NCERT SOLUTIONS

CLASS - 12th

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Class : 12th

Subject : Economics

Chapter : 5

Chapter Name : Government budget and the economy

Q1 Explain why public goods must be provided by the government.

Answer. Public goods are those goods which are not provided by the market forces of demand and supply. These goods include defence, infrastructural facilities etc. They aren't provided by the private sector because they are provided to all the citizens irrespective of their purchasing power while the private sector provides goods to only those people who have the purchasing power.

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Q2 Distinguish between revenue expenditure and capital expenditure.

Answer. The budget expenditure of the government is divided into two categories - revenue and capital expenditure. The key differences between the two are as follows -

Basis	Revenue expenditure	Capital expenditure
1. Definition	It is the expenditure incurred on the day to day working of the government.	It is the expenditure incurred on purchasing of the financial assets or disposing of loan.
2. Nature	It occurs again and again i.e. They are recurring in nature.	They are non - recurring in nature. Once incurred, they provide long term benefits.
3. Purpose	They are incurred for day to day operations and not for purchasing any asset.	They are incurred for acquisition of a financial asset or to dispose off the liability.
4. Examples	Payment of salaries, interest payments etc.	Payment of loans, acquisition of asset etc.

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Q3 ‘The fiscal deficit gives the borrowing requirement of the government’. Elucidate.

Answer. The fiscal deficit is the difference between the government expenditure and the government receipts (excluding borrowings). Hence it calculates the borrowing of the government. If this will increase, then it means that the government borrowings will also rise. It means that the fiscal deficit will rise. It will thereby increase the burden of the loan and its interest.

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Q4 Give the relationship between the revenue deficit and fiscal deficit.

Answer. Revenue deficit is the difference between revenue expenditure and revenue receipts of the government.
Fiscal deficit is the difference between government expenditure and government receipts except borrowings.
If the fiscal deficit will increase, then it means that the government borrowings will rise. Hence, the funds available with the government for revenue expenditure will fall and it will have to borrow more money.
Hence, with the rise in the fiscal deficit, the revenue deficit also increases.

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Q5 Suppose that for a particular economy, investment is equal to 200, government purchases are 150, net taxes (that is lump-sum taxes minus transfers) is 100 and consumption is given by C = 100 + 0.75Y (a) What is the level of equilibrium income? (b) Calculate the value of the government expenditure multiplier and the tax multiplier. (c) If government expenditure increases by 200, find the change in equilibrium income.

Answer. Given that the investment (I) = 200,
Government purchases (G) = 150,
Net taxes (T) = 100,
Consumption function - 100 + 0. 75Y
Hence, autonomous consumption(C) = 100, MPC(b) = 0.75.

a) Equilibrium income $= \left[\frac{1}{(1-b)}\right] \times (I + G + C - bT)$

$= \left[\frac{1}{(1-0.75)}\right] \times (200 + 150 + 100 - 0.75 \times 100))$

$= \left(\frac{1}{0.25}\right) \times 375$

= ₹1500.

b) Government investment multiplier = $\dfrac{1}{(1-b)}$

$= \dfrac{1}{(1-0.75)} = \dfrac{1}{0.25} = 4$

Government tax multiplier = $\dfrac{-b}{(1-b)}$

$= \dfrac{0.75}{(1-0.75)}$

$= \dfrac{-0.75}{0.25}$

$= -3$

c) If the government expenditure(G) increases by 200,New equilibrium income will be -

$\left[\dfrac{1}{(1-0.75)}\right] \times (200 + 150 + 200 + 100 - 0.75 \times 100)$

$= \left(\dfrac{1}{0.25}\right) \times 575$

= ₹2300.

Hence change in income = 2300 - 1500 = ₹800.

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Q6 Consider an economy described by the following functions: C = 20 + 0.80Y, I = 30, G = 50, TR = 100 (a) Find the equilibrium level of income and the autonomous expenditure multiplier in the model. (b) If government
expenditure increases by 30, what is the impact on equilibrium income? (c) If a lump-sum tax of 30 is added to pay for the increase in government purchases, how will equilibrium income change?

Answer. Given that the investment (I) = 30,
Government purchases (G) = 50,
Net transfers (TR) = 100,
Consumption function = 20 + 0. 80Y
Hence, autonomous consumption(C) = 20, MPC(b) = 0.80.

a) Equilibrium income =

= \left(\dfrac{1}{0.2}\right)\times 180 = 900 $\sin^2\theta$ 900 0 $

Autonomous expenditure multiplier(m) = $\frac{1}{(1-b)}$

= $\dfrac{1}{(1-0.8)}$

= 5

b) If the government expenditure increases by 30,

new equilibrium income = $\left[\frac{1}{(1-b)}\right] \times (I + G + C + bTR)$

= $\left[\frac{1}{(1-0.8)}\right] \times (30 + 50 + 30 + 0.80 \times 100 + 20)$

= 5×210 = 1050.

c) Tax multiplier = $\frac{-b}{(1-b)}$

= $\frac{-0.80}{(1-0.80)}$

= - 4.

Change in income due to change in tax = - 4 $\times$ 30 = (-120)

New equilibrium income = 900 - 120 = 780.

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Q7 In the above question, calculate the effect on output of a 10 per cent increase in transfers, and a 10 per cent increase in lump-sum taxes. Compare the effects of the two.

Answer. Given that the investment (I) = 30,
Government purchases (G) = 50,
Transfers (TR) = 100,
Consumption function = 20 + 0. 80Y
Hence, autonomous consumption(C) = 20, MPC(b) = 0.80.
Change in transfers $(\triangle TR) = 10$

New equilibrium income = $\left[\frac{1}{(1-0.8)}\right] \times (30 + 50 + 0.80 \times 100 + 0.80 \times 10 + 20)$

= $\left(\frac{1}{0.2}\right) \times 188 = 940$

Hence, change in income = 940 - 900 = 40.

