Mahindra University
Global Thinkers Engaged Leaders

Mahindra University Hyderabad

École Centrale School of Engineering

Minor-II exam

Program: B. Tech.   Branches: All   Year: II   Semester: I

Subject: Principles of Economics (HS-2102)

Date: 25/10/2024   **Start Time: 2 PM**

Time Duration: 1.5 Hours   **Max. Marks: 40**

Instructions:

1) All questions are compulsory

2) Answer all the sub-questions asked within the four questions

3) Calculator is allowed inside the exam hall

1. Answer the following sub-questions on monetary system and money supply.
   a. Suppose $250 of currency is in circulation in the economy. Calculate the total money supply if there is no banking system in the economy (1)
   b. A bank received $250 as deposits. Draw the assets and liability column with 100% reserve banking system (2)
   c. A bank received $300 as deposits. Draw the assets and liability column in a fractional reserve banking system (where cash reserve ratio is 25%) (2)
   d. Calculate the money multiplier and the maximum amount by which the money supply can increase, if the bank has reserves of $1000 and the prevailing CRR is 25%. (2)
   e. The Cash Reserve Ratio (CRR) of a particular bank is 10%. How should RBI change the CRR in tune with the inflationary and deflationary tendencies? (2)
   f. Is the changing of CRR in tune with the inflationary/deflationary tendencies a fiscal or monetary policy? Briefly pinpoint why. (1)

2. Answer the following sub-questions given below.
   a. Convert the following microeconomic statement to a macroeconomic statement: The unemployment in Telangana is increasing (2)
   b. Convert the following positive statement into a normative statement: The unemployment in Telangana reached a record high (2)
   c. The government decides to build houses for slum dwellers. But the intended area on which the government is planning to build houses is a prime city center. Akash, one multimillionaire wants to set up several businesses (hair salon, restaurant, movie theatre etc.) in that area.
      i. In this scenario, what is the equitable, equal and efficient solution? (3)
      ii. Do you think the solution to the above scenario will be different in capitalist prone and socialist prone economies? What might be the prescription of the capitalistic and socialistic prone economies to the above problem (3)

3. Answer the following sub-questions pertaining to supply and demand.

   A. Draw how the equilibrium quantity (number of engineers) and equilibrium prices (engineering wages) will change in each of the following cases.

      a. The number of engineers graduating from college increases at the same time and in the same proportion as the demand for engineers increases. (2)

      b. The number of engineers graduating from college increases at the same time as the demand for engineers increases. But the demand for engineers rose at a much higher rate than the number of engineers graduated (2)

      c. The number of engineers graduating from college increases at the same time and in the same proportion as the demand for engineers decreases (2)

   B. Consider the demand for a good. At price Rs 4, the demand for the good is 25 units. Suppose price of the good increases to Rs 5, and as a result, the demand for the good falls to 20 units. Calculate the price elasticity? Do you think the producer should have increased the price in this case (Explain in terms of the relationship between elasticity and total revenue)? (4)

4. Answer the following sub-questions related to national income.

   A. Will these be included in National Income or not. Briefly pinpoint why.

      a. Brokerage commission on sale of a second-hand car which was manufactured in 2010 (2)

      b. Bell peppers purchased by a restaurant to make pizza (2)

   B. From the table given below, answer the following questions. The base year is 2018.

	Coffee		Tea	
year	*P*	*Q*	*P*	*Q*
2018	\$10	4000	\$2.00	1500
2019	\$11	5000	\$2.50	1200
2020	\$12	6000	\$3.00	1400

      a. The nominal GDP for the year 2020 (1)

      b. The real GDP for the year 2018 (1)

      c. The change in nominal GDP and real GDP between the years 2019 to 2020 (2)

      d. Compute the GDP deflator for the year 2020 (2)