

IIFT MBA Entrance Exam

Sample Paper – 10

Duration: 120 Minutes

Maximum Marks: 300

Instructions

- This paper contains **110 Multiple Choice Questions (Single Correct Answer)**, modelled on the IIFT MBA Entrance Examination.
- **Marking Scheme:**
 - **Sections A (VARC), B (QA) & C (DILR): +3 marks** per correct answer; **–1 mark** per incorrect answer.
 - **Section D (General Awareness): +1.5 marks** per correct answer; **–0.5 mark** per incorrect answer.
- Unattempted questions carry **no penalty**.
- Duration: **120 minutes**; no sectional time limit.
- **CBT mode.** Personal calculators, log tables, mobile phones, and electronic gadgets are strictly prohibited. No on-screen calculator is provided in the IIFT interface.
- Rough sheets will be provided at the test centre.

Section A: Verbal Ability & Reading Comprehension (VARC) [Q1–Q35]

RC Passage 1 — Questions 1–5: Read the following passage carefully and answer the questions that follow.

Governing the Global Ocean Commons

The world's oceans cover more than 70 per cent of the Earth's surface, yet their governance remains among the most contested and fragile achievements of international law. The United Nations Convention on the Law of the Sea (UNCLOS), ratified in 1994, created a framework that grants coastal states sovereign economic rights over a 200-nautical-mile Exclusive Economic Zone (EEZ) while preserving the freedom of innocent passage for all nations. Crucially, however, the EEZ does not confer full sovereignty: coastal states control fishing, mining, and energy resources, but the high seas beyond remain a global commons.

The discovery of polymetallic nodules and hydrothermal vent ecosystems on the deep seabed has



ignited a new race for submarine resources. Deep-sea mining, championed by several Pacific island states and transnational corporations, carries the risk of permanently destroying unstudied and irreplaceable ecosystems. Unlike surface mining, the crush, suction, and sediment plumes of deep-sea extraction eliminate micro-organisms and macro-fauna that have evolved over millions of years in near-total darkness. Once destroyed, these ecosystems cannot be restored within any human timescale.

Coastal and estuarine habitats offer a more tractable area of intervention. Mangroves, seagrasses, and salt marshes—collectively termed “blue carbon” ecosystems—sequester carbon at rates five times higher than tropical forests per unit area. India’s Blue Economy Policy 2023, released by the Ministry of Earth Sciences, explicitly identifies the protection of these habitats as both a climate mitigation and livelihood strategy. Yet enforcement against illegal, unreported, and unregulated (IUU) fishing remains chronically underfunded, allowing short-term extraction to undercut long-term ecological value.

The tragedy of the ocean commons—a maritime adaptation of Hardin’s classic argument—holds that, without binding multilateral governance, individual actors will over-exploit shared resources to collective ruin. Strengthening international frameworks under UNCLOS, expanding the jurisdiction of the International Seabed Authority, and investing in satellite-based IUU detection are therefore not merely environmental imperatives but economic necessities. Balancing the legitimate aspirations of maritime nations with the ecological integrity of the global ocean is the defining governance challenge of the blue century.

Q1. What is the central argument of the passage?

- (A) UNCLOS is fundamentally ineffective and must be replaced by a new treaty.
- (B) Deep-sea mining should be immediately banned to protect biodiversity.
- (C) Ocean governance requires balancing economic exploitation with ecological preservation.
- (D) Blue carbon ecosystems can fully offset industrial greenhouse gas emissions.

Q2. What can be inferred about the Exclusive Economic Zone (EEZ)?

- (A) Coastal states have sovereign resource rights in the EEZ but cannot exclude innocent passage by other nations.
- (B) The EEZ grants full territorial sovereignty identical to land territory.
- (C) The EEZ was originally created to extend military protection zones.
- (D) EEZs extend exactly 200 kilometres from the coastline.



- Q3.** In the context of the passage, “blue carbon” refers to:
- (A) Carbon dioxide emitted by international shipping and maritime trade.
 - (B) Carbon trapped in deep-sea sediment by geological processes.
 - (C) Carbon captured by ocean phytoplankton through photosynthesis.
 - (D) Carbon sequestered by coastal ecosystems such as mangroves, sea-grasses, and salt marshes.
- Q4.** According to the passage, what is the most specific risk posed by deep-sea mining?
- (A) It creates legal disputes between coastal states and the International Seabed Authority.
 - (B) It permanently destroys unique, unstudied deep-sea ecosystems that cannot be restored.
 - (C) It undercuts the economics of land-based mineral mining industries.
 - (D) It primarily harms artisanal coastal fishing communities.
- Q5.** What does the author ultimately recommend?
- (A) A moratorium on all maritime economic activity until new treaties are signed.
 - (B) Expanding naval capacity to enforce UNCLOS provisions unilaterally.
 - (C) Strengthening multilateral frameworks to address the tragedy of the ocean commons.
 - (D) Transferring full control of EEZ resources to individual coastal nations.

RC Passage 2 — Questions 6–10: Read the following passage carefully and answer the questions that follow.

India's Urban Housing Paradox

India's cities present a paradox: they are engines of aspiration and yet home to some of the world's largest concentrations of inadequate shelter. The urban housing shortage stands at an estimated 18.78 million units, concentrated almost entirely among Economically Weaker Sections (EWS) and Low-Income Groups (LIG). The Pradhan Mantri Awas Yojana–Urban (PMAY-U), launched in 2015, has sanctioned approximately 11.8 million houses under four verticals: Beneficiary-Led Construction



(BLC), Affordable Housing in Partnership (AHP), In-Situ Slum Redevelopment, and Credit-Linked Subsidy Scheme (CLSS). Despite these figures, construction completion rates lag significantly.

The Dharavi redevelopment project in Mumbai epitomises the tensions inherent in urban renewal. In-situ redevelopment—rebuilding housing on the same site where communities currently live—is widely regarded as more socially equitable than resettlement to distant peripheral sites. It preserves livelihoods, social networks, and access to employment. Yet in-situ projects face formidable obstacles: unclear land titles, complex legal claims from multiple stakeholders, and the sheer density of existing structures. Critics argue that large redevelopment concessions to private builders may replicate displacement under a different label.

Transit-Oriented Development (TOD)—the creation of dense, mixed-use, walkable neighbourhoods around mass-transit nodes—offers a structural solution to both housing density and urban mobility. By concentrating housing supply near metro and BRT corridors, TOD reduces commuting costs for low-income workers and generates the ridership densities that make mass transit financially viable. Several Indian cities, including Ahmedabad and Pune, have adopted TOD policies, though implementation remains inconsistent.

The Model Tenancy Act 2021 sought to reactivate the vast stock of locked, vacant urban housing by modernising the landlord-tenant legal framework. However, its limited adoption by states and the absence of fast-track rental courts have blunted its impact. A holistic response to India's urban housing paradox therefore requires integrating supply-side interventions such as TOD with demand-side reforms such as rental market liberalisation, while ensuring that the poorest urban households are not displaced by the very policies designed to serve them.

Q6. What is the primary purpose of this passage?

- (A) To expose corruption in the PMAY-Urban scheme.
- (B) To compare rural and urban housing conditions in India.
- (C) To promote Transit-Oriented Development as the only viable solution.
- (D) To analyse the multidimensional nature of India's affordable housing challenge.

Q7. What does the author imply about in-situ redevelopment?

- (A) In-situ redevelopment always results in displacement of original residents.
- (B) It is preferable to peripheral resettlement but faces significant land-title and implementation challenges.
- (C) It is cheaper than constructing new greenfield housing in the suburbs.
- (D) It is universally opposed by affected slum residents.



- Q8.** As used in the passage, “in-situ redevelopment” means:
- (A) Rebuilding housing on the same site where people currently live.
 - (B) Relocating communities to distant peripheral sites and building there.
 - (C) Providing rental subsidies to enable families to find their own housing.
 - (D) Demolishing existing structures without providing any replacement housing.
- Q9.** Which policy approach does the author recommend?
- (A) Fully privatising urban housing development.
 - (B) Focusing exclusively on greenfield development outside existing cities.
 - (C) Integrating housing supply near transit nodes with rental market reforms.
 - (D) Eliminating the EWS and LIG housing categories under PMAY-U.
- Q10.** Which of the following accurately reflects a detail from the passage about PMAY-Urban?
- (A) PMAY-U covers all urban areas of India with equal financial allocation.
 - (B) PMAY-U is applicable only to cities with a population exceeding 10 lakh.
 - (C) PMAY-U benefits only households living in notified slums.
 - (D) PMAY-U has sanctioned approximately 11.8 million houses, many of which are still under construction.

RC Passage 3 — Questions 11–15: Read the following passage carefully and answer the questions that follow.

From Globalisation to Geo-Economics

The COVID-19 pandemic exposed a fundamental vulnerability in the architecture of global trade: decades of efficiency-driven supply-chain consolidation had created single points of failure. The semiconductor shortage of 2021–22, which halted automobile production across three continents, and the European energy crisis triggered by Russia’s invasion of Ukraine demonstrated that economic interdependence, once celebrated as a pacifying force, could equally function as a vector of strategic coercion.



The policy response has been a reconfiguration of global supply chains along geopolitical lines. “Friendshoring”—concentrating production in geopolitically aligned or trusted nations to reduce strategic risk—has become the organising principle of trade policy in Washington, Brussels, and Tokyo. Its spatial complement, nearshoring, prioritises geographic proximity to reduce logistics risk and lead times. Together, these strategies are reshaping global trade flows in ways not seen since the post-war multilateral system was established.

China’s dominance in electronics, pharmaceuticals, and rare earths has prompted the China+1 strategy: companies diversify manufacturing to Vietnam, India, and Mexico while maintaining residual operations in China to service the domestic market. India’s Production Linked Incentive (PLI) scheme, the US CHIPS and Science Act, and the EU Chips Act represent a renaissance of industrial policy—active government intervention in determining where strategic industries locate—that sits in uneasy tension with WTO subsidy disciplines.

