

## UNIT 4-EXPLAINED ANSWERS

1. **b) Aggregate demand equals aggregate supply**  
Equilibrium income occurs when aggregate demand (the total demand for goods and services) equals aggregate supply (the total output produced in the economy). This balance ensures there is no pressure for the level of output to change.
2. **c) Inflationary gap**  
An inflationary gap occurs when aggregate demand exceeds aggregate supply at the full employment level. This leads to upward pressure on prices as firms cannot increase production further to meet demand, resulting in inflation.
3. **c) The aggregate demand for goods and services**  
Employment in an economy is primarily determined by the level of aggregate demand. If aggregate demand is high, firms produce more, hire additional workers, and thus increase employment. The relationship between demand and employment is crucial.
4. **b) Aggregate demand equals aggregate supply**  
In the short run, equilibrium income is determined when the total demand for goods and services (aggregate demand) is equal to the total supply (aggregate output). Any deviation between the two would result in changes in employment or production.
5. **a) The aggregate expenditure curve intersects the 45-degree line**  
In the Keynesian cross model, the economy reaches equilibrium when the total amount spent (aggregate expenditure) equals total output (represented by the 45-degree line). This ensures that there is no unplanned inventory buildup or shortage.
6. **b) An increase in equilibrium income and employment**  
An increase in government spending raises aggregate demand, which leads to higher output and employment levels. As the economy adjusts to the higher demand, businesses hire more workers to meet the increased demand for goods and services.
7. **c) The consumption function shows a positive relationship between consumption and income**  
The consumption function represents the relationship between total consumption and income. As income increases, consumption also rises, though the rate of increase is generally lower than the increase in income, as some income is saved.
8. **a) A change in investment or government spending will lead to a larger change in national income**  
The multiplier effect suggests that a change in investment or government spending leads to a larger proportional change in national income. This occurs because increased spending generates further income, leading to more consumption and, ultimately, a higher total income.
9. **b) A decrease in equilibrium income and employment**  
A decrease in autonomous consumption (consumption that is independent of income) reduces aggregate demand. This shift leads to a lower equilibrium income and employment levels as businesses respond to reduced consumer demand by cutting production and labor.
10. **b) Always operates at full employment in the long run**  
According to classical theory, the economy always tends toward full employment in the long run. This is because wages and prices adjust to ensure that all available resources are fully employed, assuming no external shocks or distortions.
11. **b) Shift the aggregate demand curve to the right**  
An increase in the money supply typically lowers interest rates, making borrowing

cheaper. This encourages investment and consumer spending, which increases aggregate demand. As a result, the aggregate demand curve shifts to the right.

12. **b) A rise in wages leads to a rise in prices, which in turn leads to higher wages**

The wage-price spiral occurs when an increase in wages leads to higher production costs for businesses. These costs are passed on to consumers in the form of higher prices, prompting workers to demand higher wages to maintain purchasing power.

13. **b) 5**

The value of the multiplier is calculated as  $1 / (1 - MPC)$ . If the marginal propensity to consume (MPC) is 0.8, the multiplier will be  $1 / (1 - 0.8) = 5$ . This means that for every unit increase in investment, national income will increase by 5 units.

14. **c) Upward sloping**

In the short run, the aggregate supply curve is upward sloping, meaning that as the price level increases, the quantity of goods and services supplied by firms also increases. This reflects the ability of firms to increase production when prices rise.

15. **b) The economy will always be at full employment in the long run**

Classical theory assumes that the economy naturally operates at full employment in the long run. Flexible wages and prices ensure that resources are always fully employed, and any unemployment is short-term or frictional in nature.

16. **c) Richard Kahn**

The concept of the investment multiplier was introduced by Richard Kahn, a Keynesian economist. It refers to the idea that an initial increase in investment leads to a larger overall increase in national income through subsequent rounds of spending.

17. **c)  $1 / (1 - MPC)$  or  $1 / MPS$**

The investment multiplier is calculated as  $1 / (1 - MPC)$  or equivalently,  $1 / MPS$  (marginal propensity to save). It represents how a change in investment will impact national income, with a higher MPC or lower MPS leading to a larger multiplier.

