UP Board Class 12 Economics 2026 (Set 329 DG) Question Paper with Solutions

General Instructions

(i) This booklet contains 25 questions, each provided with a complete, step-by-step solution.

(ii) It comprises 10 single-correct multiple-choice questions.

(iii) Attempt each question on your own before reviewing the given solution.

1. How does Robbins define Economics?

(A) Science of market

(B) Science of business

(C) Science of life

(D) Science of scarcity

Correct Answer: (D) Science of scarcity

Solution:

Step 1: Understanding the Question:

Lionel Robbins gave a scarcity-based definition of Economics in 1932, shifting away from Marshall's welfare-based definition.

Step 2: Why option D is correct:

Robbins defined Economics as "the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses." This is universally summarised as the "Science of scarcity" (or the science of choice).

Step 3: Why option A is wrong:
"Science of market" describes only the exchange side of economic activity, not Robbins's behavioural/choice-based definition.

Step 4: Why option B is wrong:
"Science of business" narrows economics to commerce alone, which is not what Robbins meant by ends and scarce means.

Step 5: Why option C is wrong:
"Science of life" was, roughly, Marshall's welfare-based framing (economics as an ordinary business of life), not Robbins's.

Final Answer:
Robbins's definition is the **Science of scarcity**.

Quick Tip: Robbins (1932) defined economics around scarce means with alternative uses, not welfare.

2. Inventory is a ..... concept whereas the change in inventory is a ..... concept.

(A) stock, flow

(B) flow, stock

(C) stock, stock

(D) flow, flow

Correct Answer: (A) stock, flow

Solution:

Step 1: Understanding the Question:
In national-income accounting, a **stock** is measured at a point in time; a **flow** is measured over a period of time.

Step 2: Why option A is correct:
Inventory (the stock of unsold goods a firm holds) is measured on a particular date, e.g. 31 March — that makes it a stock. The *change* in inventory over the accounting year is measured over a period, e.g. April to March — that makes it a flow.

Step 3: Why option B is wrong:
This reverses the logic: inventory itself is not measured over a period, and change in inventory is not measured at a single instant.

Step 4: Why option C is wrong:
Calling both concepts "stock" ignores that change is inherently a period-based (flow) measure.

Step 5: Why option D is wrong:
Calling both "flow" ignores that the inventory level itself is a point-in-time (stock) measure.

Final Answer:
Inventory is a **stock**, change in inventory is a **flow**.

Quick Tip: Stock = measured at a point in time; flow = measured over a period.

3. The consumption function curve is

(A) Upward sloping

(B) Downward sloping

(C) Parallel to the x-axis

(D) Parallel to the y-axis

Correct Answer: (A) Upward sloping

Solution:

Step 1: Understanding the Question:

The Keynesian consumption function is written C = a + bY, where a is autonomous consumption and b is the marginal propensity to consume (MPC), with 0 < b < 1.

Step 2: Why option A is correct:

Since b (the slope) is positive, consumption C rises as income Y rises — the curve therefore slopes upward from left to right, starting from a positive intercept 'a' on the C-axis.

Step 3: Why option B is wrong:

A downward slope would mean consumption falls as income rises, which contradicts the basic psychological law that consumption increases with income.

Step 4: Why option C is wrong:

A line parallel to the x-axis would mean consumption never changes with income at all (MPC = 0), which is not how the standard consumption function is drawn.

Step 5: Why option D is wrong:

A line parallel to the y-axis is not even a function of income (it would

mean one income level supports every possible consumption), so it cannot represent C = a + bY.

Final Answer:
The consumption function curve is **upward sloping**.

Quick Tip: C = a + bY with MPC (b) between 0 and 1 gives a positively sloped line.

4. Which of the following makes a financial institution a bank?

(A) Accepting deposits

(B) Lending

(C) Accepting demand deposits

(D) Accepting time deposits

Correct Answer: (C) Accepting demand deposits

Solution:

Step 1: Understanding the Question:
Many financial institutions (post offices, NBFCs, cooperatives) accept deposits and lend money, so we need the feature that is unique to banks specifically.

Step 2: Why option C is correct:
Only commercial banks are legally permitted to accept **demand deposits** — deposits withdrawable on demand by cheque — which allows banks to create credit (the money-multiplier process). This chequable, on-demand feature is what distinguishes a bank from any

other financial institution.

Step 3: Why option A is wrong:
Non-bank institutions (e.g. post office savings schemes, NBFCs) also accept deposits, so mere deposit-taking does not define a bank.

Step 4: Why option B is wrong:
Lending is done by many non-bank financial companies too, so lending alone is not the defining feature.

Step 5: Why option D is wrong:
Accepting time (fixed) deposits is also done by non-bank institutions like cooperative societies and post offices, so it is not unique to banks either.

Final Answer:
Accepting **demand deposits** is what makes a financial institution a bank.

Quick Tip: Only banks can accept demand (chequable) deposits — the legal test of a bank.

