1.Aggregate Demand (AD); is the total demand for goods and services that are produced within a particular country (economy)

The following are the factors that affect the level of aggregate demand

e). The relationship between aggregate demand and interest rate is inverse. That is when the interest rate rises, it becomes costful to borrow money thus the aggregate demand decreases. Also if the interest rate decreases, the number of people borrowing money increases hence the aggregate demand increases.

f). Nominal wealth; Is the actual wealth which a person has without considering or taking into account the inflation and nominal wealth is measured in terms of money and has some few determinants as follows urbanization, occupational status, literacy, number of children and as well as region of residence. Increase in nominal wealth leads to increase in aggregate demand since wealthy people tend to consume more hence aggregate demand increase which is contrary when nominal wealth decreases aggregate demand also decreases

g). Consumer confidence; This is the measure of degree of optimism that consumers feel about the overall state of the economy and their personal financial situation. Optimism simply means hopefulness and confidence about the future. The change in consumer confidence causes a change in the willingness to undertake consumption expenditure especially on durable goods (such as cars, houses and furniture) which in turn leads to change in aggregate demand.
An increase in consumer confidence causes an increase in aggregate demand, while a decrease in consumer confidence causes a decrease in aggregate demand.

h). Income taxes; are tax charges on an individual's income. There is inverse relationship between income taxes and aggregate demand, an increase in income taxes lowers disposable personal income which lowers consumption and reduces aggregate demand. Also, a reduction in income taxes heightens the level of consumption resulting to high disposable personal income which increases aggregate demand.

i).Business confidence; describes the forward-looking expectation of firms. Business confidence fluctuates as economic conditions fluctuate. Business confidence in return influences the decision on whether or not to invest given the existing economic circumstances, which affects the level of aggregate demand. When business confidence is high, firms tend to increase their investment expenditure, expecting higher returns from their investments, which subsequently leads to increase in aggregate demand. A good example is the recovery period in economic cycles. And when business confidence is low, firms cut back on investments spending till the level of business confidence raises again; when the rate of investment returns are more favorable to the firms, as the firms protect their profit levels. This leads to a decrease in aggregate demand. A good example is the recession period in economic cycles.

j).Government spending; Is the spending by all level of the government on goods and services example festival expenditure, roads construction and public wages. It excludes transfer payments such as unemployment benefits and pensions.

k). Net Exports (Exports - Imports); Net exports are a measure of a country's total trade of goods and services. It is also known as the balance of trade. It is at after deducting the nation's import value from the export value and calculated for a specific period. When exports are greater than imports , net exports are positive while when exports are less than imports , net exports are negative.

A major determinant of net exports is foreign demand for a country's goods and services; that demand will vary with foreign incomes. An increase in foreign incomes increases a country's net exports and aggregate demand; a slump in foreign incomes reduces net exports and aggregate demand. For example, several major U.S. trading partners in Asia suffered recessions in 1997 and 1998. Lower real incomes in those countries reduced U.S. exports and tended to reduce aggregate demand.

Question 2.
(l) The IS-Curve (Investment – Saving Diagram), Is a graph of all combination of income/current output and interest rate that result to goods market equilibrium.
It is a graph of interest rate against output that has a negative slope
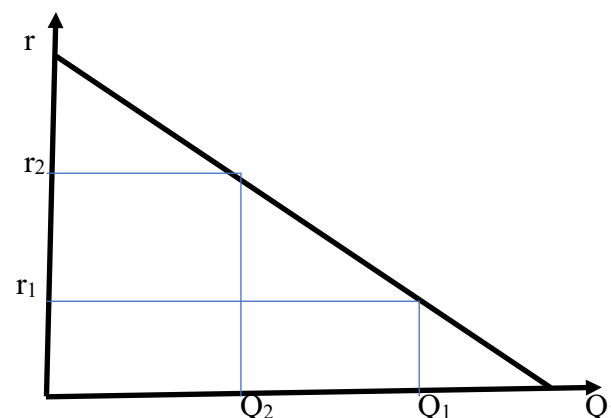
Savings tend to increase with increase in interest rate while on the other hand investment decreases with increase in interest rate.

At higher level of output, savings rise and interest rate falls to restore equilibrium. Also as output increases, investment also increases and thus decrease in interest rate, leading to the downward slope to right.

