

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI**  
(MID SEMESTER EXAMINATION MO/2024)

CLASS: IMSc.  
BRANCH: QEDS

SEMESTER: III  
SESSION : MO/2024

**SUBJECT: ED205 INTRODUCTORY MACROECONOMICS**

TIME: 02 Hours

FULL MARKS: 25

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

			CO	BL
Q.1(a)	Consider an economy where the government has a deficit budget and there is a deficit in the current account balance. Show that an increase in investment has to be financed by an increase in aggregate savings of the private sector.	[3]	1	1
Q.1(b)	Why is the output of the private sector measured in market prices while that of the government is measured at cost?	[2]	1	3
Q.2(a)	What are the components of GDP when GDP is measured using expenditure method? Why are imports deducted from GDP?	[2]	1	2
Q.2(b)	The automobile (car and two-wheelers) sales are witnessing a downward trend in India in the last couple of months. As a result, it is reported, that the inventories with dealers are increasing. The hope is that, with the onset of the festive season, automobile sales will pick up. Consider the following alternative scenarios and explain which components of GDP will be affected and how. <ol style="list-style-type: none"> <li>i. The dealers are able to sell all their current inventories before 31<sup>st</sup> March, 2025.</li> <li>ii. The dealers are able to sell some cars, but not all cars before 31<sup>st</sup> March, 2025, with a decline in their inventories since the month of August, 2024.</li> <li>iii. The dealers are able to sell some cars, but the number of cars in their inventory as on 31<sup>st</sup> March, 2025 increases from what it was on 31<sup>st</sup> March, 2024.</li> </ol>	[3]	1	3
Q.3(a)	Consider the following behavioral equations: Consumption: $C=250+0.7Y_D$ Investment: $I=200$ ; Government expenditure $G=150$ ; Taxes: $T=100$ Solve for the equilibrium GDP( $Y$ ) and disposable income ( $Y_D$ )	[2]	2	3
Q.3(b)	Now suppose the government increases expenditure to $G=250$ , what will be the new equilibrium GDP? Is the increase in GDP more or less than the increase in government expenditure? Explain why is it so.	[3]	2	3
Q.4(a)	What is Balance of Payments? What are the components of Balance of Payments?	[3]	2	2
Q.4(b)	'The external account must balance'. Explain this statement.	[2]	2	4
Q.5(a)	What relationship is explained by the LM curve?	[5]	2	1
Q.5(a)	The demand for money is given by $M^d = Y(0.7 - 4r)$ where $Y$ is GDP and $r$ is the rate of interest. Derive the LM curve if the money supply is 100. Derive the LM curve if the money supply is 150. Other things remaining constant, how will $r$ change when money supply increases from 100 to 150?	[5]	2	3

:20/09/2024::E