5. Decrease in Cash Reserve Ratio will lead to

(A) fall in aggregate demand

(B) rise in aggregate demand

(C) no change in aggregate demand

(D) fall in general price level

Correct Answer: (B) rise in aggregate demand

Solution:

Step 1: Understanding the Question:

Cash Reserve Ratio (CRR) is the fraction of a bank's deposits that must be kept with the central bank, and it is a quantitative monetary-policy tool.

Step 2: Why option B is correct:

A fall in CRR frees up more funds with commercial banks for lending. Through the credit-multiplier process this increases the money supply, which lowers interest rates and raises investment and consumption spending — i.e. aggregate demand rises.

Step 3: Why option A is wrong:

A fall (not rise) in aggregate demand would follow an *increase* in CRR, which restricts lending — the opposite of what is asked here.

Step 4: Why option C is wrong:

Since CRR directly affects banks' lendable funds and hence the money supply, "no change" contradicts the entire monetary-transmission mechanism.

Step 5: Why option D is wrong:

A fall in CRR is expansionary (raises AD, and typically raises prices), so a fall in the general price level would be inconsistent — that outcome follows a CRR hike, not a cut.

Final Answer:

A decrease in CRR causes a **rise in aggregate demand**.

Quick Tip: Lower CRR → more lendable funds → higher money supply → higher AD.

6. The shape of average revenue curve in monopoly is

(A) Upward rising

(B) U-shaped

(C) Downward sloping

(D) S-shaped

Correct Answer: (C) Downward sloping

Solution:

Step 1: Understanding the Question:
Under monopoly there is a single seller, and Average Revenue (AR) always equals price (AR = TR/Q = P).

Step 2: Why option C is correct:
A monopolist faces the entire (downward-sloping) market demand curve, since AR = Price, the AR curve is identical to this downward-sloping demand curve — to sell more units the monopolist must lower the price.

Step 3: Why option A is wrong:
An upward-rising AR would mean price rises as quantity sold rises, which contradicts the law of demand faced by a monopolist.

Step 4: Why option B is wrong:
U-shaped curves are typical of short-run average cost curves, not the

AR/demand curve of a monopolist.

Step 5: Why option D is wrong:
An S-shape describes curves like the Total Product curve under diminishing marginal returns, not AR.

Final Answer:
The monopolist's AR curve is **downward sloping**.

Quick Tip: AR = Price for any firm; a monopolist's price-quantity (demand) relation is downward sloping.

7. Fiscal deficit in a government budget refers to

(A) Shortfall in taxes

(B) Disinvestment requirement

(C) Shortfall in disinvestment

(D) Borrowing

Correct Answer: (D) Borrowing

Solution:

Step 1: Understanding the Question:
Fiscal deficit is defined as Total Expenditure minus Total Receipts *excluding borrowings*.

Step 2: Why option D is correct:
Since the deficit is calculated by excluding borrowed money from receipts, the resulting gap is exactly the amount the government must

borrow to finance its spending — so fiscal deficit is a direct measure of the government's **borrowing** requirement.

Step 3: Why option A is wrong:
A tax shortfall is only one possible component of the revenue side; fiscal deficit is a broader measure covering the whole gap between spending and non-borrowed receipts, not taxes alone.

Step 4: Why option B is wrong:
Disinvestment (selling government stakes in PSUs) is itself a capital receipt included on the receipts side; the fiscal deficit is not defined as a "requirement" for disinvestment.

Step 5: Why option C is wrong:
A shortfall specifically in disinvestment proceeds is far narrower than the fiscal deficit, which covers the entire expenditure-receipts gap.

Final Answer:
Fiscal deficit refers to the government's **borrowing** requirement.

Quick Tip: Fiscal deficit = Total Expenditure minus non-borrowed receipts = the government's borrowing need.

8. Steps taken through the government budget can influence

(A) Inequalities

(B) Allocation of resources

(C) Inflation

(D) All of these

Correct Answer: (D) All of these

Solution:

Step 1: Understanding the Question:
The government budget performs three classic objectives, following Musgrave's classification: allocation, distribution, and stabilisation.

Step 2: Why option D is correct:
Through taxes, subsidies and public spending the budget can (i) reallocate resources toward merit/public goods (**allocation**), (ii) redistribute income via progressive taxes and transfers to reduce **inequalities** (distribution), and (iii) manage aggregate demand to control **inflation** or deflation (stabilisation). All three are genuine budget functions.

Step 3: Why options A, B and C are each individually wrong:
Picking only one of inequalities, allocation of resources, or inflation ignores that the budget simultaneously performs all three functions — none of them alone is the complete answer.

Final Answer:
The budget can influence **all of these**: inequalities, resource allocation, and inflation.

Quick Tip: The budget's allocation, distribution and stabilisation functions cover resources, inequality and inflation together.

9. When exchange rate in terms of domestic currency rises

(A) Exports become cheaper

(B) Imports become cheaper

(C) Exports become costlier

(D) No effect on imports

Correct Answer: (A) Exports become cheaper

Solution:

Step 1: Understanding the Question:
Exchange rate here means the amount of domestic currency (Rupees) needed to buy one unit of foreign currency. A rise in this rate means the Rupee has **depreciated** (weakened).

