increase in investment of Rs. 100 crore when MPC = 0.50, is shown through Fig. 7.

An increase in investment brings about an increase in total expenditure or aggregate demand. It shifts the aggregate demand function in the upward direction and the level of income rises the investment multiplier times the initial increase in investment.
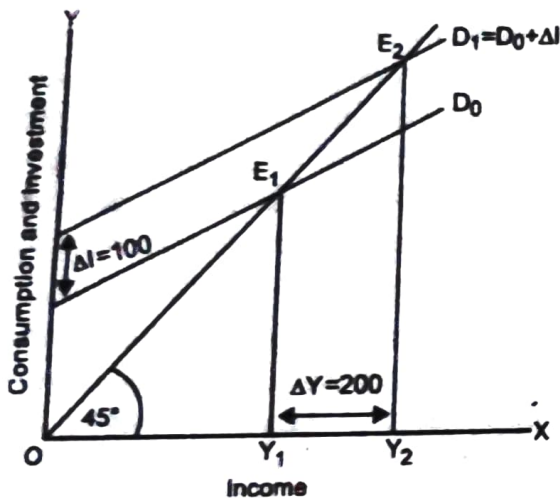

Fig. 7

In Fig. 7, income is measured along the horizontal scale and consumption and investment re measured along vertical scale. The 45° line income-consumption line (Y = C) or aggregate pply function is drawn from the origin. By gregating consumption and investment, we get e aggregate expenditure or aggregate demand nction D_0. It cuts the 45° line at E_1 and the tial equilibrium income is OY_1. If autonomous estment is raised by ΔI = Rs. 100 crore, the regate expenditure or aggregate demand ve shifts to $D_1 = D_0 + \Delta I$. It cuts the 45° and E_2 and the equilibrium income is finally , Y_1Y_2 is the increase in income (ΔY) = 200 crore due to increase in investment = Rs. 100 crore measured by the vertical nce between D_0 and $D_1 = D_0 + \Delta I$ curves. there is an increase in income multiplier the increase in initial investment.

11. DERIVATION OF AGGREGATE DEMAND SCHEDULE FROM IS–LM FRAMEWORK

In Keynesian analysis, the aggregate demand schedule is of fundamental importance. Keynes related the levels of income and employment to the varying level of aggregate spending. If it is assumed that the aggregate expenditure is autonomonsly given and nominal money supply remains constant but there are variations in price level, the aggregate demand can vary inversely with the price level. It is possible to explain this type of relationship between aggregate demand or the level of income or output and price level through the IS–LM model.

If the nominal money supply remains constant but the price level rises, there is a decline in the *real* money supply. It will cause a shift in the LM function to the left. Given the IS function, the equilibrium between IS and LM functions will correspond with higher rate of interest and lower level of income or aggregate demand. It means a lower level of aggregate demand corresponds with a higher level of prices. Thus, there is an inverse relation between price level and aggregate demand or income. Consequently, the aggregate demand schedule slopes negatively. It can be derived through Fig. 8.

In Fig. 8 (*i*), income or aggregate demand is measured along the horizontal scale and rate of interest is measured along the vertical scale. Given originally IS function and LM function corresponding to P_0 level of prices, the equilibrium income and rate of interest are Y_0 and r_0 respectively. As the price level rises from P_0 and P_1, given the nominal money supply, the real money supply decreases, so that the LM function shifts to the left from LM_{P_0} to LM_{P_1}.

The intersection between IS_0 and LM_{P_1} function determines higher rate of interest r_1 and lower income or aggregate demand Y_1. As there is a further rise in price level, the LM function shifts further to the left to LM_{P_2}. The intersection between IS_0 and LM_{P_2} determines still higher rate of interest r_2 and lower level of income Y_2.
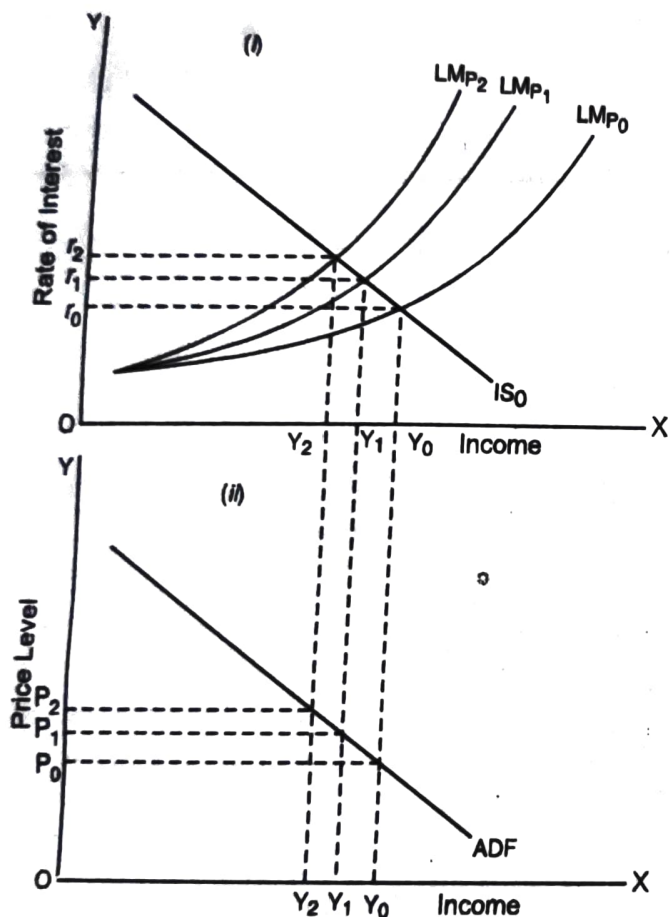

