2018

1.

i) Consider the following macroeconomic data for an economy.

$C = 60 + 0.8\ Y_D$ $I = 100$ $G = 200$ $T = 150$ $Tr = 75$

Y_D	=	Disposable National Income
I	=	Investment
T	=	Taxes
C	=	Consumption
G	=	Government purchases
Tr	=	Transfers

a) What is the savings function of this economy? (2 marks)
b) When $Y_D = 500$, Calculate the average propensity to consume and average propensity to save? (4 marks)
c) What is the equilibrium level of National Income? (4 marks)
d) What is the value of the investment multiplier? (2 marks)

ii) Assume in a hypothetical economy that government purchases (G) are Rs. 400 billion, taxes (T) are Rs. 300 billion, and private savings (S) are Rs. 200 billion and private investment (I) is Rs. 250 billion.
What is the value of net exports of this economy? (4 marks)

2017

2.

i) Suppose an aggregate consumption faction for a simple economy is given by C = 100 + 0.8 Y. While investment is given by I = 200.
a) What is the equilibrium level of income in this economy? (2 marks)
b) What is the level of saving at the equilibrium? (2 marks)
c) If, for some reason, aggregate output were at the level of 1700, what would the level of involuntary inventory accumulation be? (2 marks)

ii) Explain why a Rs. 500 million reduction in government purchases (G) will generate a larger fall in real GDP than a Rs. 500 million tax (T) increase. (4 marks)

iii) Assume that GDP (Y) is Rs. 6000 million, personal disposable income is Rs. 5100 million. Government budget deficit is Rs. 200 million, consumption expenditure is Rs. 3800 million and trade deficit is Rs. 100 million.
a) What is the amount of savings (S)? (2 marks)
b) What is the size of investment (I)? (2 marks)
c) How much is government spending (G)? (2 marks)

2016

3.

i) The following macroeconomic data are given for an economy. (All figures are in Rs. Million)

Autonomous consumption	=	500
Planned investment (I)	=	1250
Government purchases (G)	=	1000
Net exports (NX)	=	-250
Marginal propensity to consume (MPC)	=	0.8

Determine the equilibrium level of National income for this economy. (4 marks)

ii) The following macroeconomic data are given for an economy. (All figures are in Rs. Million)

National Income	=	1 000
Consumption	=	500
Government Expenditure	=	250
Net exports	=	100
Budget deficit	=	40

a) Calculate disposable national income. (2 marks)

b) What is the value of investment of this economy? (2 marks)

2015

4.

i) The following macroeconomic data is given for a closed economy: (All figures are in Rs. Million)

Consumption (c)	=	$50+0.8\ Y_d$
Investment (I)	=	120
Government purchases (G)	=	100
Taxes (T)	=	80
Government transfers to households (Tr.)	=	55

a) Determine the equilibrium level of national income for this economy. (2 marks)

b) If Government purchases rises to Rs. 200 million, what would be the new equilibrium level of national income? (2 marks)

c) What is the value of the government expenditure multiplier? (2 marks)

d) If the government intends to achieve a target level of the national income of Rs. 2000 million, what would be the required level of total government purchases? (2 marks)

2013

5.

i) Suppose that for a particular closed economy, for some given time period, investment was equal to 100, government purchases were equal to 75, net taxes were fixed at 100, and consumption (C) given by the consumption function,

$$C = 25 + 0.8\ Y_d$$ (where Yd is disposable income.)