Step 2: Why option A is correct:
When the Rupee depreciates, foreign buyers need less of their own currency to buy the same amount of Rupees, so Indian goods become cheaper for foreigners — India's **exports become cheaper** (more competitive) in foreign markets.

Step 3: Why option B is wrong:
Depreciation makes imports *costlier*, not cheaper, because Indian buyers now need more Rupees to purchase the same amount of foreign goods.

Step 4: Why option C is wrong:
This is the direct opposite of the actual effect: depreciation cheapens exports, it does not make them costlier.

Step 5: Why option D is wrong:
Imports are directly affected (they become costlier), so "no effect" is

incorrect.

Final Answer:
A rise in the exchange rate (Rupee depreciation) makes **exports become cheaper**.

Quick Tip: A rise in Rs./unit-foreign-currency = rupee depreciation, which cheapens exports and raises import cost.

10. Balance of trade equals

(A) Exports less imports

(B) Exports of goods less imports of goods

(C) Exports of services less imports of services

(D) None of these

Correct Answer: (B) Exports of goods less imports of goods

Solution:

Step 1: Understanding the Question:
Balance of Payments has two main accounts: the Current Account, which is further split into the Balance of **Trade** (visible/merchandise trade) and the Balance of **Invisibles** (services, transfers, income).

Step 2: Why option B is correct:
By definition, the balance of trade (also called the trade balance or balance of visible trade) covers only physical, tangible **goods**: exports of goods minus imports of goods.

Step 3: Why option A is wrong:
A generic "exports less imports" without specifying goods is ambiguous and, if it includes services, actually describes the current account balance, not the narrower trade balance.

Step 4: Why option C is wrong:
Exports of services minus imports of services is the balance on **invisibles** (specifically the services component), which is a separate account from the balance of trade.

Step 5: Why option D is wrong:
Since option B is precisely correct, "none of these" cannot be right.

Final Answer:
Balance of trade = **exports of goods less imports of goods**.

Quick Tip: Balance of trade is strictly the goods (visible) component of the current account, separate from services.

11. Distinguish between Micro-economics and Macro-economics.

Correct Answer: —

Solution:

Step 1: Definitions:
Microeconomics studies the economic behaviour of **individual** units — a single consumer, firm, or industry — such as how a household chooses between goods or how a firm sets its price. Macroeconomics studies the economy as a **whole** using aggregates such as national

income, general price level, and total employment.

Step 2: Scope and approach:
Microeconomics uses *partial equilibrium analysis*, examining one market or unit while holding others constant ("other things being equal"). Macroeconomics uses *general equilibrium analysis*, examining how all sectors of the economy interact simultaneously.

Step 3: Key variables studied:
Microeconomics deals with the price of a particular commodity, output of a firm, and individual demand/supply. Macroeconomics deals with aggregate demand, aggregate supply, national income, general price level (inflation), and the overall employment/unemployment rate.

Step 4: Nature of problems addressed:
Microeconomics addresses the problem of resource allocation (what, how, for whom to produce) at the level of a single unit. Macroeconomics addresses economy-wide problems like inflation, unemployment, and growth of national income.

Final Answer:
Microeconomics = study of individual economic units using partial equilibrium; Macroeconomics = study of the economy as a whole using aggregates and general equilibrium.

Quick Tip: Micro = individual units, partial equilibrium; Macro = the economy as a whole, aggregates.

12. What do you mean by substitute goods? Give examples of two goods which are substitutes of each other.

Correct Answer: —

Solution:

Step 1: Definition:
Substitute goods are two (or more) goods that can be used in place of one another to satisfy essentially the same want or need of the consumer.

Step 2: The defining economic test:
Substitutes have a **positive cross-price elasticity of demand** — when the price of one good rises, consumers switch away from it toward the other, so the demand for the other (substitute) good *rises*.

Step 3: Examples:
(i) Tea and Coffee — both satisfy the same want for a hot beverage, so if tea becomes costlier, many consumers shift to coffee, raising coffee's demand. (ii) Coca-Cola and Pepsi — both are cola soft drinks satisfying the same thirst/refreshment want, so a price rise in one typically shifts demand toward the other.

Final Answer:
Substitute goods satisfy the same want and can replace each other; e.g. tea & coffee, or Coca-Cola & Pepsi.

Quick Tip: Substitutes satisfy the same want; positive cross-price elasticity is the defining test.

13. Why is the budget line downward sloping? Explain.

Correct Answer: —

Solution:

Step 1: Write the budget equation:

For two goods X and Y, a consumer with income M spends: $P_x X + P_y Y = M$.

Step 2: Rearrange to see the slope:

Solving for Y: $Y = \frac{M}{P_y} - \frac{P_x}{P_y} X$. This is a straight line whose slope is $-\frac{P_x}{P_y}$, which is **negative** since both prices are positive.

Step 3: Give the economic reasoning:

With a fixed money income and fixed prices, the consumer faces a strict trade-off: buying more units of X necessarily means less money is left for Y, so Y purchased must fall. This inverse (trade-off) relationship between the quantities of the two goods is exactly what produces a negatively (downward) sloping line.

Final Answer:

The budget line slopes downward because, given a fixed income, buying more of one good is only possible by giving up some of the other good — its slope equals $-P_x/P_y$.

