

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

22nd November 2023

Subject CB2 – Business Economics

Time allowed: 3 Hours 15 Minutes (10.15 – 13.30 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

- 1. Please read the instructions inside the cover page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception.*
- 2. Mark allocations are shown in brackets.*
- 3. Attempt all questions beginning your answer to each question on a separate sheet. However, answers to objective type questions could be written on the same sheet.*
- 4. Please check if you have received complete Question Paper and no page is missing. If so, kindly get new set of Question Paper from the Invigilator.*

AT THE END OF THE EXAMINATION

Please return your answer book and this question paper to the supervisor separately. You are not allowed to carry the question paper in any form with you.

- Q. 1)** Which of the following item doesn't affect the cost of production for mobile phones?
- A. The cost of rare earth metals used to make micro-chips for the phones.
 - B. The cost of R&D undertaken by the Company to develop new features.
 - C. Geopolitical conflicts.
 - D. Competition between firms. [1.5]
- Q. 2)** Which of the following statements is false?
- A. Uncertainty is a measure of variability of an outcome.
 - B. Risk is when the outcome of an action may or may not occur but the probability of occurring is known.
 - C. Uncertainty is when an outcome may or may not occur and its probability of occurring is unknown.
 - D. A short seller is exposed to the risk that the asset they have short sold will rise in price leading them to make a loss. [1.5]
- Q. 3)** A company has suffered a severe hit to its brand name. What do you think will happen to its demand curve?
- A. Shift the curve to the right and make it more elastic.
 - B. Shift the curve to the left and make it more elastic.
 - C. Shift the curve to the left and make it more inelastic.
 - D. Shift the curve to the right and make it more inelastic. [1.5]
- Q. 4)** Which of the following is income effect on the change in price of a particular good?
- A. When the prices of tomatoes increase people started consuming more onions which are cheaper and less of tomatoes.
 - B. When the prices of laptops increase the demand of laptops fall.
 - C. When the price of wooden furniture increases people started buying more steel furniture which was cheaper.
 - D. Both A and C. [1.5]
- Q. 5)** Bounded Rationality is caused by?
- A. Lack of information.
 - B. Lack of time & effort and perhaps expense of obtaining relevant information.
 - C. Lack of understanding of complex situations.
 - D. All of the Above. [1.5]
- Q. 6)** Which of the following is/are true about short run marginal cost?
- I. Marginal cost is the addition to total costs as a result of producing one more unit of Output.
 - II. Short run marginal cost is equal to the increase in short-run variable cost.
 - III. The shape of short run marginal cost curve is U shaped.
- A. Both I and II
 - B. Only I
 - C. All I, II and III
 - D. Only III [1.5]

- Q. 7)** Which of the following are variable costs for a firm?
- A. Rent for office space
 - B. Metered Electricity
 - C. Salaries of unskilled labour
 - D. Both B and C
- [1.5]**
- Q. 8)** Which of the following is main reason for diseconomies of scale?
- A. Economies of Scope
 - B. Managerial Factors
 - C. Increasing Pollution
 - D. The opportunity cost of production
- [1.5]**
- Q. 9)** There are a few restaurants and pubs operating in an area. What could be the market structure that appropriately defines them?
- A. Oligopoly
 - B. Monopolistic Competition
 - C. Perfect Competition
 - D. Monopoly
- [1.5]**
- Q. 10)** In limit pricing strategy the oligopolist charges a price that is below the:
- A. The minimum average cost of for a new entrant.
 - B. Its own average minimum cost.
 - C. The short run profit maximising price.
 - D. Both A and B.
- [1.5]**
- Q. 11)** The cab aggregators strategy of charging different prices for different types of cabs (bike, mini, prime, prime play) is which type of price discrimination?
- A. Third degree price discrimination
 - B. First degree price discrimination
 - C. Second degree price discrimination
 - D. None of the Above
- [1.5]**
- Q. 12)** In which of the four stages of product cycle the competition is likely to be most intense?
- A. Launch
 - B. Growth
 - C. Maturity
 - D. Decline
- [1.5]**
- Q. 13)** Which of the following is a merit good?
- A. Pensions
 - B. Wireless Internet access in a restaurant
 - C. Pay per view TV broadcasting
 - D. Private Parks
- [1.5]**

