Selling Government bonds to bank
- B. Reducing its willingness to lend to the banks
- C. Funding Government borrowings by selling Treasury bills instead of Government bonds
- D. Raising the reserves ratio which banks are required to hold.

[1.5]

**Q. 19)** Which of the following ratios is the ratio of company's borrowed capital to shares?

- A. Capital adequacy
- B. Gearing
- C. Liquidity
- D. Net stable funding

[1.5]

**Q. 20)** Match the different stages of the business cycle with the corresponding symptoms in the economy following:

Business Cycle	Symptoms in Economy
1. Depression	a. Low demand, low inflation, high unemployment, voluntary retirement scheme prevalent.
2. Recession	b. Low demand, low inflation, increase in rate of unemployment.
3. Slackness	c. Low demand, low inflation, growth rate not increasing, investment takes place
4. Stagnation	d. Low demand, low inflation, high unemployment, forced labour cut in practice.

- A.** 1-c, 2-a, 3-b, 4-d  
**B.** 1-b, 2-d, 3-c, 4-a  
**C.** 1-d, 2-a, 3-b, 4-c  
**D.** 1-d, 2-b, 3-a, 4-c

[1.5]

**Q. 21)** Unemployment and inflation can co-exist because of:

- I.** Structural unemployment  
**II.** Cost-push inflation  
**III.** Firms operating with different degree of slack

- A.** I only  
**B.** I and II  
**C.** I and III  
**D.** I, II and III

[1.5]

**Q. 22)** The principal of non-rivalry applied to public goods means that:

- A.** The production of public goods involves marginal costs.  
**B.** Public goods must be financed by income tax.  
**C.** The opportunity cost of provision is a positive and constant value.  
**D.** No extra resources will be consumed when marginal consumption takes place.

[1.5]

**Q. 23)** A loss leader may be used as part of which of the following pricing strategies?

- A.** Predatory pricing  
**B.** Full-range pricing  
**C.** Peak-load pricing  
**D.** First-degree price discrimination

[1.5]

**Q. 24)** The kinked demand curve theory of oligopoly implies that the oligopolist:

- A.** Will seek to make only satisfactory rather than maximum profit  
**B.** Has a discontinuity in its marginal revenue curve  
**C.** Has a discontinuity in its marginal cost curve  
**D.** Has a discontinuity in its average revenue curve

**Q. 25)** Which of the following is TRUE?

- I.** A merit good is provided free of charge by the Government.
- II.** Bid rigging is an abuse of market power used by a monopoly.
- III.** If the marginal social benefit exceeds the marginal social cost then an increase in output will increase welfare.

- A.** I & II
- B.** II & III
- C.** II only
- D.** III only

[1.5]

**Q. 26)** Select the correct CODE regarding 'carry trade':

- I.** Promoting foreign trade on the basis of bilateral terms
- II.** Borrowing in one currency and investing in another
- III.** A situation of zero trade balance

CODE:

- A.** I and II
- B.** II and III
- C.** I, II and III
- D.** None of these

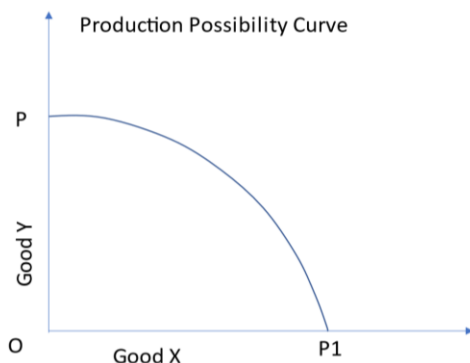
[1.5]

**Q. 27)** i) What is the view of the Austrian school of economists with respect to regulation? (4)

ii) With the 2008 financial crisis as an example, explain why the Austrian school of economists believe Government regulations have been ineffective? (1)

[5]

**Q. 28)** The diagram below represents the Production Possibility Curve showing all the possible combinations of two goods (Good X and Good Y) that a country can produce.



Answer the following related to the Production Possibility Curve.

- i) What are the assumptions underlying the construction of the Production Possibility Curve? (3)
- ii) What are the Uses or Applications of the Production Possibility Curve? (7)
- [10]

**Q. 29)** For a person X, the marginal utility is given for goods G and H.

Unit#	Marginal Utility for G	Marginal Utility for H
1	15	10
2	12	12
3	10	9
4	8	7
5	6	5
6	5	4

- i) Comment on the validity of marginal utilities for G and H. (2)
- ii) If there has to be a correction made in the numbers given in the table above, what would that be? (1)
- iii) Calculate total utility from good G and H based on your corrected figures, if you have made changes or on the original table. (2)
- iv) The cost of G is Rs 10 and H is Rs 8. What quantities of X and Y will give maximum utility, if person X spends Rs 100 on these two items? (2)
- [7]

- Q. 30)** i) What is the law of diminishing marginal return? (1)
- ii) What are diseconomies of scale? (1)
- iii) How are the above two different? (3)
- [5]

**Q. 31)** During the recent coronavirus pandemic, vaccines were developed and manufactured at a great speed and helped save many lives.

- i) In this context, what type of market structure is the vaccine industry? (1)
- ii) What are the characteristics of such a market structure? (5)
- iii) Provide any two other example of industries that operate in a similar structure? (1)
- iv) Only one company in a country or a small number of pharma companies produce the bulk of vaccines. What could be the major disadvantages of this? (2)
- v) How has the Government intervention during the pandemic impacted vaccine production and distribution? (2)
- [11]



**Q. 32)** Given the following information (all in INR '00cr), calculate the

- i)** GDP at market prices (1)
- ii)** GNI at market prices (1)
- iii)** GDP at basic prices (1)
- iv)** Per capita GNI at basic prices (1)

Consumer expenditure including indirect taxes	90
Investment	20
Government expenditure including transfer payments	50
Exports	20
Imports	30
Net property income from abroad	10
Transfer payments	20
Indirect taxes	15

**[4]**

- Q. 33)** **i)** Explain in simple terms, WITHOUT any diagrams, demand-pull and cost-push inflation. (2)
- ii)** Give examples of two indices of inflation and explain what they track? (2)
- iii)** What do you believe is the impact on inflation of the current Russia- Ukraine conflict on the warring countries as well as the world? (4)

**[8]**

- Q. 34)** **i)** When does a country have an absolute advantage in production of a good? (1)
- ii)** What is the law of comparative advantage? (1)
- iii)** Explain any three measures of restricting trade between countries. (3)
- iv)** Provide real world examples of measures you mentioned above. (3)
- v)** What could be non-economic reasons for restricting free trade? (3)

**[11]**

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