Quick Tip: Budget line: PxX+PyY=M gives slope -Px/Py; fixed income forces a trade-off between the two goods.

14. What is the difference between planned and unplanned inventory accumulation? Explain.

Correct Answer: —

Solution:

Step 1: Define planned inventory accumulation:
This is the deliberate, desired addition to stock that a firm builds up as part of its planned investment decision — for example, stocking up ahead of an expected festive-season demand surge. It is an intended part of planned investment expenditure.

Step 2: Define unplanned (unintended) inventory accumulation:
This arises unexpectedly when actual sales differ from what a firm anticipated. If aggregate demand falls short of aggregate output (AD < AS), goods pile up unsold — an **unplanned rise** in inventory. If demand exceeds output (AD > AS), inventories are run down faster than planned — an **unplanned fall**.

Step 3: Why the distinction matters:
Unplanned inventory changes are the economy's signal that AD and AS are not in equilibrium. Firms respond to unplanned build-up by cutting production (and vice versa), which is precisely the adjustment mechanism that pushes national income toward its equilibrium level where AD = AS.

Final Answer:
Planned inventory change is a deliberate part of investment; unplanned inventory change is the unintended gap caused by AD ≠ AS, and it is what drives firms to adjust output toward equilibrium.

Quick Tip: Unplanned inventory change = AS - planned AD; it signals disequilibrium and drives output adjustment.

15. Explain the components of money supply.

Correct Answer: —

Solution:

Step 1: Recall the basic (M1) measure:
The narrowest and most commonly used measure of money supply, M1, has three components.

Step 2: Currency held by the public:
This is the total value of currency notes and coins issued by the central bank/government that are actually in circulation with the public (currency held by banks/government itself is excluded, since it isn't in active circulation).

Step 3: Demand deposits with commercial banks:
These are deposits (like savings and current account balances) that can be withdrawn on demand via cheque, and are counted as money because they are directly usable as a medium of exchange.

Step 4: Other deposits with the central bank (RBI):
This is a small residual component — deposits held with the RBI by entities other than the government and banks (e.g. foreign central banks, IMF), which are also part of the money stock.

Final Answer:

Money Supply (M1) = Currency held by the public + Demand deposits of commercial banks + Other deposits with the RBI.

Quick Tip: M1 = Currency with public + Demand deposits with banks + Other deposits with RBI.

16. General public are not allowed to open accounts in the central bank. Does it mean that the central bank does not perform any commercial banking activity? Explain.

Correct Answer: —

Solution:

Step 1: Confirm the premise:
It is true that the central bank (RBI) does not accept deposits from, or lend to, ordinary members of the public the way a commercial bank does — so in that specific retail sense, the central bank does **not** perform commercial banking with the general public.

Step 2: Explain who the central bank banks for instead:
Rather than the public, the central bank performs banking functions for two special clients: it is the **banker to the government** (holding government accounts, managing its receipts/payments, providing ways and means advances), and the **banker's bank** for commercial banks (holding their cash reserves, clearing inter-bank transactions, and acting as the lender of last resort in a crisis).

Step 3: Note the other core central-banking functions:
Beyond banking for government and banks, the central bank also has

functions no commercial bank has — sole authority to issue currency notes, custodian of the nation's foreign exchange reserves, and controller of credit/money supply through monetary policy tools (CRR, SLR, repo rate).

Final Answer:
Yes, the statement effectively means the central bank does not do retail commercial banking with the public — but it still performs banking-type functions, just for the government and commercial banks, alongside its unique functions like note issue and credit control.

Quick Tip: The central bank bans public accounts but still banks for government and commercial banks (banker's bank).

17. The Marginal Rate of Substitution (MRS) between perfectly substitute goods remains constant. Explain with diagram.

Correct Answer: —

Solution:

Step 1: Define perfect substitutes:
Two goods are perfect substitutes when the consumer is willing to exchange them for one another at a **fixed, constant ratio**, regardless of how much of each good is already held — e.g. a consumer who values one red pen exactly the same as one blue pen, always trading 1-for-1.

Step 2: Define MRS and apply it here:

MRS(X for Y) is the rate at which a consumer is willing to give up Y to get one more unit of X while staying on the same indifference curve (same satisfaction). For perfect substitutes, since the trade-off ratio never changes no matter the combination held, MRS_{XY} stays the **same constant number** along the whole indifference curve.

Step 3: Consequence for the indifference curve shape:
Because the slope of the indifference curve (which equals $-MRS_{XY}$) never changes, the indifference curve for perfect substitutes is a **straight (linear) downward-sloping line**, not the usual convex curve.

Step 4: Diagram description:
Draw Good X on the horizontal axis and Good Y on the vertical axis. The indifference curve IC_1 is a straight line running from a point high on the Y-axis down to a point far on the X-axis, with a constant negative slope throughout — unlike the usual bowed-in (convex) shape drawn for normal indifference curves.

Final Answer:
For perfect substitutes the exchange ratio never changes, so MRS is constant along the indifference curve, which is why that indifference curve is a straight line rather than convex.