- Q. 14)** Appreciation of a Country's exchange rate is likely to result in:
- A. Less competitive exports
 - B. Cheaper imports
 - C. Rise in import volumes
 - D. Fall in export volumes
- [1.5]**
- Q. 15)** Which of the following is not true?
- Financial integration and globalization resulted in-
- A. Greater productivity
 - B. Higher liquidity
 - C. Capital mobility
 - D. Reduction in exposure to systemic risk
- [1.5]**
- Q. 16)** Liabilities of a commercial bank are:
- I. Overdrafts
 - II. Reverse Repo
 - III. Repo
 - IV. Time Deposit
- Which of the above are true?
- A. I, II, III
 - B. II and III
 - C. III and IV
 - D. I and III
- [1.5]**
- Q. 17)** Which of the following causes the money supply to rise?
- A. Banks choose to hold a higher liquidity ratio.
 - B. The non-bank private sector chooses to hold more cash.
 - C. The public sector expenditure is more than the public sector receipts.
 - D. The public sector expenditure is less than the public sector receipts.
- [1.5]**
- Q. 18)** An exogeneous money supply curve-
- A. Does not depend on interest rates and is vertical.
 - B. Depends on interest rates and slopes upwards.
 - C. Depends on interest rates and is vertical.
 - D. Encourages banks to lend more.
- [1.5]**
- Q. 19)** Which of the following statement is not true?
- A. Gross Domestic Product (GDP) can be measured as the sum of all goods and services produced in the country in a year.
 - B. GDP can be measured as the sum of all income in the form of wages, salaries, profits, rents and interest earned in a year.
 - C. GDP is the difference between all goods & services produced and the expenditure necessary to purchase them, in a particular year.
 - D. All the methods of calculating GDP must yield the same result.
- [1.5]**

- Q. 20)** If an increase in aggregate demand causes:
- A.** Only output to increase, the AS curve must be vertical.
 - B.** Only prices to increase, the AS curve must be horizontal.
 - C.** Both output and prices to increase, the AS curve must slope downwards.
 - D.** Both output and prices to increase, the AS curve must slope upwards. **[1.5]**

- Q. 21)** Monetarist application of the expectations-augmented Phillips curve implies that:

- I.** Monetary or fiscal policy can have long run effect on unemployment.
- II.** Monetary or fiscal policy can have no long run effect on unemployment.
- III.** Monetary or fiscal policy can have short run effect on unemployment.
- IV.** It can be used to influence the inflation rate.

Which of the above statements are true?

- A.** I only
- B.** II only
- C.** I and IV
- D.** II, III and IV **[1.5]**

- Q. 22)** Neo Classical Economists argued that:

- A.** There is a trade off between unemployment and inflation in the short term.
- B.** There is a trade off between unemployment and inflation in the long term.
- C.** Expectations are rational but are based on imperfect information.
- D.** Expectations are rational and are based on perfect information. **[1.5]**

- Q. 23)** Which of the following statement is false?

- A.** Central banks set the real interest rate.
- B.** Real interest rates determine aggregate demand.
- C.** The ex-ante real interest rate is the nominal interest rate less the expected rate of inflation.
- D.** To raise real interest rates, the nominal interest rate must be increased relative to the expected inflation rate. **[1.5]**

- Q. 24)** The extent of crowding out in response to an increase in Government spending will be greater:

- I.** If investment is insensitive to interest rates.
- II.** The flatter is the money supply curve.
- III.** The flatter is the liquidity preference curve.

Which of the above statements are true?