It would be a mistake, however, to characterise these developments as “deglobalisation.” Trade volumes remain at historic highs; what is changing is the geometry of trade relationships. The global economy is not retreating from interdependence but re-globalising along geopolitical fault lines. For developing nations that are not clearly aligned with either the US-led or China-led blocs, this reconfiguration poses an acute challenge: the new trade architecture may demand alignment as the price of access to capital, technology, and markets.

Q11. What is the central thesis of the passage?

- (A) Economic globalisation has irreversibly ended as a result of the pandemic.
- (B) Geopolitics-driven supply-chain diversification is fundamentally reshaping global trade.
- (C) Friendshoring benefits all nations equally by reducing supply-chain concentration.
- (D) Industrial subsidies under the CHIPS Act violate WTO international trade law.

Q12. As used in the passage, “friendshoring” means:

- (A) Relocating factories to geographically proximate nations to reduce logistics costs.
- (B) Sharing sensitive technology with allied nations through bilateral agreements.
- (C) Concentrating supply chains in geopolitically aligned nations to reduce strategic risk.
- (D) Creating free-trade zones exclusively for allied nations within the



WTO framework.

Q13. What does the “China+1” strategy entail, according to the passage?

- (A) Companies diversify manufacturing to Vietnam, India, and Mexico while retaining some presence in China.
- (B) Corporations completely eliminate all manufacturing operations inside China.
- (C) A US government mandate requiring American firms to leave China within five years.
- (D) Adding one extra manufacturing line within China for redundancy.

Q14. What is the author’s view on the characterisation of current trends as “deglobalisation”?

- (A) The author endorses the term as accurately describing the retreat from trade interdependence.
- (B) The author sees deglobalisation as economically beneficial for developing nations.
- (C) The author remains neutral and presents both sides without taking a position.
- (D) The author challenges the label, arguing trade is re-globalising along geopolitical lines, not retreating.

Q15. What does the passage imply for developing nations that are not aligned with major geopolitical blocs?

- (A) They will benefit equally from both the US-led and China-led trade architectures.
- (B) They risk exclusion from the new trade architecture unless they signal geopolitical alignment.
- (C) Industrial subsidies from major powers will automatically flow to non-aligned developing nations.
- (D) They should reject the new trade architecture and rely exclusively on WTO rules.



Para-Jumbles (Q16–Q19)

Q16. The five sentences below, labelled P, Q, R, S, T, form a coherent paragraph when arranged in the correct order. Select the option that gives the correct sequence.

P. The UNFCCC \$100 billion climate finance pledge, made in 2009, was repeatedly missed in subsequent years, eroding trust between developed and developing nations.

Q. The establishment of a Loss and Damage Fund at COP28 in Dubai represented a landmark acknowledgement that some climate impacts are beyond adaptation.

R. Adaptation finance for vulnerable nations must therefore be scaled up dramatically and disbursed through mechanisms that prioritise grant-based flows over loans.

S. Developing nations, disproportionately exposed to climate risk yet contributing least to cumulative emissions, have consistently argued that historical responsibility must translate into financial obligation.

T. Without reliable, accessible finance, the most climate-vulnerable nations face a stark choice between economic development and climate resilience.

(A) $S \rightarrow P \rightarrow Q \rightarrow T \rightarrow R$

(B) $P \rightarrow S \rightarrow Q \rightarrow R \rightarrow T$

(C) $Q \rightarrow P \rightarrow S \rightarrow T \rightarrow R$

(D) $T \rightarrow P \rightarrow S \rightarrow Q \rightarrow R$

Q17. Arrange the following sentences into a coherent paragraph:

P. Ayushman Bharat's expansion to cover a larger beneficiary base aimed to address the chronic under-insurance of India's low-income population.

Q. The pandemic also accelerated telemedicine adoption, with the eSanjeevani platform recording over 100 million consultations by 2023.

R. India's healthcare infrastructure was exposed as critically strained during the COVID-19 second wave of 2021.

S. Post-pandemic reforms therefore encompassed both physical infras-



structure augmentation and digital health ecosystem development.

T. The Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) was launched with a ₹64,180 crore outlay to strengthen primary, secondary, and tertiary care.

- (A) $P \rightarrow Q \rightarrow R \rightarrow T \rightarrow S$
- (B) $R \rightarrow T \rightarrow P \rightarrow S \rightarrow Q$
- (C) $Q \rightarrow R \rightarrow P \rightarrow T \rightarrow S$
- (D) $R \rightarrow T \rightarrow Q \rightarrow P \rightarrow S$

Q18. Arrange the following sentences into a coherent paragraph:

P. India's median age is projected to remain below 31 years until 2030, representing an extraordinary window of demographic opportunity.

Q. However, the National Skill Development Corporation estimates that fewer than 5% of India's workforce has received any formal vocational training, compared to over 70% in Germany and South Korea.

R. Translating this youth bulge into sustained productivity gains requires not merely formal education but employability-focused skilling aligned with industry demand.

S. Sectors such as logistics, healthcare, construction, and advanced manufacturing face acute skilled-labour shortages even as graduate unemployment remains high.

T. The demographic dividend can only be realised if the gap between educational supply and labour-market demand is urgently and systematically closed.

- (A) $R \rightarrow P \rightarrow Q \rightarrow S \rightarrow T$
- (B) $P \rightarrow R \rightarrow Q \rightarrow T \rightarrow S$
- (C) $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T$
- (D) $Q \rightarrow P \rightarrow R \rightarrow S \rightarrow T$

Q19. Arrange the following sentences into a coherent paragraph:

P. Platform-mediated gig work has grown rapidly in India, with food-delivery and ride-hailing platforms employing millions of workers classi-



fied as “partners” rather than employees.

Q. This classification exempts platforms from providing statutory benefits such as provident fund contributions, gratuity, and paid leave, creating a structural social-security deficit.

R. The Code on Social Security 2020 introduced provisions for gig and platform workers but has not yet been fully notified or operationalised across all states.

S. In the interim, workers injured on the job or facing income disruption have no guaranteed access to the formal social-protection net.

T. Effective regulation of the platform economy therefore requires both legislative operationalisation and platform-funded portable benefit architectures.

(A) $Q \rightarrow P \rightarrow S \rightarrow R \rightarrow T$

(B) $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T$

(C) $R \rightarrow P \rightarrow Q \rightarrow T \rightarrow S$

(D) $P \rightarrow Q \rightarrow S \rightarrow R \rightarrow T$

Critical Reasoning (Q20–Q23)

Q20. *Argument:* “Renewable energy cannot replace fossil fuels for base-load power demand because solar and wind generation are inherently intermittent and cannot supply continuous 24/7 electricity at scale.”

Which of the following is a hidden assumption underlying this argument?

(A) Intermittent renewable sources cannot be complemented by hydro or geothermal power.

(B) Grid transmission infrastructure is not a limiting factor in renewables deployment.

(C) Base-load demand will remain constant and will not shift to renewable-peak hours.

(D) Large-scale, cost-effective energy storage technology will not become economically viable.



Q21. *Argument:* “Social media causes political polarisation because it exposes users to algorithmically curated content that reinforces existing beliefs and amplifies extreme viewpoints.”

Which of the following, if true, most weakens this argument?

- (A) Nordic countries with the highest per-capita social media usage consistently score as the least politically polarised nations, despite extensive algorithmic curation.
- (B) Social media platforms have recently introduced counter-speech features to reduce extremist content.
- (C) Political polarisation was documented in several countries before social media existed.
- (D) Algorithmic curation is not unique to social media and also appears in traditional news aggregation.

Q22. *Argument:* “Early childhood education significantly reduces long-term economic inequality by improving cognitive development and school readiness in low-income children.”

Which of the following, if true, most strengthens this argument?

- (A) Pre-K programme enrolment has increased by 15% in urban districts over the past decade.
- (B) Governments that invest in early childhood education also tend to invest more in adult retraining.
- (C) A 30-year longitudinal study found that low-income children enrolled in quality pre-K programmes earned 40% more at age 30 than comparable non-attendees.
- (D) Early childhood education teachers earn significantly less than secondary school teachers on average.

Q23. Read the following argument carefully. The two statements in **bold** are specifically highlighted.

*“Automation driven by artificial intelligence is steadily displacing routine cognitive and manual jobs. **The existing social safety net was designed***



*for a different era of employment and is inadequate for the scale of disruption AI may cause. Pilot programmes in Finland and Stockton, California have produced preliminary evidence that direct income transfers can sustain consumption and reduce anxiety without eliminating work incentives. **Therefore, governments should pilot Universal Basic Income programmes at scale before committing to full national implementation.***"

The second bold-faced statement is:

- (A) A premise arguing that the existing safety net is insufficient.
- (B) The main conclusion of the argument.
- (C) Background context describing the problem of automation.
- (D) A counter-argument presenting a fiscal objection to UBI.

Vocabulary (Q24–Q28)

Q24. Choose the meaning closest to the word **EPHEMERAL**:

- (A) Lasting only a very short time; transitory.
- (B) Relating to changing weather conditions.
- (C) Causing severe physical pain.
- (D) Commanding deep respect and admiration.

Q25. Choose the meaning closest to the word **IMPUGN**:

- (A) To praise enthusiastically and at length.
- (B) To ignore completely and deliberately.
- (C) To challenge or call into question as false or dishonest.
- (D) To accept as accurate without any verification.

Q26. Choose the meaning closest to the word **TRUCULENT**:

- (A) Peaceful, cooperative, and willing to compromise.
- (B) Aggressively defiant, belligerent, and quarrelsome.
- (C) Excessively cautious and reluctant to take risks.
- (D) Scrupulously honest and morally upright.