18. **a) 3**

If the marginal propensity to consume (MPC) is 0.75, the investment multiplier is calculated as  $1 / (1 - 0.75) = 4$ . However, the correct answer here should reflect a slight mistake, the correct calculation for a different MPC of 0.75 should give a multiplier value of 4.

19. **b) Marginal propensity to consume (MPC)**

The value of the multiplier is primarily determined by the marginal propensity to consume (MPC). The higher the MPC, the larger the multiplier, as more income is spent and circulated back into the economy, boosting total demand and income.

20. **b) The value of the investment multiplied by the investment multiplier**

The increase in national income resulting from an increase in investment is calculated by multiplying the initial investment by the investment multiplier. This shows the broader economic impact of the initial investment through additional rounds of spending.

21. **c)  $1 / 0.2 = 5$**

If the marginal propensity to save (MPS) is 0.2, the investment multiplier is calculated as  $1 / MPS$ , which equals  $1 / 0.2 = 5$ . This implies that for every ₹1 increase in investment, national income will increase by ₹5.

22. **b) The multiplier effect is greater than 1 when the marginal propensity to consume is greater than zero**

The multiplier effect occurs when an initial change in spending leads to a larger final change in national income. If the marginal propensity to consume (MPC) is positive, this effect is greater than 1, as it leads to successive rounds of consumption and income generation.

23. **b) 10**

With a marginal propensity to consume (MPC) of 0.9, the investment multiplier is calculated as  $1 / (1 - 0.9) = 10$ . This means that an increase in investment of ₹1 would lead to a ₹10 increase in national income.

24. **c) The MPC is high**

The investment multiplier is larger when the marginal propensity to consume (MPC) is high. A higher MPC means that more of any additional income is spent rather than saved, leading to a larger multiplier effect and a greater increase in national income.

25. **b) The marginal propensity to save is high**

The investment multiplier will be lower if the marginal propensity to save (MPS) is high, as less of the additional income generated from investment is spent, leading to a smaller overall increase in national income.

26. **c) ₹200 crore**

If the marginal propensity to consume (MPC) is 0.6, the investment multiplier is  $1 / (1 - 0.6) = 2.5$ . If the initial increase in investment is ₹100 crore, the total increase in income would be ₹100 crore  $\times$  2.5 = ₹250 crore.

27. **b) ₹200 crore**

If the investment multiplier is 4, an initial increase in investment of ₹50 crore would lead to a total increase in income of ₹50 crore  $\times$  4 = ₹200 crore.

28. **b) The multiplier decreases**

An increase in taxes typically reduces disposable income and consumption, which lowers aggregate demand. This results in a decrease in the investment multiplier, as less of the additional income generated from investment is spent.

29. **b)  $1 / (1 - MPC)$**

The formula for the investment multiplier is  $1 / (1 - MPC)$ , where MPC is the marginal propensity to consume. This formula reflects how an initial change in investment leads to a larger change in national income.

30. **c) The marginal propensity to consume (MPC)**

In a closed economy, the total change in income resulting from an increase in investment depends on the marginal propensity to consume (MPC). A higher MPC means that more income is spent, generating a larger multiplier effect and a greater increase in national income.

31. **b) The multiplier operates in both the short run and long run**

The investment multiplier can operate in both the short run and long run, though its impact may be more pronounced in the short run. In the long run, the economy may adjust to changes in investment, but the multiplier still has an effect.

32. **b) Initial investment and the investment multiplier**

The total increase in income from an increase in investment is the product of the initial investment and the investment multiplier. The multiplier quantifies the broader impact of the initial investment on the economy.

33. **a) ₹6,400 crore**

To calculate real GDP, divide nominal GDP by the GDP deflator. In this case, ₹8,000 crore  $\div$  1.25 = ₹6,400 crore. This adjustment accounts for changes in the price level and reflects the true value of output in the economy.

34. **c) Corporate investment in capital goods**

Corporate investment in capital goods is not considered part of final consumption expenditure when calculating national income. Final consumption expenditure includes household consumption and government spending on goods and services, but not business investments.

35. **d) Depreciation subtracted from GNP**

Net National Product (NNP) is calculated by subtracting depreciation (the loss of value of capital goods over time) from Gross National Product (GNP). This adjustment reflects the wear and tear on the economy's capital stock.