- A.** I and II
- B.** I and III
- C.** I, II and III
- D.** None of the above **[1.5]**

- Q. 25)** All else being equal, the real exchange rate will increase if:
- A.** Import prices fall by less than export prices.
 - B.** Import prices rise by less than export prices.
 - C.** The nominal exchange rate falls.
 - D.** Import prices rise while export prices are unchanged. **[1.5]**
- Q. 26)** Which of the following statement are true?
- I.** In the short run, changes in aggregate demand can have no effect on output and employment.
 - II.** In the long run, changes in aggregate demand have a smaller effect on output and employment and a larger effect on prices.
 - III.** Excessive growth in the money supply will lead to inflation.
 - IV.** In a deep recession, expansion of the money supply might be necessary.
- A.** I and II
 - B.** I and III
 - C.** I and IV
 - D.** II, III and IV **[1.5]**
- Q. 27)** What are the external benefits of Government Health insurance scheme? **[2]**
- Q. 28)** Consider a market for tabletop calendars and explain the effect of each of the following scenarios on the supply curve for tabletop calendars:
- i)** Fall in the cost of glazed paper. **(1)**
 - ii)** The price of wall hung calendars increase. **(1)**
 - iii)** A new process of recycling is developed in Country C due to which the cost of cardboard decreases because wastepaper from developed countries are used to make cardboard. **(1)**
 - iv)** Government makes it more difficult to cut trees needed for producing glazed paper. **(1)**
[4]
- Q. 29)** Poor rice crop yields because of floods is likely to result in rise in its price. Highlight how self-fulfilling speculation will have a destabilising effect on the price. **[2]**
- Q. 30)** Describe the role of behavioural economics in design of economic policy with a suitable example. **[4]**
- Q. 31)** Mr. Raju runs a hardware store. In the last year his accountant calculated Mr. Raju's profit by comparing his revenue with his expenditure on staff wages, depreciation, loan interest, rent and cost of items sold. The resulting figure was INR 9,50,000 which his accountant calls as profit. His accountant is amazed how Mr. Raju is running such a profitable business
- However, Mr. Raju sees things differently:
- He feels he could have earned a salary of INR 8,00,000 had he been working as a software engineer.

- The INR 7,50,000 of the money that he has put in the business, he could have earned INR 48,000 in interest had he left that money in his bank account.
 - i) Please state which costs are implicit and which are explicit. (1)
 - ii) Please calculate Mr. Raju normal profit. (2)
 - iii) Mr. Raju has hired you an Actuary to redo the numbers. Determine the economic profit that he made last year. (2)
 - iv) Assuming Mr. Raju can sell the bookshop business next year for INR 800,000. What your answer suggests Mr Raju should do next year? (2)

The next year Mr. Raju's accountant again calculate the accounting profits as being INR 8,75,000.

- v) Assuming that Mr. Raju's salary as a software engineer would have been INR 8,77,000 and his initial investment in the business would have earned INR 50,000 how will Mr. Raju view this? (2)
- [9]**

- Q. 32)** Describe three ways in which firms can use their market power to the detriment of the consumers. Define each one of them with an example. **[5]**
- Q. 33)** Provide two important features of the new classical school. What is the key accompanying element in the thinking of new classical school. **[3]**
- Q. 34)** Much of the work in the farming industry is mechanized, meaning fewer farmers are necessary, and many lose work.
- i) What is this type of unemployment called? Define it. (1)
 - ii) Outline the main reasons for the same. (3)
 - iii) Discuss the factors affecting the level of such unemployment. (3)
 - iv) Explain the ways of tackling this kind of unemployment. (2)
- [9]**
- Q. 35)** Explain why market-oriented supply side policies may be superior to interventionist supply side policies and describe three possible market-oriented supply side policies. **[5]**
- Q. 36)** List the advantages of having a single currency for the member states of European Economic and Monetary Union (EMU). **[2]**
- Q. 37)** Discuss the main factors that affect investment in an economy. **[5]**
- Q. 38)** Why capital adequacy is important for Banks? Define the formula for Capital Adequacy Ratio (CAR) and explain the components of CAR. **[5]**
- Q. 39)** List the macroeconomic objectives that are dependent on the aggregate demand in the short term and explain how they vary through the expansionary phase of business cycle. **[6]**