- Q27.** Select the **antonym** of **PENURIOUS** (meaning: extremely unwilling to spend money; miserly):
- (A) Extremely wealthy and financially secure.
 - (B) Wildly extravagant and wasteful.
 - (C) Desperately poor and destitute.
 - (D) Generous, bountiful, and open-handed.
- Q28.** Choose the meaning closest to the word **GARRULOUS**:
- (A) Excessively talkative, especially about trivial matters.
 - (B) Unusually quiet, reserved, and reluctant to speak.
 - (C) Highly educated and possessing wide knowledge.
 - (D) Bold, fearless, and willing to take great risks.

Grammar (Q29–Q32)

- Q29.** Identify the grammatically correct sentence free of errors:
- (A) “I don’t have no time to review the document before the meeting.”
 - (B) “She can’t hardly believe the results of the final audit.”
 - (C) “The manager did not want any delays in the project delivery schedule.”
 - (D) “There wasn’t nobody in the conference room when the client arrived.”
- Q30.** Select the correctly formed Type 3 (past unreal) conditional sentence:
- (A) “If she would have studied the case earlier, she would pass the examination.”
 - (B) “If she had studied harder, she would have passed the examination.”
 - (C) “If she studied harder last year, she would have passed the examination.”
 - (D) “If she had studied the material, she would pass the examination easily.”
- Q31.** Select the sentence that maintains correct parallel structure:



- (A) “The new role requires reading briefs, to swim laps each morning, and hiking at weekends.”
- (B) “The team was praised for planning the strategy, executing it well, and to review results.”
- (C) “She decided to buy a new apartment, renovating the kitchen, and saving for retirement.”
- (D) “The consultant excels at planning, executing, and reviewing projects under tight deadlines.”

Q32. Select the sentence in which the collective noun is used with the correct verb form:

- (A) “The committee has reached its final decision on the appointment.”
- (B) “The committee have decided their verdict after deliberating for two weeks.”
- (C) “The committees decides the annual budget at the October meeting.”
- (D) “The committee are deciding their final recommendations as we speak.”

Para-Completion (Q33–Q35)

Q33. The paragraph below is missing its concluding sentence. Select the option that best completes it.

“India’s foreign policy has historically been guided by the principle of non-alignment, first articulated by Nehru as a rejection of Cold War bipolarity. In the contemporary multipolar order, this principle has evolved into what Indian strategists term ‘strategic autonomy’: the freedom to engage with multiple great powers on the basis of national interest rather than ideological affiliation. India simultaneously participates in the Quad security grouping, maintains deep defence ties with Russia, and hosts Chinese investment, a combination that confounds simple alliance categorisation.”

- (A) India must ultimately choose between the US-led and China-led blocs to maximise its strategic leverage.



- (B) Non-alignment was always a rhetorical device rather than a genuine foreign policy principle.
- (C) Economic dependence on the US will ultimately constrain India's strategic independence.
- (D) India's strategic autonomy is thus a product of both ideological heritage and pragmatic calculation.

Q34. The paragraph below requires a sentence to fill the highlighted gap. Select the best option.

“ESG (Environmental, Social, and Governance) investing has grown from a niche ethical preference into a mainstream asset allocation strategy commanding trillions of dollars globally. Yet a persistent problem undermines the credibility of ESG as an analytical framework: the same company can receive a top-quartile ESG rating from one provider and a bottom-quartile rating from another. Studies have found that correlations between major ESG rating agencies are as low as 0.38—far below the near-perfect correlation seen in credit ratings. _____ Without such standards, capital flows guided by ESG ratings may reflect rating-provider methodology as much as genuine corporate sustainability.”

- (A) ESG funds have nevertheless outperformed traditional benchmarks in most years since 2015.
- (B) Regulators in the European Union have begun to restrict the marketing of ESG-labelled products.
- (C) This divergence in ESG ratings suggests that standardised global reporting frameworks are urgently needed.
- (D) Individual investors are advised to construct their own ESG scoring rubrics rather than rely on agencies.

Q35. Select the sentence that best continues the paragraph below.

“A growing body of research associates increased social media use among adolescents with higher rates of depression, anxiety, and loneliness. Longitudinal surveys conducted across the United States and United Kingdom



have documented significant declines in adolescent well-being that coincide with the widespread adoption of smartphones after 2012. However, the statistical relationship between social media use and mental health outcomes is more complex than popular discourse suggests.”

- (A) Policymakers should therefore immediately ban social media access for all users under the age of 16.
- (B) This correlation, however, does not definitively establish causation, as pre-existing mental health vulnerabilities may themselves drive increased social media use.
- (C) Social media platforms have a moral obligation to implement algorithmic safeguards for teenage users.
- (D) The evidence is now sufficiently conclusive to justify treating social media use as a direct cause of adolescent mental illness.

Section B: Quantitative Aptitude (QA) [Q36–Q60]

- Q36.** In a class of 30 students, the average marks of boys is 76 and the average marks of girls is 64. If the overall class average is 72, how many boys are there in the class?
- (A) 12
 - (B) 20
 - (C) 15
 - (D) 18
- Q37.** The average of the first 5 consecutive even numbers is 20. What is the average of the *next* 5 consecutive even numbers?
- (A) 25
 - (B) 28
 - (C) 32
 - (D) 30
- Q38.** A car travels from city X to city Y at a speed of 60 km/h and returns from Y to X at 40 km/h. What is the average speed for the entire round trip?



- (A) 48 km/h
- (B) 50 km/h
- (C) 46 km/h
- (D) 52 km/h

Q39. The 8th term of an arithmetic progression is 52 and the 11th term is 70. Find the first term of the AP.

- (A) 4
- (B) 8
- (C) 10
- (D) 12

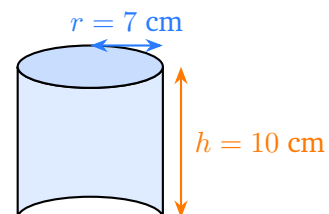
Q40. A geometric series has first term 3 and common ratio 2. Find the sum of the first 6 terms.

- (A) 180
- (B) 189
- (C) 192
- (D) 186

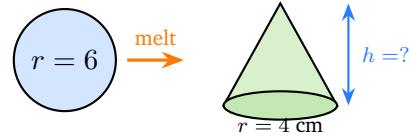
Q41. For the arithmetic progression 3, 7, 11, ..., how many terms must be taken so that the sum exceeds 200?

- (A) 8
- (B) 9
- (C) 11
- (D) 10

Q42. A right circular cylinder has radius 7 cm and height 10 cm. Find its volume. (Use $\pi = \frac{22}{7}$.)



- (A) 1540 cm^3
- (B) 1320 cm^3
- (C) 1680 cm^3
- (D) 1760 cm^3



Q43. A metallic solid sphere of radius 6 cm is completely melted and recast into a solid cone whose base radius is 4 cm. Find the height of the cone.

- (A) 45 cm
- (B) 48 cm
- (C) 54 cm
- (D) 60 cm

Q44. A frustum of a cone has top radius $r = 6 \text{ cm}$, bottom radius $R = 10 \text{ cm}$, and height $h = 3 \text{ cm}$. If $\pi = \frac{22}{7}$, find the Total Surface Area of the frustum.

- (A) 628 cm^2
- (B) 679 cm^2
- (C) 706 cm^2
- (D) 594 cm^2

Q45. Find the value of $\log_2 8 + \log_2 32 - \log_2 4$.

- (A) 5
- (B) 4
- (C) 7
- (D) 6

Q46. Find the value of $\log_{125} 25$.

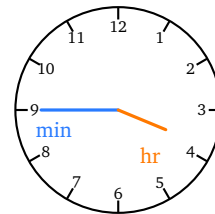
- (A) $\frac{2}{3}$



- (B) $\frac{3}{2}$
 (C) $\frac{2}{3}$
 (D) $\frac{3}{5}$

Q47. Solve for x : $\log_4(x^2) = 3$.

- (A) 4
 (B) 16
 (C) 8
 (D) 6



Q48. What is the angle between the hour hand and the minute hand of a clock at **3:45**?

- (A) 165
 (B) 157.5
 (C) 150
 (D) 172.5

Q49. How many times do the hour hand and minute hand of a clock coincide between 12 noon and 12 midnight (exclusive of both endpoints)?

- (A) 12
 (B) 10
 (C) 13
 (D) 11

Q50. If 14 March 2020 was a Saturday, what day of the week was 14 March 2021? (Note: 2020 is a leap year, but 14 March falls after 29 February.)

- (A) Sunday
 (B) Monday



- (C) Saturday
- (D) Friday

Q51. For the quadratic equation $3x^2 - 7x + 2 = 0$ with roots α and β , find $\alpha^2 + \beta^2$.

- (A) $\frac{25}{9}$
- (B) $\frac{49}{9}$
- (C) $\frac{37}{9}$
- (D) $\frac{13}{3}$

Q52. For what value of k does the equation $kx^2 - 4x + 3 = 0$ have equal roots?

- (A) 1
- (B) $\frac{4}{3}$
- (C) $\frac{2}{3}$
- (D) 2

Q53. Solve for x : $|3x - 6| > 9$.

- (A) $-1 < x < 5$
- (B) $x > 5$ only
- (C) $-5 < x < 1$
- (D) $x < -1$ or $x > 5$

Q54. Simplify $\frac{3 + \sqrt{5}}{\sqrt{5} - 1}$.

- (A) $2 + \sqrt{5}$
- (B) $3 + \sqrt{5}$
- (C) $1 + 2\sqrt{5}$
- (D) $4 + \sqrt{5}$

Q55. Which is greater: $\sqrt[4]{5}$ or $\sqrt[3]{3}$?



- (A) $\sqrt[3]{3}$ is greater.
- (B) They are equal.
- (C) $\sqrt[4]{5}$ is greater.
- (D) Cannot be determined without a calculator.

Q56. Simplify $\sqrt{75} + \sqrt{48} - \sqrt{27}$.

