

INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

Date: _____ FN/AN, Time: 2 Hrs., Full Marks: 60, Deptt: Rajendra Mishra School of Engineering Entrepreneurship, No. of Students: 120, Mid Spring Semester Examination, Sub. No. EP60008, Sub. Name: **Economics of Entrepreneurship**

_____ Yr. B.Tech.(H) / B.Arch.(H) / M.Sc. / M.Tech(Dual)

Instructions: Please write in brief and to the point. No queries will be entertained during the examination. Please clearly state the assumptions made in the solution.

Section – A

All questions are compulsory in Section A.

1. Using the SAS-LAS-AD framework, show with clear illustrations the possible impacts of the following exogenous changes on P and Y. No need for explanations in words if graphs are clearly labeled. (2 x 4 = 8)
 - (a) Large immigrant workforce coming into the country.
 - (b) Emergence of new technological improvements that enhance work efficiency
 - (c) Sharp increase in crude oil price
 - (d) Introduction of new anti-poverty employment schemes by the Government

2. Compute the following: (2 x 3 = 6)
 - (a) A two-sector economy has a total income of Rs. 150 billion and its overall MPC is worked out to be 66.67%. How much does this country need to invest once for all to increase its total income by 100%.

 - (b) The product-market model is given as $C = 100 + 0.8Y$; $S = -100 + 0.2Y$; $I = 120 - 0.5i$; and money-market equations are $M_s = 120$; and $M_d = 0.2Y - 5i$ (where, i is a percentage interest rate). Assuming a change in money supply as $\Delta M_s = 30$, find the level of Y and i at the general equilibrium.

3. (a) Why does an increase in the interest cause a decline in the bond prices? What is its effect on the demand for money? Explain with the help of an example. (4)
 - (b) A persistent sentiment characterized by falling share prices in Indian stock markets is affecting private investment by firms. You are presently in charge of strategic planning with a retail chain in India. Using the simple Keynesian model explain to your Board of Directors how a change in the level of investment spending could indirectly cause a change in the level of household consumption spending? (5)

4. (a) What is meant by the 'liquidity trap'? Why does a change in money supply up to a certain limit does does not help to come out of the liquidity trap? (3)

(b) You work for a leading investment banking company. Your colleague is worried that increased government spending in India as reflected in the burgeoning budget deficits can adversely affect private investment and household consumption spending. Would you agree with her fully? Under what circumstances could she be right? Could there be situations when you could argue against her viewpoint? Elaborate. (4)

Section – B

Answer any three questions in Section B.

(3 x 10 = 30)

5. As a strategic advisor to a bank you are asked to outline to the Board of Directors why government budget deficits are an important cause of economic instability in terms of high inflationary pressure. Explain using the AS-AD framework what are the short-run tradeoffs in tackling the problem of inflation and also the long-term solution to the problem of high inflation?

6. You are working for a large seed producing company. You are asked to report on the possible effects of the El Nina, which is likely to bring unusually good weather and bumper crops for most of India in 2013. However, 2014 is expected to be a bad year for agriculture with the El Nino coming back with a vengeance. What could be the short-run and long-run effects on output and prices? Explain using the AS-AD framework.

7. A three-sector model assuming simultaneous and different changes in fiscal and monetary matters is given as, $C = 100 + 0.75Y_d$; $I = 250 - 4i$; $G = 150$; $T = 40 + 0.20Y$; Transfer Payments $TR = 40$; $M_t = 0.25Y$; $M_{sp} = -20Y$; Nominal supply of Money, $M_s = 1000$; Price level, $P = 5$.

Estimate the following aspects and variables:

- The equilibrium rate of interest and the level of income
- Fiscal multiplier in the system
- The crowding-out effect of additional government spending of Rs. 50 billion on the equilibrium income and the interest rate
- The effect of increase in tax rate from 0.20Y to 0.25Y on the equilibrium income, given the increase in the government spending, and
- Increase in real money supply (ΔM_s) required to counter balance the crowding-out effect of government expenditure

8. For the economy with the following specification:

$C = 100 + 0.9Y_d$; $T = (1/3)Y$; $I = 600 - 30i$; $G = 300$; $M_t = 0.4Y$; $M_{sp} = -50i$; Nominal money supply, $M_s = 1040$; $P = 2$; Full employment level of income = 2500

- Derive the IS and LM equations and compute the equilibrium levels of income and rate of interest
- Compute the change required in the level of government expenditure to achieve full employment level of income
- Explain the change in position of IS and LM curves if MPC changes to 0.60