Quick Tip: Perfect substitutes trade at a fixed ratio everywhere, so MRS never diminishes -- giving a straight-line indifference curve.

18. The following table shows the Total Cost Schedule of a firm. Calculate Total Fixed Cost, Total Variable Cost, Average Variable Cost, Average Cost and Marginal Cost:

Q: 0, 1, 2, 3, 4, 5, 6

Total Cost: 10, 30, 45, 55, 70, 90, 120

Correct Answer: –

Solution:

Step 1: Find Total Fixed Cost (TFC):

TFC is the cost that does not change with output, so it equals Total Cost at Q = 0. From the table, $TC(0) = 10$, so **TFC = 10** for every level of output.

Step 2: Find Total Variable Cost (TVC = TC – TFC):

$TVC(0) = 0$, $TVC(1) = 30 - 10 = 20$, $TVC(2) = 45 - 10 = 35$, $TVC(3) = 55 - 10 = 45$, $TVC(4) = 70 - 10 = 60$, $TVC(5) = 90 - 10 = 80$, $TVC(6) = 120 - 10 = 110$.

Step 3: Find Average Variable Cost (AVC = TVC / Q):

$AVC(1) = 20/1 = 20$, $AVC(2) = 35/2 = 17.5$, $AVC(3) = 45/3 = 15$, $AVC(4) = 60/4 = 15$, $AVC(5) = 80/5 = 16$, $AVC(6) = 110/6 \approx 18.33$.

Step 4: Find Average Cost (AC = TC / Q):

$AC(1) = 30/1 = 30$, $AC(2) = 45/2 = 22.5$, $AC(3) = 55/3 \approx 18.33$, $AC(4) = 70/4 = 17.5$, $AC(5) = 90/5 = 18$, $AC(6) = 120/6 = 20$.

Step 5: Find Marginal Cost (MC = change in TC / change in Q):

$MC(1) = 30 - 10 = 20$, $MC(2) = 45 - 30 = 15$, $MC(3) = 55 - 45 = 10$, $MC(4) = 70 - 55 = 15$, $MC(5) = 90 - 70 = 20$, $MC(6) = 120 - 90 = 30$.

Final Answer:

TFC = 10 throughout. TVC = 0,20,35,45,60,80,110. AVC = -,20,17.5,15,15,16,18.33. AC = -,30,22.5,18.33,17.5,18,20. MC = 20,15,10,15,20,30 (for Q=1 to 6). Notice AVC and AC are both minimum at Q=3-4 (15 and 17.5-18.33), and MC (10) is below both there before rising and eventually cutting them from below — consistent with standard cost-curve theory.

Quick Tip: TFC = TC at Q=0; TVC = TC - TFC; AVC = TVC/Q; AC = TC/Q; MC = change in TC per unit.

19. Write down any three identities of calculating the gross domestic product of a country by the three methods of estimating national income.

Correct Answer: —

Solution:

Step 1: Value Added (Production) Method:

$GDP = \sum GVA_i = \sum(Value\ of\ Output_i - Intermediate\ Consumption_i)$ summed across all producing sectors/firms i in the economy — this avoids double counting by only adding the value each stage of production contributes.

Step 2: Income Method:

$GDP = Compensation\ of\ Employees + Operating\ Surplus + Mixed\ Income\ of\ Self\text{-}employed + Net\ Indirect\ Taxes + Depreciation$, i.e. the sum of all factor incomes (wages, rent, interest, profit) paid out in production, plus depreciation and net indirect taxes to move from factor cost/NDP to market-price GDP.

Step 3: Expenditure Method:

$GDP = C + I + G + (X - M)$, where C = private final consumption expenditure, I = gross investment, G = government final consumption expenditure, and (X–M) = net exports (exports minus imports).

Final Answer:

The three identities are the Production/Value-Added method, the Income method, and the Expenditure method — all three must yield the same GDP figure since they measure the same economic activity from three different angles (what is produced, what is earned, and what is spent).

Quick Tip: Three GDP methods: Value Added, Income (factor payments), Expenditure (C+I+G+X-M) -- all identically equal.

20. Write the relationship between the revenue deficit and the fiscal deficit. Are fiscal deficits inflationary?

Correct Answer: —

Solution:

Step 1: Define both deficits:

Revenue deficit = Revenue Expenditure – Revenue Receipts (the shortfall on the government's current/day-to-day account). **Fiscal deficit** = Total Expenditure – (Revenue Receipts + Non-debt Capital Receipts) (the government's total borrowing requirement).

Step 2: Relate them:

Revenue deficit is always a **part of** (a subset of) fiscal deficit, since revenue expenditure is one component of total expenditure. The portion of fiscal deficit left after subtracting revenue deficit represents borrowing used to finance capital expenditure (asset creation), whereas the revenue-deficit portion represents borrowing used merely to cover current/consumption spending — which does not create any productive asset. A high revenue deficit as a share of fiscal deficit is therefore a sign of poor-quality government borrowing.

Step 3: Are fiscal deficits inflationary?