- (A) $5\sqrt{3}$
- (B) $6\sqrt{3}$
- (C) $7\sqrt{3}$
- (D) $4\sqrt{3}$

Q57. Two fair dice are rolled simultaneously. What is the probability that the sum of the numbers on the two dice equals 8?

- (A) $\frac{1}{9}$
- (B) $\frac{7}{36}$
- (C) $\frac{1}{6}$
- (D) $\frac{5}{36}$

Q58. One card is drawn at random from a well-shuffled standard deck of 52 cards. What is the probability that it is an ace or a king?

- (A) $\frac{2}{13}$
- (B) $\frac{1}{13}$
- (C) $\frac{3}{13}$
- (D) $\frac{4}{13}$

Q59. A box contains 3 red, 5 blue, and 2 green balls. Two balls are drawn one after the other without replacement. Given that the first ball drawn is red, what is the probability that the second ball drawn is blue?

- (A) $\frac{5}{10}$



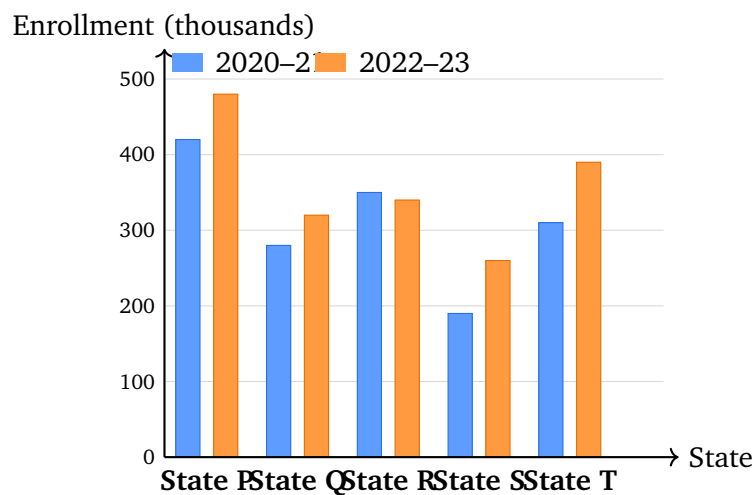
- (B) $\frac{1}{2}$
 (C) $\frac{9}{5}$
 (D) $\frac{5}{18}$

Q60. Events A and B are mutually exclusive. $P(A) = 0.4$ and $P(B) = 0.3$. Find $P(A \cup B)$.

- (A) 0.12
 (B) 0.7
 (C) 0.1
 (D) 0.5

Section C: Data Interpretation & Logical Reasoning (DILR) [Q61–Q90]

Questions 61–65: The grouped bar chart below shows school enrollment (in thousands) across five states for two academic years. Study the data and answer Q61–Q65.



Q61.

Which state recorded the highest percentage growth in school enrollment from 2020–21 to 2022–23?

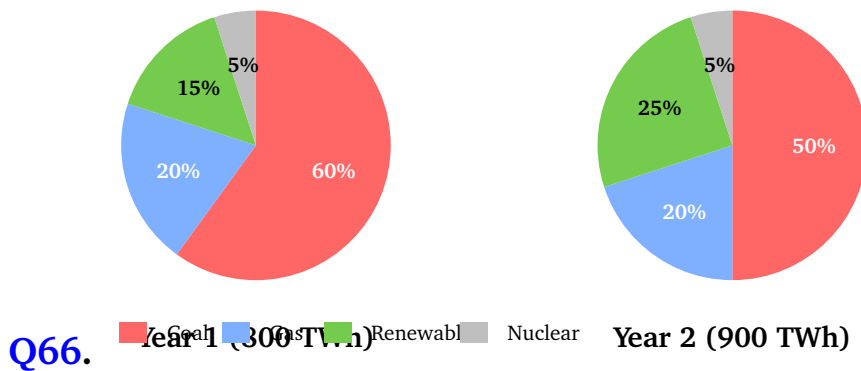
- (A) State S
 (B) State T
 (C) State P
 (D) State Q



- Q62.** (Refer to bar chart in Q61.) What is the total school enrollment (in thousands) across all five states in the academic year 2022–23?
- (A) 1650 thousand
 - (B) 1720 thousand
 - (C) 1790 thousand
 - (D) 1850 thousand
- Q63.** (Refer to bar chart in Q61.) Which state showed a *decline* in school enrollment between 2020–21 and 2022–23?
- (A) State P
 - (B) State R
 - (C) State Q
 - (D) State T
- Q64.** (Refer to bar chart in Q61.) What is the ratio of enrollment of State P to State S in the academic year 2020–21?
- (A) 21 : 9
 - (B) 14 : 6
 - (C) 7 : 3
 - (D) 42 : 19
- Q65.** (Refer to bar chart in Q61.) What is the average school enrollment of State T across both the academic years 2020–21 and 2022–23 (in thousands)?
- (A) 350 thousand
 - (B) 375 thousand
 - (C) 310 thousand
 - (D) 390 thousand

Questions 66–70: The pie charts below show a city's electricity consumption by source in Year 1 (2022, total: 800 TWh) and Year 2 (2024, total: 900 TWh). Study the data and answer Q66–Q70.





Which energy source recorded the highest *absolute increase* in consumption (TWh) from Year 1 to Year 2?

- (A) Gas
- (B) Coal
- (C) Renewable
- (D) Nuclear

Q67. (Refer to pie charts in Q66.) By how many percentage points did Coal's share of total electricity consumption decline from Year 1 to Year 2?

- (A) 5 percentage points
- (B) 10 percentage points
- (C) 15 percentage points
- (D) 20 percentage points

Q68. (Refer to pie charts in Q66.) What is the ratio of renewable energy consumption in Year 1 to that in Year 2?

- (A) 8 : 15
- (B) 4 : 7
- (C) 3 : 5
- (D) 2 : 3

Q69. (Refer to pie charts in Q66.) If total electricity consumption in Year 2 is 12.5% more than in Year 1, what was the total consumption (in TWh) in Year 1?

- (A) 750 TWh



- (B) 850 TWh
- (C) 950 TWh
- (D) 800 TWh

Q70. (Refer to pie charts in Q66.) By how many TWh did gas consumption increase from Year 1 to Year 2?

- (A) 10 TWh
- (B) 15 TWh
- (C) 20 TWh
- (D) 25 TWh

Questions 71–75: The table below gives performance metrics for four hospitals (A, B, C, D). Study the data and answer Q71–Q75.

Hospital	OPD (Daily Avg.)	Surgeries/Month	Bed Occ.%	Revenue (₹ cr/yr)
A	850	420	78%	180
B	1200	380	85%	240
C	650	500	72%	150
D	950	310	90%	200

Q71.

Which hospital has the highest average bed occupancy percentage?

- (A) Hospital A
- (B) Hospital D
- (C) Hospital B
- (D) Hospital C

Q72. (Refer to table in Q71.) What is the total annual revenue (in ₹ crore) of all four hospitals combined?

- (A) ₹690 crore
- (B) ₹720 crore
- (C) ₹750 crore
- (D) ₹770 crore

Q73. (Refer to table in Q71.) Which hospital has the highest ratio of surgeries per month to daily average OPD?



- (A) Hospital A
- (B) Hospital B
- (C) Hospital C
- (D) Hospital D

Q74. (Refer to table in Q71.) If Hospital A's annual revenue increases by 25%, what will be its new annual revenue?

- (A) ₹225 crore
- (B) ₹215 crore
- (C) ₹230 crore
- (D) ₹240 crore

Q75. (Refer to table in Q71.) What is the average daily OPD across all four hospitals?

- (A) 900
- (B) 912.5
- (C) 925
- (D) 937.5

Questions 76–80: Five persons P, Q, R, S, T sit in a row from left (seat 1) to right (seat 5) facing North.

Use the clues below to answer Q76–Q80. (i) P sits at one extreme end of the row.

(ii) Q is immediately to the right of P.

(iii) R is to the right of Q but NOT at the extreme right.

(iv) S and T are not adjacent to each other.

(v) S is not positioned between P and R.



Based on the given clues, in which seat is S sitting?

- (A) 1st seat (leftmost)
- (B) 3rd seat
- (C) 4th seat
- (D) 5th seat (rightmost)



- Q77.** (Refer to the seating arrangement in Q76.) Who is sitting immediately to the right of T?
- (A) Q
 - (B) S
 - (C) R
 - (D) P
- Q78.** (Refer to the seating arrangement in Q76.) Which of the following persons sits at an extreme end of the row?
- (A) P
 - (B) T
 - (C) R
 - (D) Q
- Q79.** (Refer to the seating arrangement in Q76.) How many persons are sitting between P and S?
- (A) 2
 - (B) 3
 - (C) 4
 - (D) 1
- Q80.** (Refer to the seating arrangement in Q76.) If T and Q exchange their seats, who will be sitting immediately to the right of P?
- (A) S
 - (B) Q
 - (C) R
 - (D) T

Questions 81–85: In a certain code language, each letter is shifted 3 positions forward in the alphabet ($A \rightarrow D$, $B \rightarrow E$, ..., $W \rightarrow Z$, $X \rightarrow A$, $Y \rightarrow B$, $Z \rightarrow C$). Use this rule to answer Q81–Q85.

- Q81.** Decode the following word from the code language: **PDQJR**



- (A) MAPLE
- (B) MARCH
- (C) MANGO
- (D) MANOR

Q82. What is the code for the word **TRADE** in this code language?

- (A) WUDGH
- (B) TRADE
- (C) VSDGE
- (D) XVEGF

Q83. The word **PAPER** is coded as **SDSHV**. In this coded word, the letter 'H' stands for which letter of the original word?

- (A) A
- (B) P
- (C) R
- (D) E

Q84. Decode the following word from the code language: **OLJKW**

- (A) NIGHT
- (B) LIGHT
- (C) MIGHT
- (D) FIGHT

Q85. What is the code for the word **SPEED** in this code language?

