INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

27th June 2019

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. <u>However, answers to objective type questions could be written on the same sheet.</u>
- 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.

About 33% of the overall imports to India constitutes of Mineral fuels (including oil) during **Q.** 1) 2018. Name the product group that represent the second highest in India's import purchases during 2018. A. Electrical machinery, equipment **B.** Machinery including computers C. Plastics, plastic articles **D.** Gems, precious metals [1.5] Q. 2) According to the Classical model, Disequilibrium Unemployment..... **A.** Could not persist because wages would fall to eliminate the excess supply of labour. **B.** Could persist for long periods of time because wages are not flexible. **C.** Could be eliminated only through Government intervention. **D.** Could never exist. [1.5] $\mathbf{0.3}$ Say's law states that: **A.** Supply creates its own demand. **B.** Demand creates its own supply. **C.** There is no such thing as a free lunch **D.** Macroeconomic policy activism is essential to ensure full-employment. [1.5] **Q.** 4) In the equation C = a + bY, which describes the aggregate consumption function, 'a' stands for **A.** The amount of consumption when income is zero. **B.** The marginal propensity to consume. **C.** The amount of consumption when income is Maximum. **D.** The average consumption level. [1.5] $\mathbf{Q.5}$ Assuming there is no foreign sector, if the multiplier is 3, and the net income tax rate is 20%, the MPC is **A.** 3/4 **B.** 4/5 **C.** 5/6 **D.** 6/7 [1.5] **Q.** 6) If injections are less than withdrawals at the full-employment level of national income, there is **A.** An inflationary gap. **B.** Equilibrium. C. A deflationary gap. **D.** Hyperinflation. [1.5] **O.** 7) Which of the following is likely to result from a rapid rise in aggregate demand? A. Increased unemployment **B.** Static living standards

C. Rising prices.

D. Surplus on the balance of payments

- **Q. 8**) Consider the following statements with respect to WTO:
 - I. The current set of governing rules stems from the Geneva Round of GATT negotiations
 - II. It has its headquarters in Uruguay.
 - III. It was formed in 1995
 - IV. Highest Level decision making body is the WTO General Council

Which of the above statements are true?

- **A.** I & II
- B. III & IV
- **C.** I,II & IV
- **D.** All of the above [1.5]
- **Q. 9**) As per the accelerationist hypothesis of inflation, which of the following statements is FALSE?
 - **A.** A decrease in the aggregate demand in the short run will cause a rightward movement along the expectations -augmented Phillips Curve.
 - **B.** If the actual rate of unemployment is lower than the natural rate of unemployment because the Government has increased the rate of growth of money supply, then the expectations -augmented Phillips Curve will shift downwards.
 - **C.** If inflation is temporarily above its expected level, then unemployment will be below its natural level.
 - **D.** None of the above.
- **Q. 10**) Which of the following best describes the distinction between real GDP and nominal GDP?
 - **A.** Nominal GDP is calculated by deflating real GDP; real GDP is unadjusted for inflation
 - **B.** Nominal GDP is adjusted for changes in prices; real GDP is not adjusted for changes in prices
 - C. Nominal GDP is calculated every year; real GDP is calculated only occasionally
 - **D.** Nominal GDP uses current prices; real GDP uses constant prices [1.5]
- **Q. 11**) Which of the following best describes the relationship between the change in the monetary base and the change in the money supply that occurs when a central bank buys bonds?
 - **A.** The change in the money supply is equal to the change in the monetary base
 - **B.** The change in the money supply is unrelated to the change in the monetary base
 - C. The change in the money supply is greater than the change in the monetary base
 - **D.** The change in the money supply is always less than the change in the monetary base [1.5]
- **Q. 12**) The natural rate of unemployment in a country is 5%, and the current rate of unemployment is 2%. Also, the consumer price index (CPI) has been increasing rapidly.

Which of the following combinations of monetary and fiscal policy would be appropriate to return this economy to full employment?