Again change in taxes $(\triangle T) = 10$

So, change in income = $\frac{-b}{(1-b)} \times \triangle T$

= $\frac{-0.80}{(1-0.8)} \times 10$

= - 4 $\times$ 10

= - 40.

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Q8 We suppose that C = 70 + 0.70Y D, I = 90, G = 100, T = 0.10Y (a) Find the equilibrium income. (b) What are tax revenues at equilibrium income? Does the government have a balanced budget?

Answer. Given - Autonomous consumption (.C) = 70,
MPC (b) = 0.70, I = 90, G = 100, T = 0.10Y

A) Equilibrium income (Y) = C + I + G + bY
   Y = 70 +90+ 100 + 0.7 $(Y-T)$
   Y = 260 + 0.7 $(Y-0.10Y)$
   Y = 260 + 0.63Y
   0.37Y = 260
   Y = 702.7
B) Tax = 0.10 $\times$ 702.7 = 70.27.

Now we can see that the government expenditure = 100 while the tax revenue generated is only 70.27.
For a government budget to be balanced, the revenue of the government must be equal to the expenditure of the government. But here, they aren't equal and hence, the budget isn't balanced. It is a deficit budget.

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Q9 Suppose marginal propensity to consume is 0.75 and there is a 20 percent proportional income tax. Find the change in equilibrium income for the following
(a) Government purchases increase by 20 (b) Transfers
decrease by 20.

Answer. Given that MPC (.c) = 0.75, change in tax (t) = $\frac{20}{100}=0.2$, change in government purchases $(\triangle G)=20$, decrease in transfers $(\triangle TR)=20.$

Change in income = $\frac{1}{[1-c(1-t)]}\times\triangle G$

$$=\frac{1}{[1-0.75(1-0.2)]}\times 20$$

$$=\frac{1}{(1-0.6)}\times 20$$

= 50.

Change in income due to transfers = $\frac{c}{(1-c)\times\triangle T}$

$$=\frac{0.75}{(1-0.75)}\times 20$$

$$= \frac{0.75}{0.25} \times 20$$

= 60

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Q10 Explain why the tax multiplier is smaller in absolute value than the government expenditure multiplier?

Answer. We can see that the tax multiplier is always smaller than the government expenditure multiplier in absolute value. It is so because when the government increases its expenditure, the total aggregate demand rises in the same proportion.
The disposal income of the people is affected by tax multiplier and thereby the consumption level in the economy changes. The total disposal income which increases due to more expenditure isn't consumed. Only a portion of it is consumed. This will lead to increase to increase in tax at lesser rate. Hence the change in the tax multiplier is smaller than the change in the government expenditure.

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Q11 Explain the relation between government deficit and government debt.

Answer. Government deficit is the excess of government expenditure over its receipts in a financial year. When the government does more expenditure, then it has to borrow funds for making such expenses.
Hence, government has to raise loans. Then, it has to pay back the loan along with the interest amount. For this purpose, it takes another loan and this circle goes on. Hence the government deficits give rise to the government debts.

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Q12 Does public debt impose a burden? Explain.

Answer. Public debt is the amount of the loan raised by the government to meet the deficit. It is a burden on the general public. The government in order to pay back the loan amount, may borrow money from outside or from RBI.
The government has to pay interest on the external debts, whose burden is shifted on the public in the form of taxes.
If it borrows funds from RBI, then new currency is issued. Due to the increased money supply,the inflation in the economy rises which thereby is a burden on the general public.
When the government borrows funds for unproductive purposes, then the money don't provide any return and hence it proves as a burden.

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Q13 Are fiscal deficits inflationary?

Answer. Yes, fiscal deficit is inflationary. Fiscal deficit is equal to the borrowing of the government. When the government borrows funds from the Reserve Bank of India, then it issues new currency in the market. Thus leads to increased money supply in the economy thereby causing inflation. Hence, the fiscal deficit proves to be inflationary.

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Q14 Discuss the issue of deficit reduction.

Answer. The deficit reduction is the process of reducing the difference between the government expenditure and government receipts. It can be done in two ways.

A) By increasing the receipts - The government may impose more taxes on the people to collect more money and thereby reducing the deficit.
B) By reducing the expenditure - If the give reduces its expenditure on the non-productive activities, then also it can reduce its deficit.

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Q15 What do you understand by G.S.T? How good is the system of G.S.T as compared to the old tax system? State its categories.

Answer. GST(Goods and Services Tax) is the integrated taxation system of India. It has replaced VAT, Sales tax and other indirect taxes on the countries. It is very beneficial as compared to old tax system.

A) GST is imposed at the point of consumption. Under the previous systems, the tax was levied at each stage and the system was not uniform. But under the GST, the system is uniform.
B) The tax were categorised into many categories under the previous tax laws. But after the introduction of GST, there is only one centralised taxation system.
C) Due to different taxation rates in all the states and for all categories of taxes, it was very difficult for the government to account for these taxes. But under GST, the system is simplified.

GST is divided into three categories -

1) CGST - Central Goods and Services Tax goes to the central government. It has merged the Central Sales Tax, Central Excise Duty etc.
2) SGST - State Goods & Services Tax (SGST) is the tax levied by the State governments. Its revenue belongs to the state governments.

3) IGST - Integrated Goods & Services Tax is the tax imposed on the inter-state transactions. The revenue earned under the IGST is shared by state government and central government in agreed ratio.

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