- (A) UQHMF
- (B) VTHIG
- (C) VSHHG
- (D) WSIIG

Questions 86–90: A machine rearranges an input string of numbers and words in steps. In each **ODD** step, the largest remaining number moves to the next available leftmost position. In each **EVEN** step, the



alphabetically first remaining word moves to the next available leftmost position. This continues until all elements are placed. **Input:** salt 42 mine 63 road 15 gold 78

Q86. What is the arrangement at the end of **Step 3**?

- (A) 78 gold 63 salt 42 mine road 15
- (B) 78 salt 63 gold road 42 mine 15
- (C) 78 gold salt 42 mine 63 road 15
- (D) 63 gold 78 mine 42 road 15 salt

Q87. Which element occupies **position 4** in the arrangement at the end of **Step 5**?

- (A) 42
- (B) road
- (C) salt
- (D) mine

Q88. In which step does the arrangement 78 gold 63 mine 42 road 15 salt first appear?

- (A) Step 4
- (B) Step 5
- (C) Step 7
- (D) Step 6

Q89. If the input had contained **10 elements** (5 numbers and 5 words), how many steps would be needed for the machine to complete the full arrangement?

- (A) 7
- (B) 9
- (C) 8
- (D) 10

Q90. What element is at **position 2** in the arrangement at the end of **Step 2**?



- (A) gold
- (B) 63
- (C) mine
- (D) salt

Section D: General Awareness (GA) [Q91–Q110]

Q91. The 2023 AI Safety Summit was held at:

- (A) Geneva, Switzerland
- (B) Bletchley Park, England
- (C) Washington D.C., USA
- (D) Tokyo, Japan

Q92. India's space economy target by 2033, as per the Indian Space Policy 2023, is approximately:

- (A) \$22 billion
- (B) \$33 billion
- (C) \$50 billion
- (D) \$44 billion

Q93. NITI Aayog, established in January 2015, replaced which body?

- (A) Planning Commission
- (B) Finance Commission
- (C) National Development Council
- (D) Economic Advisory Council

Q94. The Digital Personal Data Protection (DPDP) Act 2023 establishes which body for enforcement and adjudication?

- (A) Data Protection Authority of India
- (B) Information Commissioner's Office
- (C) Data Protection Board of India
- (D) Digital Regulatory Commission of India



- Q95.** INS Vikrant, India's first domestically built aircraft carrier, was commissioned into the Indian Navy in:
- (A) 2020
 - (B) 2022
 - (C) 2021
 - (D) 2023
- Q96.** Who was the first person announced to receive the Bharat Ratna 2024 (announced in January 2024)?
- (A) APJ Abdul Kalam (posthumous)
 - (B) Sachin Tendulkar
 - (C) Atal Bihari Vajpayee (posthumous)
 - (D) Karpoori Thakur (posthumous)
- Q97.** India's rank in the Global Innovation Index (GII) 2024 was:
- (A) 39th
 - (B) 46th
 - (C) 52nd
 - (D) 61st
- Q98.** The Sagarmala Programme, launched by the Government of India, primarily aims to:
- (A) Develop India's inland waterways network.
 - (B) Expand India's naval capabilities and blue-water presence.
 - (C) Modernise ports and promote port-led economic development.
 - (D) Create exclusive economic fishing zones for coastal communities.
- Q99.** India's total coastline length (including island territories) is approximately:
- (A) 5,422 km
 - (B) 7,516 km



- (C) 6,100 km
- (D) 8,200 km

Q100. India's Financial Action Task Force (FATF) compliance status as of 2024 is:

- (A) Grey list (enhanced monitoring)
- (B) Black list (high-risk jurisdiction)
- (C) Under observation (increased reporting)
- (D) Regular Follow-up (largely compliant member)

Q101. The National Investment and Infrastructure Fund (NIIF) was set up by the Government of India as a:

- (A) Sovereign wealth fund to attract long-term infrastructure investment.
- (B) Manager of India's foreign exchange reserves.
- (C) Development finance institution for priority-sector lending.
- (D) Export-import bank for trade financing.

Q102. India's first Indian Institute of Technology (IIT) was established at:

- (A) Mumbai
- (B) Madras
- (C) Kharagpur
- (D) Delhi

Q103. The Cross-Border Interbank Payment System (CIPS) is operated by:

- (A) USA
- (B) China
- (C) European Union
- (D) Russia

Q104. The Pradhan Mantri Ujjwala Yojana (PMUY) provides free LPG connections primarily to:



- (A) All families living below the poverty line.
- (B) Farmers with land-holdings below 2 acres.
- (C) Urban slum dwellers identified by local bodies.
- (D) Women from Below Poverty Line (BPL) households.

Q105. The National Monetisation Pipeline (NMP), launched by NITI Aayog, covers the period:

- (A) 2021–22 to 2024–25
- (B) 2020–21 to 2025–26
- (C) 2023–24 to 2026–27
- (D) 2022–23 to 2027–28

Q106. Which country holds the G20 Presidency in 2025?

- (A) Brazil
- (B) India
- (C) South Africa
- (D) Italy

Q107. India's National Logistics Policy was launched in:

- (A) 2020
- (B) 2022
- (C) 2021
- (D) 2023

Q108. A “greenfield fab” differs from a “fablight” semiconductor manufacturing model primarily because:

- (A) A greenfield fab involves a fully new facility performing complete front-end wafer processing; a fablight model focuses on back-end assembly, testing, and packaging.
- (B) A greenfield fab exclusively uses imported semiconductor equipment; fablight relies on domestic equipment.



- (C) A greenfield fab is funded entirely by private investment; a fablight model receives government subsidy.
- (D) A greenfield fab manufactures advanced node chips; a fablight makes only legacy chips.

Q109. As of 2024, RuPay cards are accepted in approximately how many countries?

- (A) 50+ countries
- (B) 15+ countries
- (C) 100+ countries
- (D) 30+ countries

Q110. India's Blue Economy Policy 2023 was released by which Ministry?

- (A) Ministry of Ports, Shipping and Waterways
- (B) Ministry of External Affairs
- (C) Ministry of Earth Sciences
- (D) Ministry of Commerce and Industry



Detailed Solutions

Solution

Concept — Reading Comprehension (Main Idea): The passage covers UNCLOS governance, deep-sea mining risks, blue carbon protection, IUU fishing, and the tragedy-of-the-commons analogy, all converging on the need to balance economic use with ecological protection. **Why other options are wrong:**

- Q1.
- (A) The author does not call UNCLOS ineffective; it is seen as a foundational, if imperfect, framework.
 - (B) A total ban on deep-sea mining is not advocated; the author calls for stronger governance.
 - (D) The passage explicitly does not claim blue carbon can offset all industrial emissions.

Final Answer: Ocean governance must balance exploitation with preservation

⇒ ☐ C

Answer: (C) [Go Back to Q1](#)

Solution

Concept — Reading Comprehension (Inference): The passage states EEZ grants sovereign *economic* rights but not full sovereignty; freedom of innocent passage is preserved. Coastal states control resources, not navigation. **Why other options are wrong:**

- Q2.
- (B) The passage explicitly says EEZ is *not* full sovereignty.
 - (C) EEZ is an economic, not military, construct under UNCLOS.
 - (D) The EEZ extends 200 *nautical miles*, not kilometres.

Final Answer: Sovereign resource rights, but innocent passage preserved ⇒

☐ A

Answer: (A) [Go Back to Q2](#)

Solution

Concept — Reading Comprehension (Vocabulary in Context): The passage defines “blue carbon” as carbon sequestered by coastal and estuarine habitats—mangroves, seagrasses, and salt marshes—at rates five times higher than tropical forests. **Why other options are wrong:**

- Q3.
- (A) Shipping emissions are not mentioned as blue carbon.
 - (B) Deep-sea sediment carbon is geological, not the passage’s usage.
 - (C) Phytoplankton capture is oceanic, distinct from coastal blue carbon.



Final Answer: Carbon sequestered by coastal ecosystems ⇒ D

Answer: (D) [Go Back to Q3](#)

Solution

Concept — Reading Comprehension (Specific Detail): The passage directly states that deep-sea mining “eliminate[s] micro-organisms and macro-fauna” and once destroyed these ecosystems “cannot be restored within any human timescale.” **Why other options are wrong:**

- Q4.**
- (A) Legal disputes are not cited as the primary mining risk.
 - (C) Competition with land mining is not mentioned.
 - (D) Coastal fishermen are not identified as the primary risk group.

Final Answer: Permanent destruction of unstudied deep-sea ecosystems ⇒ B

Answer: (B) [Go Back to Q4](#)

Solution

Concept — Reading Comprehension (Author’s Recommendation): The final paragraph recommends strengthening international frameworks, expanding ISA jurisdiction, and investing in IUU detection—all multilateral strengthening measures. **Why other options are wrong:**

- Q5.**
- (A) A moratorium on all maritime activity is far beyond what the author suggests.
 - (B) Naval expansion is not mentioned as a recommended measure.
 - (D) The author explicitly warns against unilateral national control of shared resources.

Final Answer: Strengthen multilateral frameworks against the tragedy of the commons ⇒ C

Answer: (C) [Go Back to Q5](#)

Solution

Concept — Reading Comprehension (Primary Purpose): The passage analyses the housing shortage, PMAY-U, Dharavi redevelopment tensions, TOD, and Model Tenancy Act—all dimensions of the urban housing problem. This is multidimensional analysis, not an exposé or single-solution advocacy. **Why other options are wrong:**

- Q6.**
- (A) Corruption is not discussed.



- (B) Rural housing is not covered.
- (C) TOD is one of several solutions; the author does not call it the only answer.

Final Answer: Analyse multidimensional affordable-housing challenge ⇒ **D**

Answer: (D) [Go Back to Q6](#)

Solution

Concept — Reading Comprehension (Inference): The passage calls in-situ redevelopment “more socially equitable” but lists obstacles: unclear land titles, legal claims, density, and risk of disguised displacement. **Why other options are wrong:**

- Q7.**
- (A) The author says it is *preferable*, not that it always displaces.
 - (C) Cost comparison is not made.
 - (D) The passage does not say all residents oppose it.