Yes, generally. A fiscal deficit is financed either by (a) borrowing from the public/market, which can raise interest rates and, if it also raises overall purchasing power and demand, can push up prices, or (b) borrowing from the RBI (deficit financing/monetisation), which directly injects new money into the economy, increasing money supply and aggregate demand — this is the more directly inflationary channel, especially if the extra spending does not match a matching increase in output.

Final Answer:

Revenue deficit is a component of the (larger) fiscal deficit; and fiscal deficits are generally inflationary, particularly when financed through central bank borrowing/deficit financing that expands the money supply faster than output.

Quick Tip: Revenue deficit is a part of fiscal deficit; deficits financed by money creation tend to be inflationary.

21. What are official reserve transactions? Explain their importance in the balance of payments.

Correct Answer: —

Solution:

Step 1: Define official reserve transactions:
Official reserve transactions are transactions undertaken by a country's monetary authority (the central bank, e.g. the RBI) involving purchase or sale of foreign exchange reserves — gold, foreign currencies, and Special Drawing Rights (SDRs) — specifically to settle any imbalance left over in the balance of payments (BOP).

Step 2: Distinguish them from autonomous transactions:
Most BOP transactions (trade, investment, remittances) are "autonomous" — undertaken independently for their own economic motives (profit, consumption). Official reserve transactions are different: they are "accommodating" — undertaken by the central bank purely to balance the books after all autonomous transactions are counted.

Step 3: Explain their importance/role:
(i) They make the BOP accounting identity hold — total autonomous receipts plus accommodating (official reserve) transactions must equal total payments, so BOP always balances in an accounting sense. (ii) A BOP deficit is financed by the central bank **drawing down** its reserves (selling foreign exchange); a BOP surplus results in the central bank **accumulating** reserves. (iii) This mechanism helps stabilise the exchange rate, since the central bank's reserve sales/purchases can offset excess demand or supply of foreign currency in the market.

Final Answer:

Official reserve transactions are the central bank's use of forex reserves to settle the BOP gap left by autonomous transactions; they make the BOP identically balance and give the country a buffer to manage exchange-rate stability.

Quick Tip: Official reserve transactions are central-bank forex movements that balance BOP and stabilise the exchange rate.

22. Describe Total Revenue, Average Revenue and Marginal Revenue.

Correct Answer: —

Solution:

Step 1: Total Revenue (TR):

Total Revenue is the entire sale proceeds a firm receives from selling a given quantity of output: $TR = Price \times Quantity\ sold = P \times Q$.

Step 2: Average Revenue (AR):

Average Revenue is revenue earned per unit sold: $AR = \frac{TR}{Q} = \frac{P \times Q}{Q} = P$. This is why AR always equals price, and the AR curve is identical to the firm's demand curve.

Step 3: Marginal Revenue (MR):

Marginal Revenue is the additional revenue earned from selling one more unit of output: $MR_n = TR_n - TR_{n-1}$, or in continuous terms $MR = \frac{d(TR)}{dQ}$.

Step 4: Relationship between them:

Under **perfect competition**, price is fixed for the firm, so AR = MR = Price (a horizontal line). Under **imperfect competition** (e.g. monopoly), the firm must lower price to sell more, so both AR and MR slope downward, and MR lies below AR (MR falls twice as fast as AR for a straight-line demand curve), because selling an extra unit both adds revenue from that unit AND lowers the price received on all previous units.

Final Answer:

TR = P×Q (total sales proceeds); AR = TR/Q = Price (revenue per unit); MR = change in TR per additional unit sold — AR=MR under perfect competition, but MR < AR under imperfect competition.

Quick Tip: TR=P*Q; AR=TR/Q=Price; MR=change in TR. AR=MR under perfect competition; MR<AR otherwise.

23. What are the different types of costs (fixed, variable, total, average, marginal) and how are they related? Explain with the help of diagrams.

Correct Answer: —

Solution:

Step 1: Total Fixed Cost (TFC):

TFC is the cost that does not vary with the level of output (rent, insurance) — it must be paid even at zero output. Graphed against output, TFC is a **horizontal straight line**.

Step 2: Total Variable Cost (TVC):

TVC is the cost that changes directly with output (raw material, labour). Due to the law of variable proportions, TVC initially rises at a decreasing rate, then at an increasing rate, giving it an **inverse-S shape** starting from the origin.

Step 3: Total Cost (TC = TFC + TVC):
TC has exactly the same shape as TVC, but shifted vertically upward by the constant amount TFC — the TC and TVC curves are always a fixed vertical distance (TFC) apart, and never touch.

Step 4: Average Fixed Cost (AFC = TFC/Q):
Since TFC is constant, AFC keeps falling continuously as Q rises (this is called "spreading the overhead") — graphically, AFC is a **rectangular hyperbola** that approaches but never touches either axis.

Step 5: Average Variable Cost (AVC = TVC/Q) and Average Cost (AC = TC/Q = AFC+AVC):
Both are **U-shaped**, first falling (increasing returns) then rising (diminishing returns), due to the law of variable proportions. AC lies above AVC by exactly AFC at every output, and since AFC keeps shrinking, the AC and AVC curves keep getting **closer together** (converging) as output rises, though AC never actually meets AVC.