Points above the IS curve represent an excess supply of goods while points below represent an excess demand for goods.
For IS-curve; Investment = Saving

m). The IS curve, representing combination of interest rates (r) and national income(Y) in a goods market equilibrium, can be derived from the Keynesian graph;
Consider the graph below;

Deriving the IS curve
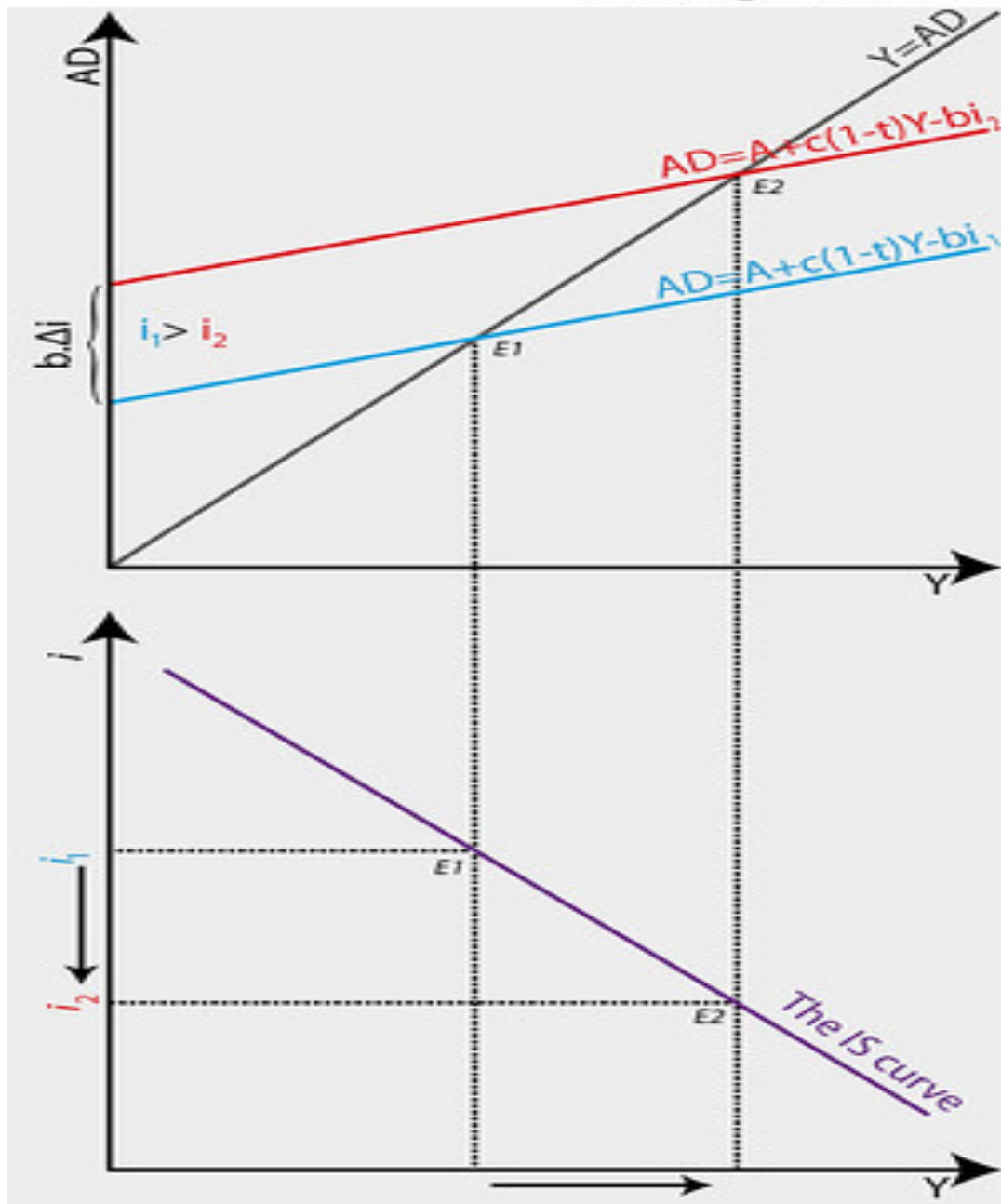
Where;

$E = C + I(r) + G$, planned expenditure

Y is actual expenditure,

G is government spending

I is planned investments, which is not exogenous

C is consumption.