Final Answer: Preferable to resettlement but faces land-title challenges ⇒ **B**

Answer: (B) [Go Back to Q7](#)

Solution

Concept — Reading Comprehension (Vocabulary in Context): The passage contrasts in-situ redevelopment with “resettlement to distant peripheral sites,” making clear that in-situ means rebuilding on the same current site. **Why other options are wrong:**

- Q8.**
- (B) This is the opposite—peripheral relocation.
 - (C) Rental subsidies are a demand-side instrument; not what the passage means.
 - (D) Demolition without replacement contradicts the entire context.

Final Answer: Rebuilding on the same site where people currently live ⇒ **A**

Answer: (A) [Go Back to Q8](#)

Solution

Concept — Reading Comprehension (Author’s Recommendation): The final sentence explicitly recommends “integrating supply-side interventions such as TOD with demand-side reforms such as rental market liberalisation,” matching option C. **Why other options are wrong:**

- Q9.**
- (A) Full privatisation is not advocated.
 - (B) Greenfield-only is not the recommendation.



- (D) The EWS/LIG categories are not dismissed.

Final Answer: Integrate TOD with rental market reforms ⇒

Answer: (C) [Go Back to Q9](#)

Solution

Concept — Reading Comprehension (Specific Detail): The passage states PMAY-U has “sanctioned approximately 11.8 million houses” but “construction completion rates lag significantly,” matching option D. **Why other options are wrong:**

- Q10.**
- (A) Equal allocation is not mentioned.
 - (B) No population-size restriction is stated.
 - (C) The scheme covers EWS/LIG broadly, not only slum dwellers.

Final Answer: 11.8 million houses sanctioned, many still under construction ⇒

Answer: (D) [Go Back to Q10](#)

Solution

Concept — Reading Comprehension (Central Thesis): The passage argues that supply-chain restructuring driven by geopolitics—friendshoring, nearshoring, China+1, industrial policy—is reshaping global trade, not ending it. **Why other options are wrong:**

- Q11.**
- (A) The author explicitly rejects the term “deglobalisation.”
 - (C) The benefits are not described as equal.
 - (D) The tension with WTO rules is noted but is not the central thesis.

Final Answer: Geopolitics-driven supply-chain diversification reshapes trade ⇒

Answer: (B) [Go Back to Q11](#)

Solution

Concept — Reading Comprehension (Vocabulary in Context): The passage explicitly defines friendshoring as “concentrating production in geopolitically aligned or trusted nations to reduce strategic risk.” **Why other options are wrong:**

- Q12.**
- (A) This describes nearshoring (geographic proximity).
 - (B) Technology sharing is not the definition given.
 - (D) Free-trade zones are not part of the definition.



Final Answer: Concentrating supply chains in geopolitically aligned nations

⇒ ☐ C

Answer: (C) [Go Back to Q12](#)

Solution

Concept — Reading Comprehension (Specific Detail): The passage states companies “diversify manufacturing to Vietnam, India, and Mexico while maintaining residual operations in China to service the domestic market.” **Why other options are wrong:**

- Q13.**
- (B) Complete elimination from China is not what the passage says.
 - (C) No government mandate is described.
 - (D) An extra line inside China is the opposite of diversification.

Final Answer: Diversify to Vietnam, India, Mexico while keeping residual China presence ⇒ ☐ A

Answer: (A) [Go Back to Q13](#)

Solution

Concept — Reading Comprehension (Author’s Stance): The passage states “It would be a mistake...to characterise these developments as ‘deglobalisation.’ Trade volumes remain at historic highs...the global economy is...re-globalising along geopolitical fault lines.” **Why other options are wrong:**

- Q14.**
- (A) The author explicitly rejects the deglobalisation label.
 - (B) No positive developmental framing is given for developing nations.
 - (C) The author clearly takes a position.

Final Answer: Trade is re-globalising along geopolitical lines, not retreating ⇒ ☐ D

Answer: (D) [Go Back to Q14](#)

Solution

Concept — Reading Comprehension (Inference): The final sentence warns that for nations “not clearly aligned with either the US-led or China-led blocs...the new trade architecture may demand alignment as the price of access.” **Why other options are wrong:**

- Q15.**
- (A) Equal benefit is not claimed; alignment is the price of access.
 - (C) Automatic subsidy flow is not mentioned.
 - (D) Rejecting the new architecture is not the implication.



Final Answer: Non-aligned nations risk exclusion from new trade architecture $\Rightarrow$ **B**

Answer: (B) [Go Back to Q15](#)

Solution

Concept — Para-Jumble (Logical Sequencing): S introduces the moral/political principle (historical responsibility $\rightarrow$ financial obligation). P follows with the specific failure (missed \$100 bn pledge). Q adds the COP28 Loss and Damage Fund as a step forward. T identifies the stark consequence for the most vulnerable. R closes with the recommendation (scale up grant-based adaptation finance). Sequence: $S \rightarrow P \rightarrow Q \rightarrow T \rightarrow R$. **Why other options are wrong:**

- Q16.** • (B)/(C)/(D): Begin with pledge failure or COP outcome without establishing the underlying principle first, causing logical disconnection.

Final Answer: $S \rightarrow P \rightarrow Q \rightarrow T \rightarrow R \Rightarrow$ **A**

Answer: (A) [Go Back to Q16](#)

Solution

Concept — Para-Jumble (Logical Sequencing): R sets the problem (COVID exposed healthcare strain). T introduces the government's physical infrastructure response (PM-ABHIM). Q adds the digital layer (eSanjeevani telemedicine). P covers the insurance/coverage dimension (Ayushman Bharat expansion). S synthesises all reforms into a holistic conclusion. Sequence: $R \rightarrow T \rightarrow Q \rightarrow P \rightarrow S$. **Why other options are wrong:**

- Q17.** • (A)/(B)/(C): Either begin with a specific policy before establishing the problem (R) or mis-order the policy interventions.

Final Answer: $R \rightarrow T \rightarrow Q \rightarrow P \rightarrow S \Rightarrow$ **D**

Answer: (D) [Go Back to Q17](#)

Solution

Concept — Para-Jumble (Logical Sequencing): P introduces the demographic opportunity (median age, time window). Q immediately provides the critical caveat (low formal skill training). R explains what is needed (employability-focused skilling). S gives concrete sectoral evidence (shortages despite graduate unemployment). T concludes with the overarching imperative (close the gap). Sequence: $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T$. **Why other options are wrong:**

- Q18.** • (A)/(B)/(D): Misplace the specific data sentence (Q) or the recommenda-



tion (R) before evidence, disrupting the argument flow.

Final Answer: $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T \Rightarrow \boxed{C}$

Answer: (C) [Go Back to Q18](#)

Solution

Concept — Para-Jumble (Logical Sequencing): P introduces the phenomenon (gig workers as “partners”). Q explains the consequence of this classification (no statutory benefits). R describes the partial legislative response (Code on Social Security 2020). S identifies the interim gap (no social protection access). T proposes the solution (legislation + portable benefits). Sequence: $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T$.

Why other options are wrong:

- Q19.** • (A)/(C)/(D): Place the legislative response (R) or solution (T) before the problem and gap are fully established.

Final Answer: $P \rightarrow Q \rightarrow R \rightarrow S \rightarrow T \Rightarrow \boxed{B}$

Answer: (B) [Go Back to Q19](#)

Solution

Concept — Critical Reasoning (Hidden Assumption): The argument concludes renewables cannot replace fossil fuels for base-load because they are intermittent. This only holds if the intermittency cannot be overcome—i.e., large-scale storage will NOT become viable. That is the hidden assumption. **Why other options are wrong:**

- Q20.** • (A) Complementary sources (hydro, geothermal) are not discussed; not the core assumption.
• (B) Grid transmission is a separate constraint not embedded in the intermittency argument.
• (C) Demand shifting is plausible but not the central hidden assumption.

Final Answer: Large-scale cost-effective storage will not become viable $\Rightarrow \boxed{D}$

Answer: (D) [Go Back to Q20](#)

Solution

Concept — Critical Reasoning (Weaken): If the countries with *highest* social media use show the *lowest* polarisation, the causal link between social media and polarisation is directly undermined. **Why other options are wrong:**

- Q21.** • (B) Counter-speech features are a future mitigation, not evidence against the causal claim.



- (C) Pre-existing polarisation is an alternative cause argument, weakening less directly than (A).
- (D) Algorithmic curation in traditional media is an alternative mechanism, but less powerful than (A)'s empirical counter-evidence.

Final Answer: High social media use, low polarisation in Nordic countries ⇒

A

Answer: (A) [Go Back to Q21](#)

Solution

Concept — Critical Reasoning (Strengthen): Option C provides direct longitudinal causal evidence: low-income children in quality pre-K earned 40% more at age 30, directly supporting the argument that early childhood education reduces long-term inequality. **Why other options are wrong:**

- Q22.**
- (A) Enrolment increase is a correlation of inputs, not an outcome measure.
 - (B) Co-investment in adult retraining introduces a confounding variable.
 - (D) Teacher pay differential is irrelevant to the outcome claim.

Final Answer: Longitudinal study shows 40% higher earnings at age 30 ⇒ **C**

Answer: (C) [Go Back to Q22](#)

Solution

Concept — Critical Reasoning (Identify Conclusion): The word “Therefore” in “Therefore, governments should pilot UBI programmes at scale before committing to full national implementation” is the classic conclusion indicator. This is the action the argument recommends; all other statements are premises or evidence supporting it. **Why other options are wrong:**

- Q23.**
- (A) The first bold statement (inadequate safety net) is a supporting premise.
 - (C) Automation/displacement is background context, not the conclusion.
 - (D) Fiscal cost is not mentioned in the bold statements.