Step 6: Marginal Cost (MC = change in TC / change in Q):
MC is also U-shaped, reflecting the same law of variable proportions. Crucially, **MC cuts both the AVC curve and the AC curve exactly at their minimum points**, always from below — this is a mathematical property (marginal always pulls the average toward itself: MC below average pulls the average down, MC above average pulls it up, so they intersect precisely where average is at its lowest).

Step 7: Diagram description:
On one graph with Output on the x-axis and Cost on the y-axis: draw AFC continuously falling (never meeting the axes), AVC and AC as U-shaped curves with AC above AVC and the gap narrowing rightward, and MC as a U-shaped curve that starts below AVC/AC, dips to its own minimum earlier (since MC responds to changes fastest), then rises and cuts AVC at AVC's lowest point, and continues up to cut AC at AC's lowest point.

Final Answer:
TFC (constant) and TVC (inverse-S) sum to TC; AFC (falling), AVC and AC (both U-shaped, AC above AVC) are per-unit costs; MC (U-shaped) cuts both AVC and AC at their respective minimum points from below.

Quick Tip: TC=TFC+TVC; AFC falls continuously; AVC, AC, MC are U-shaped; MC cuts AVC and AC at their minimum points.

OR

What do you understand by market supply? Describe the determinant elements of supply.

Correct Answer: —

Solution:

Step 1: Define market supply:
Market supply is the total quantity of a commodity that ALL the sellers/firms in a market are willing and able to offer for sale at a given price, during a given period of time — i.e. the horizontal

summation of every individual firm's supply at that price.

Step 2: Price of the good itself:
By the law of supply, a higher price gives sellers a greater incentive to offer more of the good (it is more profitable), so price and quantity supplied are positively related.

Step 3: Price of related goods (especially goods produced from the same resources):
If the price of an alternative good that a firm could produce with the same resources rises, the firm shifts resources toward that alternative, reducing supply of the original good.

Step 4: Prices of factors of production (input costs):
If wages, raw material costs or rent rise, the cost of production increases, which reduces the profitability of supplying at the existing price and hence reduces supply (supply curve shifts left).

Step 5: State of technology:
An improvement in technology lowers the cost of producing each unit, making it profitable to supply more at every price — supply increases (curve shifts right).

Step 6: Government policy — taxes and subsidies:
A tax on production raises the effective cost, reducing supply; a subsidy lowers the effective cost, increasing supply.

Step 7: Number of firms in the industry:
As more firms enter and start producing the good, the market supply (being the sum of individual firms' supply) increases, and it falls when firms exit.

Final Answer:
Market supply is the sum of all sellers' quantities offered at a price; its determinants are the good's own price, prices of related/alternative goods, input/factor prices, technology, government tax/subsidy policy, and the number of firms in the market.

Quick Tip: Market supply = sum of individual firms' supply; determinants: own price, related-good prices, input costs, technology, tax/subsidy, number of firms.

24. What is consumer's equilibrium? Explain the conditions for achieving consumer's equilibrium using the concept of indifference curves and budget lines. Illustrate with a diagram.

Correct Answer: —

Solution:

Step 1: Define consumer's equilibrium:
Consumer's equilibrium is the combination of two goods at which a consumer, given a fixed money income and fixed prices, attains the **maximum possible satisfaction** and has no incentive to alter the combination further.

Step 2: First-order (necessary) condition — tangency:
The consumer reaches equilibrium at the point where the budget line is exactly **tangent** to the highest attainable indifference curve — i.e. the slope of the indifference curve (MRS) equals the slope of the budget line (price ratio): $MRS_{XY} = \frac{P_x}{P_y}$. At this point, the rate at which

the consumer is personally willing to trade X for Y exactly matches the rate at which the market actually lets them trade X for Y.

Step 3: Second-order (sufficient) condition — convexity:
The indifference curve must be **convex to the origin** at the point of tangency (equivalently, MRS is diminishing there). This ensures the tangency point is a point of *maximum* satisfaction and not minimum — a concave indifference curve touching the budget line at a single point would actually be a point of minimum satisfaction.

Step 4: Diagram description:
Draw Good X on the horizontal axis, Good Y on the vertical axis. Sketch a family of convex, non-intersecting indifference curves $IC_1 < IC_2 < IC_3$ (further from the origin = higher satisfaction) and a single straight downward-sloping budget line. The budget line will cross IC_1 at two points and touch IC_2 at exactly one point of tangency E, while IC_3 lies entirely beyond the consumer's reach. Point E — the tangency with the highest reachable indifference curve IC_2 — is the consumer's equilibrium.

Final Answer:
Consumer's equilibrium occurs where the budget line is tangent to the highest attainable (convex) indifference curve, satisfying $MRS_{XY} = P_x/P_y$ together with a diminishing MRS at that point.

Quick Tip: Consumer equilibrium: tangency of budget line and IC (MRS=Px/Py) plus convex IC (diminishing MRS) for a true maximum.

OR

Explain six factors that affect market demand for a commodity.

Correct Answer: –

Solution:

Step 1: Price of the commodity itself:

By the law of demand, as the price of a good falls, consumers buy more of it (and vice versa), so its own price and quantity demanded are inversely related — this is the most direct determinant.