Fig. 8

In Fig. 8 (ii), income or aggregate demand is measured along the horizontal scale and price level is measured along the vertical scale. Verticals are dropped from Y_0, Y_1 and Y_2 upon Fig. (ii) from Fig. (i). P_0, P_1 and P_2 are the corresponding levels of prices. Given Y_0, Y_1 and Y_2 levels of aggregate demand and the corresponding P_0, P_1 and P_2 levels of prices, the aggregate demand schedule ADF has been drawn which slopes negatively. Such a shape of the aggregate demand schedule recognises the real balance effect.

12. AGGREGATE SUPPLY IN SHORT-RUN AND LONG RUN

The aggregate supply curve in the short-run is a horizontal line. It implies that the firms will supply whatever quantity of goods is demanded at the existing level of prices. In the conditions of unemployment, the average costs of production remain the same and firms can obtain as much amount of labour as they require at the current wage. Thus given the cost and wage level, the firms can be willing to supply as much quantity as is demanded at the same price level. Thus the Keynesian notion of short-run aggregate supply curve is that it is a horizontal line as shown in Fig. 9.
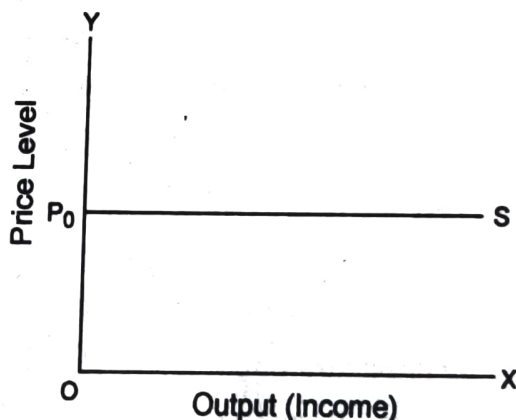

Fig. 9.

In Fig. 9, output or income is measured along the horizontal scale and price level is measured along the vertical scale. Given the short-run price level P_0, as much quantity can be supplied as is demanded so that the short-run aggregate supply curve S is a horizontal line.

In the long-run, given the assumption that there is always full employment of labour, the potential output is fixed. Any increase in demand will push up the level of prices. But firms will be able to supply a fixed quantity corresponding to the full employment of labour so that the aggregate supply curve will be a vertical line.

It is shown through fig.10.

In Fig. 10, S is the aggregate supply curve which is a vertical line. Given the full employment level of output or income Y_0, the variations in demand push the price level to P_0, P_1 and P_2, the potential output or supply remains unchanged at Y_0 so that the aggregate supply curve is a vertical line in the long-run.
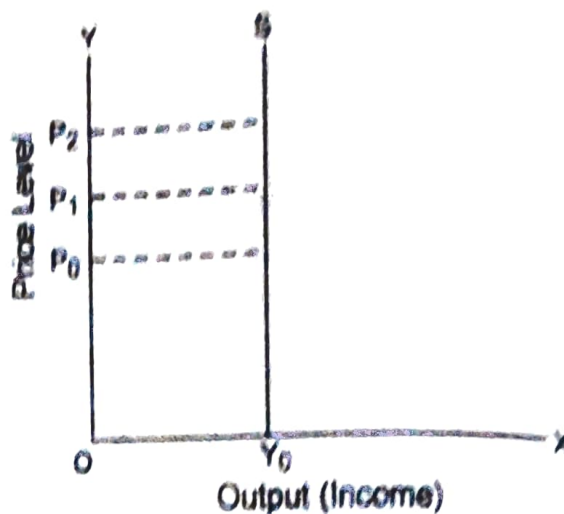

Fig. 10

Questions

Multiple Choice Questions

1. Effective demand manifests itself in
   (a) Consumption
   (b) Investment
   (c) Government expenditure
   (d) Total spending

2. The point of effective demand is determined by
   (a) Aggregate demand and supply functions
   (b) Aggregate demand function
   (c) Aggregate supply function

3. The point of effective demand can be determined at
   (a) Full employment
   (b) Below full employment
   (c) Above full employment
   (d) All the above levels.

4. The aggregate demand function slopes
   (a) Positively
   (b) Negatively
   (c) Neither of the two

5. The aggregate supply function at full empllyment is
   (a) More elastic
   (b) Less elastic
   (c) Perfectly inelastic

6. Paradox of poverty is caused by
   (a) Under-consumption
   (b) Over-saving
   (c) Both of them.

7. The long-run aggregate supply curve is a
   (a) Vertical line
   (b) Horizontal line
   (c) Neither of them

ANSWERS : 1. (d), 2.(a), 3.(d), 4. (a), 5.(c), 6.(c), 7. (a) .