Final Answer: The second bold statement is the main conclusion ⇒ **B**

Answer: (B) [Go Back to Q23](#)

Solution

Concept — Vocabulary: EPHEMERAL (from Greek *ephemeros* = lasting only a day) means lasting a very short time; fleeting; transitory. Example: “The ephemeral beauty of cherry blossoms lasts only a week.” **Why other options**



are wrong:

- Q24.**
- (B) Weather-related = meteorological, not ephemeral.
 - (C) Causing pain = excruciating/painful.
 - (D) Deeply respected = venerable/august.

Final Answer: Lasting only a very short time ⇒ **A**

Answer: (A) [Go Back to Q24](#)

Solution

Concept — Vocabulary: IMPUGN (Latin *impugnare* = to fight against) means to challenge or attack someone's credibility, motives, or accuracy. Example: "The lawyer sought to impugn the credibility of the witness." **Why other options are wrong:**

- Q25.**
- (A) To praise enthusiastically = extol/laud.
 - (B) To ignore = disregard.
 - (D) To accept without verification = acquiesce.

Final Answer: Challenge or attack as false or dishonest ⇒ **C**

Answer: (C) [Go Back to Q25](#)

Solution

Concept — Vocabulary: TRUCULENT (Latin *truculentus* = fierce) means eager or quick to argue or fight; aggressively defiant. Example: "The truculent negotiator refused every compromise." **Why other options are wrong:**

- Q26.**
- (A) Peaceful and cooperative = conciliatory/amicable.
 - (C) Excessively cautious = circumspect.
 - (D) Scrupulously honest = candid/forthright.

Final Answer: Aggressively defiant and quarrelsome ⇒ **B**

Answer: (B) [Go Back to Q26](#)

Solution

Concept — Vocabulary (Antonym): PENURIOUS = extremely unwilling to spend money; miserly/stingy. Its antonym is generous/open-handed/munificent. Option D (generous and open-handed) is the direct antonym. **Why other options are wrong:**

- Q27.**
- (A) "Very wealthy" relates to financial status, not generosity; one can be wealthy yet penurious.
 - (B) "Extravagant" (wasteful) is closer but implies excess rather than gen-



erosity.

- (C) “Desperately poor” is a near-synonym of penurious’s secondary meaning.

Final Answer: Generous and open-handed ⇒ D

Answer: (D) [Go Back to Q27](#)

Solution

Concept — Vocabulary: GARRULOUS (Latin *garrulus* = chattering) means excessively talkative, especially about trivial or unimportant matters. Example: “The garrulous tour guide talked non-stop for three hours.” **Why other options are wrong:**

- Q28.**
- (B) Quiet and reserved = taciturn/reticent.
 - (C) Highly educated = erudite/learned.
 - (D) Bold and fearless = audacious/intrepid.

Final Answer: Excessively talkative about trivial matters ⇒ A

Answer: (A) [Go Back to Q28](#)

Solution

Concept — Grammar (Double Negatives): Standard English prohibits double negatives. Option C uses a single negative (“did not want any”) correctly. Options A, B, D all contain double negatives (“don’t...no”, “can’t...hardly”, “wasn’t...nobody”). **Why other options are wrong:**

- Q29.**
- (A) “don’t have no” = double negative.
 - (B) “can’t hardly” = double negative (“hardly” is a negative adverb).
 - (D) “wasn’t nobody” = double negative.

Final Answer: “The manager did not want any delays” ⇒ C

Answer: (C) [Go Back to Q29](#)

Solution

Concept — Grammar (Conditionals): Type 3 (past unreal) conditional structure: *If + had + past participle, ... would have + past participle*. Option B follows this exactly: “If she had studied harder, she would have passed.” **Why other options are wrong:**

- Q30.**
- (A) “would have studied” in the if-clause is incorrect; must be “had studied”.
 - (C) “studied harder” (simple past) in the if-clause makes it Type 2, not Type 3.



- (D) “she would pass” (no “have”) in the main clause breaks the Type 3 structure.

Final Answer: “If she had studied harder, she would have passed” ⇒ B

Answer: (B) [Go Back to Q30](#)

Solution

Concept — Grammar (Parallel Structure): All items in a list must share the same grammatical form. Option D uses three gerunds: “planning, executing, and reviewing”—perfectly parallel. **Why other options are wrong:**

- Q31.**
- (A) Mixes gerund (reading), infinitive (to swim), and gerund (hiking).
 - (B) Mixes gerunds (planning, executing) and infinitive (to review).
 - (C) Mixes infinitive (to buy), gerund (renovating), and infinitive (save).

Final Answer: “planning, executing, and reviewing projects” ⇒ D

Answer: (D) [Go Back to Q31](#)

Solution

Concept — Grammar (Collective Nouns): In formal standard usage, collective nouns (committee, team, jury) take singular verbs when acting as a unified body. “The committee *has* reached *its* final decision” is correct. **Why other options are wrong:**

- Q32.**
- (B) “have decided their verdict” uses plural verb/pronoun (British informal, non-standard in formal IIFT context).
 - (C) “committees decides” has subject–verb number disagreement (plural subject, singular verb).
 - (D) “committee are deciding” uses plural verb without clear justification.

Final Answer: “The committee has reached its final decision” ⇒ A

Answer: (A) [Go Back to Q32](#)

Solution

Concept — Para-Completion (Logical Conclusion): The paragraph traces strategic autonomy from Nehru’s non-alignment to contemporary multi-vector engagement (Quad, Russia, China). The conclusion must tie ideological heritage and pragmatic behaviour together. Option D does exactly that. **Why other options are wrong:**

- Q33.**
- (A) Urging a binary choice contradicts the autonomy narrative.
 - (B) Calling non-alignment merely rhetorical contradicts the tone.



- (C) Economic dependence limiting independence contradicts the thrust of the paragraph.

Final Answer: Strategic autonomy = ideological heritage + pragmatic calculation ⇒

Answer: (D) [Go Back to Q33](#)

Solution

Concept — Para-Completion (Gap-Fill): The paragraph describes the low correlation (0.38) among ESG rating agencies. The gap must explain the implication of this divergence and lead logically into the final sentence about capital flows being distorted by rating methodology. Option C—calling for standardised global reporting frameworks—provides this bridge precisely. **Why other options are wrong:**

- Q34.**
- (A) ESG fund outperformance changes the subject away from the rating-divergence problem.
 - (B) EU marketing restrictions are tangential to the divergence issue.
 - (D) Recommending individual rubrics does not naturally lead to the passage's final sentence.

Final Answer: Divergence suggests standardised global reporting frameworks are needed ⇒

Answer: (C) [Go Back to Q34](#)

Solution

Concept — Para-Completion (Logical Continuation): The paragraph ends with “the statistical relationship is more complex than popular discourse suggests,” signalling a nuance is coming. Option B provides the necessary caveat (correlation ≠ causation; reverse causality possible), consistent with academic caution. **Why other options are wrong:**

- Q35.**
- (A) Immediate policy ban contradicts the “complex” nuance just introduced.
 - (C) Moral obligation of platforms changes topic from the epidemiological question.
 - (D) Calling evidence “conclusive” directly contradicts the paragraph's last sentence.

Final Answer: Correlation does not establish causation; reverse causality is possible ⇒



Answer: (B) [Go Back to Q35](#)

Solution

Concept — Weighted Average: Let b = number of boys; girls = $30 - b$.

Total marks: $76b + 64(30 - b) = 72 \times 30$

$76b + 1920 - 64b = 2160$

$12b = 240 \Rightarrow b = 20$. **Why other options are wrong:**

- Q36.**
- (A) $b = 12$: $76(12) + 64(18) = 912 + 1152 = 2064 \neq 2160$.
 - (C) $b = 15$: $\text{avg} = (76 \times 15 + 64 \times 15)/30 = 70 \neq 72$.
 - (D) $b = 18$: $76(18) + 64(12) = 1368 + 768 = 2136 \neq 2160$.

Final Answer: 20 boys $\Rightarrow$ **B**

Answer: (B) [Go Back to Q36](#)

Solution

Concept — Averages (Consecutive Even Numbers): If average of 5 consecutive even numbers = 20, the middle (3rd) number = 20. So the numbers are 16, 18, 20, 22, 24.

The next 5: 26, 28, 30, 32, 34. Average = middle = 30. **Why other options are wrong:**

- Q37.**
- (A) 25 is incorrect; each set's average rises by 10.
 - (B) 28 would be correct only if the series shifted by 4, not 10.
 - (C) 32 skips an entire group.

Final Answer: 30 $\Rightarrow$ **D**

Answer: (D) [Go Back to Q37](#)

Solution

Concept — Average Speed (Harmonic Mean): For equal distances at speeds v_1 and v_2 :

$$\text{Avg speed} = \frac{2v_1v_2}{v_1 + v_2} = \frac{2 \times 60 \times 40}{60 + 40} = \frac{4800}{100} = 48 \text{ km/h.}$$

Why other options are wrong:

- Q38.**
- (B) 50 km/h is the arithmetic mean, which overestimates average speed for unequal durations.
 - (C)/(D): Not derivable from any standard formula applied to these speeds.

Final Answer: 48 km/h $\Rightarrow$ **A**

Answer: (A) [Go Back to Q38](#)



Solution

Concept — Arithmetic Progression: $a_8 = a + 7d = 52$ and $a_{11} = a + 10d = 70$.

Subtract: $3d = 18 \Rightarrow d = 6$.

$a = 52 - 7 \times 6 = 52 - 42 = 10$. **Why other options are wrong:**

- Q39.**
- (A) $a = 4$: $a_8 = 4 + 42 = 46 \neq 52$.
 - (B) $a = 8$: $a_8 = 8 + 42 = 50 \neq 52$.
 - (D) $a = 12$: $a_8 = 12 + 42 = 54 \neq 52$.