Step 2: Price of related goods:

For a **substitute** (e.g. tea vs coffee), a rise in the substitute's price increases demand for this good. For a **complement** (e.g. car and petrol), a rise in the complement's price decreases demand for this good, since the two are used together.

Step 3: Income of consumers:

For a **normal good**, demand rises as income rises. For an **inferior good** (e.g. coarse cereals), demand actually falls as income rises, because consumers switch to better alternatives.

Step 4: Tastes and preferences:

A favourable shift in fashion, advertising, or social trends toward a good raises its demand at every price; an unfavourable shift (a good going out of fashion, or health concerns) reduces it.

Step 5: Number of buyers/consumers in the market:

Since market demand is the sum of every individual buyer's demand, an increase in the number of buyers (e.g. population growth, market expansion) raises total market demand even if each individual's own demand is unchanged.

Step 6: Consumers' expectations about future price/income:
If consumers expect the price to rise in future (or their income to fall), they tend to buy more now, raising current demand; the opposite expectation lowers current demand.

Final Answer:
The six determinants of market demand are: the good's own price, prices of related (substitute/complement) goods, consumer income, tastes and preferences, the number of buyers, and expectations about future prices/income.

Quick Tip: Demand determinants: own price, related-goods' prices, income, tastes, number of buyers, expectations.

25. What is deficient demand in an economy? Explain the measures to control it.

Correct Answer: —

Solution:

Step 1: Define deficient demand:
Deficient demand is a situation where **Aggregate Demand (AD) falls short of Aggregate Supply (AS)** at the full-employment level of output — i.e. the economy is capable of producing more than what people are actually willing to spend on. The gap between full-employment AS and the actual (lower) AD is called the **deflationary gap**.

Step 2: Consequences of deficient demand:

Firms find unsold stocks piling up, cut production, lay off workers, and may reduce prices — leading to falling output, rising unemployment, and a general fall in prices (deflation/recession).

Step 3: Monetary policy measures:
The central bank pursues an *expansionary (cheap money)* policy: cutting the repo rate, Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR), and buying government securities in the open market — all of which increase the money supply, lower interest rates, and encourage borrowing for investment and consumption, thereby raising AD.

Step 4: Fiscal policy measures:
The government increases its own spending (public expenditure on infrastructure, welfare schemes) and/or cuts taxes to leave more disposable income in people's hands — both directly and indirectly boost aggregate demand, even if it means running a larger fiscal deficit during the downturn.

Step 5: External-sector measures:
Policies that promote exports (which add to AD) and/or discourage non-essential imports (reducing the demand leakage abroad) can also help raise net exports and close the deflationary gap.

Final Answer:
Deficient demand is AD falling short of full-employment AS (a deflationary gap); it is corrected through expansionary monetary policy (lower CRR/repo/SLR, open-market purchases), expansionary fiscal policy (higher spending, lower taxes), and export-promotion measures.

Quick Tip: Deficient demand = AD below full-employment AS (deflationary gap); corrected via expansionary monetary/fiscal policy and export promotion.

OR

Write the meaning of full employment. Mention the factors responsible for full employment.

Correct Answer: —

Solution:

Step 1: Define full employment:
Full employment is the situation in which all persons who are willing and able to work at the prevailing wage rate are able to find work — there is no **involuntary** unemployment. (Some frictional/voluntary unemployment — people between jobs or choosing not to work at that wage — can still exist even under "full employment".) In macroeconomic terms, it corresponds to the output level at which Aggregate Demand exactly equals Aggregate Supply, with neither a deflationary nor an inflationary gap.

Step 2: Adequate and stable aggregate demand:
AD must be just sufficient to purchase the full-employment level of output — neither deficient (which causes unemployment) nor excessive (which causes inflation without raising real output/jobs further).

Step 3: Appropriate monetary policy:
Interest rates and credit availability must be conducive to steady investment — neither so tight that firms can't expand hiring, nor so

loose that it fuels unsustainable inflation.

Step 4: Appropriate fiscal policy:
Government spending and taxation must be calibrated to support demand during slack periods (counter-cyclical spending) without causing runaway deficits or crowding out private investment.

Step 5: Business/investment climate:
Confidence among entrepreneurs, ease of doing business, and political-economic stability encourage firms to invest and expand employment.

Step 6: Price stability:
Moderate, predictable inflation supports planning and investment; runaway inflation or deflation both discourage the steady investment needed to sustain full employment.

Step 7: Skilled and adaptable labour force:
Workers' skills must reasonably match the jobs the economy is creating; a large skills mismatch leads to structural unemployment even when overall demand is adequate.

Step 8: Adequate infrastructure:
Reliable power, transport, and communication infrastructure keeps production costs manageable and supports continuous business operation and hiring.

Final Answer:
Full employment means no involuntary unemployment (AD = full-employment AS); it depends on adequate aggregate demand, sound

monetary and fiscal policy, a healthy investment climate, price stability, a well-matched skilled workforce, and good infrastructure.

Quick Tip: Full employment: no involuntary unemployment, AD=full-employment AS; sustained by sound demand-management policy plus skills and infrastructure.