

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: ISc
BRANCH: CQEDS

SEMESTER : III
SESSION : MO/2025

SUBJECT: ED24205: INTRODUCTORY MACROECONOMICS

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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|---|------|-----------|---------|
| Q.1 President Simon Kuznets wants to measure the national income (GDP) of the country, but his team does not include any trained economists. He has now hired you as an economist to guide him. | [10] | CO
CO1 | BL
2 |
| What are the methods to calculate GDP? Explain each method briefly and discuss the advantages and disadvantages of every method. | | | |
| Q.2(a) Suppose the economy is characterized by the following behavioral equations: | [10] | CO2 | 3 |
| $C = 160 + 0.6Y_d$ $I = 150$ $G = 150$ $T = 100$ | | | |
| Solve for the following variable: | | | |
| i. Equilibrium GDP (Y) | | | |
| ii. Disposable income (Y_d) | | | |
| iii. Consumption Spending (C) | | | |
| Q.3 In the early 1980s, President Reagan was attempting a tax cut while the Federal Reserve under Chairman Paul Volcker was attempting to control inflation. | | | |
| Answer the questions below, considering a closed economy in the short run. | | | |
| Q.3(a) Considering President Reagan's tax policy (aggregate 30% tax cut in 3 years) was a crucial part of economic policy, use the IS-LM diagram to show how the tax cut would affect the economy and explain in a few sentences. Assume that monetary policy does not change. | [6] | CO3 | 5 |
| Now assume that the demand for money is insensitive to the interest rate. Now, what would be the net effect of President Reagan's tax policy (30% cut in 3 years) in the IS-LM framework? Use the IS-LM diagram to show the effect and also explain in a few sentences. | | | |
| Q.3(b) Now say that President Reagan is following an expansionary fiscal policy while Volcker's monetary policy is contractionary. Show this effect in one diagram using the IS-LM framework and explain in a few sentences. Can you say anything definitely about the net effect? | [4] | CO3 | 5 |
| Q.4 The Keynesian government is up for reelection soon, and so it wants to achieve the natural level of output. (We are still in the short run.) Propose two different policy options that would do the job. For each policy option, draw the IS-LM and the AD-AS diagrams, and show how the first translates into the second. [Make sure all shifts on the graph are clean and visible. Untidy and overwriting is not acceptable.] | [10] | CO4 | 6 |

PTO

Q.5 Use the following information to answer the questions:

[10] CO5 4

Age	Have a full time job	Have a part time job	Don't have a job but are looking for one	Don't have a job and are not looking for one	Total
<10				200	200
10 - 15				155	155
16 - 20	180	60	85	90	415
21 - 30	40	90	35	40	205
31 - 50	85	115	65	50	315
51 - 70	255	55	155	70	535
>70	50	40	30	170	290
Total	610	360	370	775	2115

- i. Determine the magnitude of the labour force in the economy?
- ii. What is the Unemployment Rate for people aged 21 - 50? Report as a percentage to two decimal places.
- iii. Calculate the Unemployment Rate for this economy. Report as a percentage to two decimal places.
- iv. Calculate the Employment Population Ratio for this economy. Report as a percentage to two decimal places.

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