From the Keynesian Cross, a decrease in the level of interest rates lead to an increase in level of investment expenditure by firms, which makes the firms to increase the level of planned investment expenditure from equilibrium and hence, disequilibrium at point y1 (E>Y). This results to depletion of inventories which drives the firms to produce more in order to increase output to the equilibrium point (E2). This illustrates an inverse relationship between interest rates and the level of national output in the IS curve.

n). The effects of change in government expenditure on the IS curve.

An increase in government expenditure from G^0 to G^1 , leads to an increase in planned expenditure from E^0 to E^1, at point y1, E>Y, which leads to unplanned depletion of inventories so firms have to produce more to increase the output from Y^0 to Y^1. This leads to rise in income to a new equilibrium (E2). The effects of the rise in income can be illustrated in the IS curve, as at the same level of interest, r^0, the income curve shifts towards the right.

Consider the graphs below;
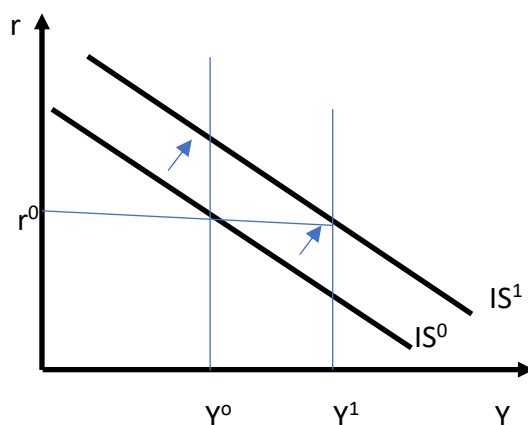
A decrease in government expenditure from G^0 to G^1 leads to a decrease in planned expenditure from E^0 to E^1, at point y3, , E<Y, which leads to unplanned accumulation of inventories so firms have to produce less to decrease the output. This leads to fall in income to a new equilibrium (E2). The effects of the fall in income can be illustrated in the IS curve, as at the same level of interest, the income curve shifts towards the left.

Consider the graphs below;

r
|
| \   \
| \   \
| \   \   E < Y
r⁰ ─────\────\
| \   \   IS¹
| \   \
| \   \   IS⁰
|_____ Y
         Y³   Y²   Y
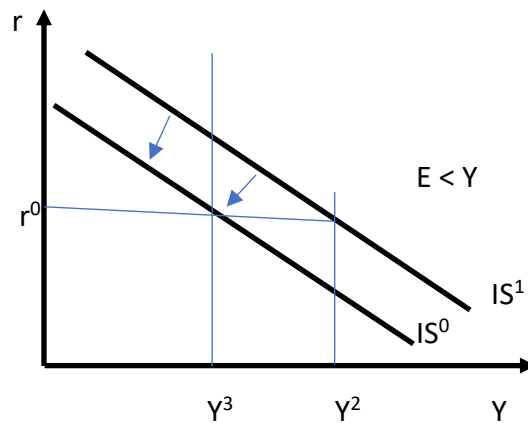
O). The increase in tax, shifts the IS curve to the left side.
Consider the Keynesian cross below for the closed economy.

E
|
| A
| B
|_____ Y
     Y₂   Y₁   Y
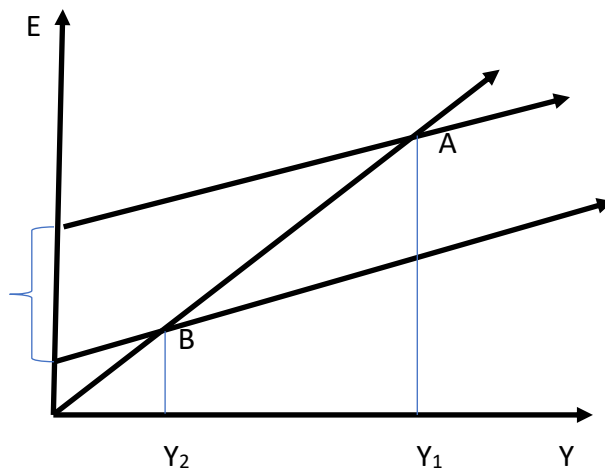
Clearly at point A, Y>E2, this is accumulation of inventories. Thus firms will decrease the production to reach the new equilibrium at B.
The effect on IS curve becomes as follows:

r
|
| \   \
| \   \
| \   \
| \   \   IS¹
| \   \   IS²
|_____ Y
      Y₂◄── Y₁   Y