(a) What are the values of the government expenditure multiplier and the tax multiplier? (4 marks)

(b) Suppose that the full-employment level of income for this economy is 1000. What would be the increase in government spending required to reach full-employment income level? Alternatively, what reduction in tax collection would be sufficient to reach full-employment income level? (4 marks)

2012

6.

i) Assume that, without taxes the consumption schedule of an economy is as shown below: (Figures are in Rs. billion)

GDP (Y)	Consumption (C)	GDP (Y)	Consumption (C)
100	120	400	360
200	200	500	440
300	280	600	520

a) Graph this consumption schedule and derive the equation representing the consumption function. (6 marks)

b) Assume now that a lump-sum tax system is imposed, such that the government collects Rs. 20 billion in taxes at all levels of FGDP. Graph the resulting consumption schedule and derive the equation representing the new consumption schedule. (6 marks)

2011

7.

i) For a closed economy with no government, suppose the consumption function is given by C = 100 + 0.8Y, while investment is given by I = 50.

a) What is the equilibrium level of income of this economy?(2 marks)

b) What is the level of savings in equilibrium? (2 marks)

c) If, for some reason, income is at the level of 800, what will the level of involuntary inventory accumulation be? (2 marks)

d) If investment (I) rises to 100, what will the effect be on the equilibrium income? (2 marks)

e) Draw a diagram indicating the equilibrium in both (a) and (d). (4 marks)

2010

8.

i) Suppose the aggregate consumption function for a simple economy is as follows.

C = 200 + 2/3 Y

a) What would the equation be for the aggregate savings function? (3 marks)

b) At which level of income would savings be Zero? (2 marks)

ii) From the macroeconomic data given below, calculate the Level of investment (I) and government purchases (G).

National Income (Y)	=	5,200
Disposable income (Y_d)	=	4,400
Consumption (C)	=	4,100
Budget balance (G-T)	=	150
Net exports (X-M)	=	-110

(4 marks)

2008

9.

i) If equilibrium national income is (Y) – 5,200, disposable income is (Yd) = 4,400, consumption is (c) = 4,100, net exports is (NX) = -110, and the budget deficit is (BD) =150, what is the level of investment (I) at equilibrium? (5 marks)

ii) Suppose the government is considering whether to reduce personal income taxes by Rs. 40 billion or to increase government expenditure by Rs. 40 billion to combat a recession. Assume that price level is constant and the Marginal Propensity to Consume (MPC) is 0.8. What effect would each of these measures have on aggregate demand? Which measure is more expansionary? Why? (5 marks)

2006

10.

i) Consider an economy with no government, imports, or exports and with fixed prices and interest rates. The aggregate consumption function of the economy is C = 150 + 0.60 Yd and investment (i) = 50 (All figures are in Rs. Billions)

a) What is the equilibrium level of aggregate output of this economy? (4 marks)

b) What is the value of the investment multiplier? (2 marks)

ii) Suppose a government sector is now added to the original economy described in part (i). The government spends 100 on goods and services and receives taxes of 100.

a) What is the equilibrium level of aggregate output now?(4 marks)

b) Full employment output in this economy is 800. Suppose government spending is raised to attain this level of output, but taxes are not changed. What level of government spending will result in an equilibrium output of 800? (5 marks)

2005

11.

i) Some information pertaining to aggregate consumption and investment in a simple economy is given below:

- Autonomous (determined independent of current income) consumption = Rs. 50 million.
- Every one rupee increase in income causes 75 cents increase in consumption.
- Investment = Rs. 100 million.

a) Using the above information, construct the consumption and savings functions for this economy. (5 marks)

b) Determine the equilibrium level of national income for this economy. (5 marks)

c) Draw consumption savings and investment functions in a diagram and show the determination of equilibrium level of income (5 marks)

2004

12.

i) Calculate the first four rounds of the multiplier effect for an increase of Rs. 100 billion in investment spending for a closed economy without a government sector where the MPC is 0.8 (4 marks)

2003

13.

i) Consider a macro economy characterized by the following equations;

(Values are in Rs. Millions)

C = 200 + 0.9 Yd

I = 80

G = 300

T = 120

Where C = Consumption, I = investment, G = government spending, and T = taxes. Using this information answer the following;

a) Calculate the equilibrium level of national income. (05 marks)

b) What happens to the equilibrium level of national income if investment rises by Rs. 20 million? (04 marks)

c) If the full employment level of national income is to be Rs. 5000 million. By how much should investment increase in the economy to reach that level? (04 marks)