- **A.** Increase Government spending; sell bonds
- **B.** Decreasing taxes; buy bonds
- C. Increasing taxes; increasing Government spending
- **D.** Increasing taxes; open market sales

Q. 13) What does the term "crowding out" refer to? **A.** When there is an increase in unemployment, spending on automatic stabilizers increases **B.** When private sector borrowing increases, Government borrowing decreases C. When there is a decrease in tax revenue, revenue from automatic stabilizers decrease **D.** When Government borrowing increases, private sector investment spending decreases [1.5] Q. 14) Which of the following does not constitute investment in the economic sense? **I.** Depositing money in bank account **II.** The purchase of new debentures issued by a company **III.** The purchase of house by a person previously owned by the other person IV. Production of stocks which will be sold next year Options: **A.** II. III and IV **B.** I, II and III **C.** II and III only **D.** IV only [1.5] **O.** 15) The problem of scarcity in economies: **A.** Means there are shortages of some goods **B.** Could be tackled if we produce more goods and services **C.** Exits in command economies **D.** Could be tackled if full potential output is achieved [1.5] Q. 16) Following an increase in the price of flour, there is a 10% increase in price of bread which results in a 5% decrease in total revenue. How would you describe the demand for bread? **A.** The demand for bread is price inelastic **B.** The demand for bread is price elastic C. The demand for bread is perfectly price inelastic **D.** The demand for bread is perfectly price elastic [1.5] Q. 17) Which of the following is NOT a feature of monopolistic competition? **A.** The firm faces a downward sloping demand curve **B.** The marginal revenue curve (MR) is a straight line that is above the average revenue curve (AR) **C.** Only normal profits are made in long run **D.** A firm can raise its price without losing all its customers [1.5] **Q. 18**) The business cycle is defined as: **A.** the annual cycle of output. **B.** the long run trend path of output after removing short run variations. **C.** the periodic fluctuations of output around the long run trend.

D. none of the above

Q. 19) If bus travel is an inferior good, which of the following will cause its demand curve to shift to the left? **A.** A rise in price of petrol **B.** A rise in income of consumer C. A rise in price of a car **D.** An increase in bus fare [1.5] Q. 20) Third degree price discrimination refers to the situation where: I. Consumers are grouped into independent markets and a separate price is charged in each market. II. The firm charges different prices in foreign and domestic markets III. The firm charges each customer the maximum price he / she is prepared to pay **IV.** The firm offers different pricing options in same market **A.** Option I and IV **B.** Option IV C. Option I and II **D.** Option III [1.5] Q. 21) Which of the following schools of thought believes that supply – side shocks are a key influence on economic growth A. Classical **B.** New classical C. Austrian **D.** Keynesian [1.5] O. 22) Consider two goods X and Y. The shape of a consumer's indifference curves are convex to the origin in the following circumstances: **A.** X and Y are perfect complements **B.** X and Y are perfect substitutes C. The consumer exhibits higher marginal utility for Y than X **D.** The consumer exhibits diminishing marginal utility for X and Y [1.5] Q. 23) A merit good: **A.** Provides benefits that are fully appreciated by user. **B.** Has strong negative externalities **C.** Is rival and excludable. **D.** Cannot be supplied by the market. [1.5] Q. 24) Country X has a comparative advantage over country Y in producing a good when: A. Country X has a lower opportunity cost of producing the good than country Y

B. Country X has a lower labour cost of producing the good than country Y
C. Country X has a lower marginal cost of producing the good than country Y
D. Country X has a lower absolute cost of producing the good than country Y

Q. 25) If the demand for Good X is price-inelastic and supply for Good X is price-elastic, then the burden of the sales tax on Good X will be borne by:

- **A.** Equally by buyers and sellers
- **B.** More heavily by buyers
- C. More heavily by sellers
- **D.** By neither buyers and sellers

[1.5]

- Q. 26) The kinked demand theory of oligopolists assume that
 - **A.** Relatively elastic demand curve at prices higher than current price
 - B. Relatively elastic demand curve at prices lower than current price
 - **C.** One firm in the industry sets price for all other firms
 - **D.** Prices can either rise or fall depends upon on what happens to firm's competitor's prices [1.5]
- **Q. 27**) i) Fill in the missing figures from the balance of payments account for Country B given below:

	Credits (+), Debits (-)	\$m (2018)	
	Current account		
1	Exports of goods	??	
2	Imports of goods	-425	
3	Balance of trade in goods	-40	
4	Exports of services	165	
5	Imports of services	-185	
6	Balance of trade in services	??	
7	Income receipts (investment income)	190	
8	Income payments (investment income)	??	
	Net income receipts (investment		
9	income)	15	
10	Current transfers (net)	-50	
11	Net income flows	??	
12	Current account balance	??	
	Capital account		
13	Capital account transactions (net)	40	
	Financial account		
14	Direct investment, net	65	
15	Portfolio investment, net	-50	
16	Reserve assets funding	20	
17	Errors and omissions	20	
18	Capital and financial account balance	??	

(2.5)

	ii)	Explain how each of the following transactions will be classified and recorded in the debit and credit of the India's balance of payments:	
		 a) A Japanese insurance company purchases Indian Treasury bonds and pays out of its bank account in Mumbai. b) An Indian citizen consumes a meal at a restaurant in Paris and pays with her American Express card. c) A Indian computer programmer is hired by a British company for consulting and gets paid from an Indian bank account maintained by the British company. 	(3) [5.5]
Q. 28)	i)	Explain what IS and LM curves show. Use an IS-LM graph to explain how the equilibrium national income and the equilibrium level of interest rates is determined.	(5)
	ii)	Discuss, with the aid of IS-LM graphs, the impact on interest rates and national income of an increase in the average price level.	(3)
	iii)	Using the IS-LM diagram explain the effects of an expansionary fiscal policy financed by bond sales on the money supply, the long-term rate of interest and the level of national income.	(3) [11]
Q. 29)	Defi	ne the following:	[##]
	i)	Hysteresis	(2)
	ii)	Structural Deficit	(1.5)
	iii)	Accelerator Coefficient	(2)
	iv)	Securitisation with diagram	(2)
	v)	Repo and Reverse Repo	(2.5) [10]
Q. 30)	i)	Explain the effect on money supply for each of the following case:	
		a) An increase in the public sector deficit financed by borrowing from the non bank private sector.b) A decrease in the non bank private sector's holding of cash.	(2)
	ii)	Explain the effect on demand for money for each of the following case:	
		a) A fall in the nominal national income.b) A fall in the expected value of the domestic currency.	(2) [4]
Q. 31)	paya	Government of the country has decided to fix maximum rate of commission to be ble to intermediaries who sell life insurance policies in the market. Some stakeholders considering this practice against overall development of insurance market.	
	Wha	t are the benefits and limitations of maximum commission regulation?	[3]

Q. 32)	If a monopoly operates in a perfectly contestable market, it might bring the "best of both worlds" for the consumer.				
	i)	Explain the statement.	(3)		
	ii)	Illustrate with an appropriate example.	(2)		
	iii)	Draw a suitable diagram showing impact on profit in a perfectly contestable market.	(1) [6]		
Q. 33)	i)	Define a negative externality. Outline an example of a negative externality that may be experienced by an individual in relation to the consumption of cigarette by another party.	(3)		
	ii)	Describe a price and non-price associated intervention that could be used to address this market failure.	(3)		
	iii)	Draw a diagram showing the marginal social benefit curve and marginal private benefit curve when a negative externality in consumption exists. You should show on your diagram, the quantity that would be consumed at the market price P1 by the private sector as Quarter 1 and the socially optimal level of consumption as Quarter 2.	(2) [8]		
Q. 34)	i)	Explain the difference between actual and potential economic growth.	(2)		
	ii)	State the main factors that explain potential Economic Growth.	(2.5) [4.5]		
Q. 35)		ribe with the aid of a diagram the intended effect of advertising on a consumer product's and curve.	[5]		
Q. 36)	Describe the difference between risk-neutral economic agents and risk-averse economic agents in terms of risk and return.		[2]		
Q. 37)		two requirements for adverse selection to be a problem and give two steps the insurance pany is taking to curb adverse selection.	[2]		