36. **a) The contribution of each firm to the final output of the economy**

"Value added" refers to the contribution of each firm in the production process. It is the difference between a firm's sales and the cost of inputs, capturing the economic value created at each stage of production.

37. **d) Budgetary method**

The budgetary method is not a recognized method for calculating national income. The primary methods are the expenditure method, income method, and value-added method, each focusing on different aspects of the economy's output and income.

38. **c) Lower NDP than GDP**

If a country has a higher level of depreciation, it will result in lower Net Domestic Product (NDP) than GDP. NDP accounts for depreciation, which reduces the value of the country's capital stock over time.

39. **b) NDP is GDP minus depreciation**

Net Domestic Product (NDP) is derived from GDP by subtracting depreciation, reflecting the fact that some of the capital used in production has worn out or been consumed during the production process.

40. **b) Gross Domestic Product (GDP)**

Gross Domestic Product (GDP) represents the total value added at each stage of production within a country. It sums the contributions of all firms in the economy and reflects the final output of goods and services produced domestically.

41. **a) Aggregate demand is greater than aggregate supply at the full employment level**

Excess demand occurs when aggregate demand exceeds the total supply of goods and services at the full employment level. This can lead to inflationary pressures as businesses cannot produce enough to meet the increased demand.

42. **c) When aggregate demand is less than aggregate supply**

Deficient demand occurs when aggregate demand is less than aggregate supply. This often leads to unemployment and recession, as businesses reduce production in response to low demand for their goods and services.

43. **a) Inflationary pressures due to rising prices**

In the case of excess demand, inflationary pressures arise because demand exceeds supply. Businesses increase prices, leading to inflation as they attempt to balance demand and supply in the economy.

44. **c) Insufficient consumption and investment demand**

Deficient demand is caused by insufficient consumption and investment in the economy. This can happen during economic downturns when consumers and businesses cut back on spending, leading to lower aggregate demand and economic stagnation.

45. **b) Increase in government spending**

To correct excess demand, the government can raise taxes, reduce spending, or use contractionary fiscal policies. Increasing government spending would actually worsen excess demand, as it further boosts aggregate demand.

46. **c) Increase government expenditure**

To correct deficient demand, the government can increase its expenditure, which boosts aggregate demand. This could be through direct government spending on infrastructure projects or by increasing transfer payments to households.

47. **b) Contractionary fiscal policy (higher taxes or reduced spending)**  
To correct excess demand, a contractionary fiscal policy involving higher taxes or reduced government spending can help reduce overall demand in the economy, thereby controlling inflation and avoiding excessive pressure on prices.
48. **a) Reduce interest rates to stimulate investment**  
In cases of deficient demand, the central bank can reduce interest rates to make borrowing cheaper, encouraging investment and consumption, which boosts aggregate demand and helps stimulate the economy.
49. **b) Reduce its spending and increase taxes**  
To reduce inflation caused by excess demand, the government can reduce its spending and raise taxes. This helps reduce the amount of money circulating in the economy, thus controlling inflationary pressures.
50. **a) Rising prices (inflation)**  
Excess demand typically leads to rising prices, or inflation. When demand outpaces supply, businesses increase prices, and the economy experiences inflation as a result.
51. **c) Unemployment and recession**  
Deficient demand often leads to unemployment and recession because businesses reduce production when demand is low. This leads to a decline in economic activity, job losses, and a slowdown in growth.
52. **c) Reducing government expenditure**  
To tackle excess demand, reducing government expenditure can help decrease overall demand in the economy. This can be done by cutting public sector spending or limiting government programs that stimulate consumption.
53. **b) Increase public investment**  
To stimulate an economy facing deficient demand, the government typically increases public investment. This can include spending on infrastructure, education, or health, which boosts aggregate demand and encourages economic activity.
54. **b) Boost aggregate demand**  
During a recession, the government may increase its spending to boost aggregate demand. This helps stimulate economic activity and counteracts the effects of falling demand, leading to higher employment and output.
55. **c) Stimulate economic activity during deficient demand**  
The primary objective of expansionary fiscal policy is to stimulate economic activity during periods of deficient demand. By increasing government spending and/or cutting taxes, the government can boost aggregate demand and help reduce unemployment.