Final Answer: First term $= 10 \Rightarrow$ **C**

Answer: (C) [Go Back to Q39](#)

Solution

Concept — Geometric Progression (Sum of n terms): $S_n = a \frac{r^n - 1}{r - 1}$ (for $r > 1$).

$S_6 = 3 \times \frac{2^6 - 1}{2 - 1} = 3 \times \frac{64 - 1}{1} = 3 \times 63 = 189$. **Why other options are wrong:**

- Q40.**
- (A) 180: incorrect; $2^6 = 64$, not 60.
 - (C) 192: corresponds to 3×64 , forgetting to subtract 1.
 - (D) 186: arithmetic error.

Final Answer: 189 $\Rightarrow$ **B**

Answer: (B) [Go Back to Q40](#)

Solution

Concept — AP (Sum Exceeding a Threshold): AP: 3, 7, 11, ... $a = 3$, $d = 4$.

$S_n = \frac{n}{2}[2a + (n - 1)d] = \frac{n}{2}[6 + 4(n - 1)] = n(2n + 1)$.

$n = 9$: $9 \times 19 = 171 < 200$.

$n = 10$: $10 \times 21 = 210 > 200$. Minimum $n = 10$. **Why other options are wrong:**

- Q41.**
- (A) $n = 8$: $8 \times 17 = 136 < 200$.
 - (B) $n = 9$: $171 < 200$; still not exceeded.
 - (C) $n = 11$ works but is not the *minimum*.

Final Answer: 10 terms $\Rightarrow$ **D**

Answer: (D) [Go Back to Q41](#)

Solution

Concept — Mensuration (Volume of Cylinder): $V = \pi r^2 h = \frac{22}{7} \times 49 \times 10 = 22 \times 7 \times 10 = 1540 \text{ cm}^3$. **Why other options are wrong:**

- Q42.**
- (B) 1320: corresponds to $r = 6$ not 7.



- (C) 1680: corresponds to $r^2 = 76$, arithmetic error.
- (D) 1760: corresponds to $h = 11.4$, not 10.

Final Answer: $1540 \text{ cm}^3 \Rightarrow \boxed{\text{A}}$

Answer: (A) [Go Back to Q42](#)

Solution

Concept — Mensuration (Volume Conservation): $V_{\text{sphere}} = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi \times 216 = 288\pi$.

$$V_{\text{cone}} = \frac{1}{3}\pi R^2 h = \frac{1}{3}\pi \times 16 \times h.$$

$$288\pi = \frac{16\pi h}{3} \Rightarrow h = \frac{288 \times 3}{16} = 54 \text{ cm. Why other options are wrong:}$$

- Q43.**
- (A) 45: uses $r_{\text{sphere}} = 5$ (wrong).
 - (B) 48: arithmetic error in division.
 - (D) 60: overcounts sphere volume.

Final Answer: $54 \text{ cm} \Rightarrow \boxed{\text{C}}$

Answer: (C) [Go Back to Q43](#)

Solution

Concept — Mensuration (Total Surface Area of Frustum): Slant height: $l = \sqrt{h^2 + (R - r)^2} = \sqrt{9 + 16} = 5 \text{ cm}$.

$$\begin{aligned} \text{TSA} &= \pi(R + r)l + \pi R^2 + \pi r^2 = \pi(16)(5) + 100\pi + 36\pi = 80\pi + 136\pi = 216\pi. \\ &= 216 \times \frac{22}{7} = \frac{4752}{7} \approx 679 \text{ cm}^2. \text{ Why other options are wrong:} \end{aligned}$$

- Q44.**
- (A) 628: uses $\pi = 3.14$ but omits base areas partially.
 - (C) 706: overestimates the lateral area.
 - (D) 594: omits one base.

Final Answer: $\approx 679 \text{ cm}^2 \Rightarrow \boxed{\text{B}}$

Answer: (B) [Go Back to Q44](#)

Solution

Concept — Logarithms (Basic Properties): $\log_2 8 = 3$, $\log_2 32 = 5$, $\log_2 4 = 2$.
 $3 + 5 - 2 = 6$. Why other options are wrong:

- Q45.**
- (A) 5: subtracts 32 instead of adding.
 - (B) 4: miscalculates $\log_2 32 = 4$ (wrong; $2^5 = 32$).
 - (C) 7: adds all three without subtraction.

Final Answer: $6 \Rightarrow \boxed{\text{D}}$

Answer: (D) [Go Back to Q45](#)



Solution

Concept — Logarithms (Change of Base): $\log_{125} 25 = \frac{\log 25}{\log 125} = \frac{2 \log 5}{3 \log 5} = \frac{2}{3}$.

Why other options are wrong:

- Q46.**
- (B) $3/2$: inverts numerator and denominator.
 - (C) $5/3$: incorrect application of base conversion.
 - (D) $3/5$: partial inversion error.

Final Answer: $\frac{2}{3} \Rightarrow \boxed{A}$

Answer: (A) [Go Back to Q46](#)

Solution

Concept — Logarithms (Solving Equations): $\log_4(x^2) = 3 \Rightarrow x^2 = 4^3 = 64 \Rightarrow x = 8$ (taking positive root). **Why other options are wrong:**

- Q47.**
- (A) $x = 4$: $\log_4 16 = 2 \neq 3$.
 - (B) $x = 16$: $\log_4 256 = 4 \neq 3$.
 - (D) $x = 6$: $\log_4 36$ is not an integer.

Final Answer: $x = 8 \Rightarrow \boxed{C}$

Answer: (C) [Go Back to Q47](#)

Solution

Concept — Clocks (Angle Between Hands): Hour hand at $H:M = 30H + 0.5M$ degrees from 12.

At 3:45: hour hand $= 30(3) + 0.5(45) = 90 + 22.5 = 112.5$.

Minute hand at 45 min $= 45 \times 6 = 270$.

Angle $= |270 - 112.5| = 157.5$. **Why other options are wrong:**

- Q48.**
- (A) 165° : incorrect hour hand position used.
 - (C) 150° : ignores the 0.5° per minute contribution of hour hand.
 - (D) 172.5° : arithmetic error.

Final Answer: $157.5^\circ \Rightarrow \boxed{B}$

Answer: (B) [Go Back to Q48](#)

Solution

Concept — Clocks (Coincidences): The minute hand gains 360° on the hour hand every $\frac{720}{11}$ minutes. In 12 hours, coincidences occur 11 times (not 12, because the hands start coinciding at 12:00 and meet next at $\frac{720}{11} \approx 65.45$ min intervals).

Why other options are wrong:



- Q49.**
- (A) 12: a common misconception; the 12th coincidence is exactly at mid-night (excluded as an endpoint here).
 - (B) 10: undercounts.
 - (C) 13: impossible in 12 hours.

Final Answer: 11 times $\Rightarrow$ D

Answer: (D) [Go Back to Q49](#)

Solution

Concept — Calendar (Day Advancement): From 14 March 2020 to 14 March 2021 is exactly 365 days. (14 March falls *after* 29 February in 2020, so the leap day does not add an extra day to this specific interval.)

$$365 \div 7 = 52 \text{ weeks remainder } 1.$$

Saturday + 1 = **Sunday**. **Why other options are wrong:**

- Q50.**
- (B) Monday: would require remainder 2 (366-day interval).
 - (C) Saturday: would require remainder 0.
 - (D) Friday: would require remainder 6.

Final Answer: Sunday $\Rightarrow$ A

Answer: (A) [Go Back to Q50](#)

Solution

Concept — Quadratic Equations (Vieta's Formulas): For $3x^2 - 7x + 2 = 0$:
 $\alpha + \beta = \frac{7}{3}$, $\alpha\beta = \frac{2}{3}$.

$$\alpha^2 + \beta^2 = (\alpha + \beta)^2 - 2\alpha\beta = \left(\frac{7}{3}\right)^2 - 2 \times \frac{2}{3} = \frac{49}{9} - \frac{4}{3} = \frac{49}{9} - \frac{12}{9} = \frac{37}{9}. \text{ **Why other options are wrong:**}$$

- Q51.**
- (A) 25/9: subtracts $\alpha + \beta$ instead of $2\alpha\beta$.
 - (B) 49/9: omits the subtraction of $2\alpha\beta$.
 - (D) 13/3: arithmetic error in combining fractions.

Final Answer: $\frac{37}{9} \Rightarrow$ C

Answer: (C) [Go Back to Q51](#)

Solution

Concept — Quadratic Equations (Discriminant): For equal roots, $\Delta = b^2 - 4ac = 0$.

$$(-4)^2 - 4(k)(3) = 0 \Rightarrow 16 - 12k = 0 \Rightarrow k = \frac{16}{12} = \frac{4}{3}. \text{ **Why other options are wrong:**}$$



- Q52.**
- (A) $k = 1$: $\Delta = 16 - 12 = 4 \neq 0$.
 - (C) $k = 2/3$: $\Delta = 16 - 8 = 8 \neq 0$.
 - (D) $k = 2$: $\Delta = 16 - 24 = -8 \neq 0$ (complex roots).

Final Answer: $k = \frac{4}{3} \Rightarrow \boxed{\text{B}}$

Answer: (B) [Go Back to Q52](#)

Solution

Concept — Absolute Value Inequality: $|3x - 6| > 9$ splits into two cases:

Case 1: $3x - 6 > 9 \Rightarrow 3x > 15 \Rightarrow x > 5$.

Case 2: $3x - 6 < -9 \Rightarrow 3x < -3 \Rightarrow x < -1$.

Solution: $x < -1$ or $x > 5$. **Why other options are wrong:**

- Q53.**
- (A) $-1 < x < 5$: this is the solution to $|3x - 6| < 9$, the opposite inequality.
 - (B) Only $x > 5$: misses the $x < -1$ branch.
 - (C) $-5 < x < 1$: completely incorrect range.

Final Answer: $x < -1$ or $x > 5 \Rightarrow \boxed{\text{D}}$

Answer: (D) [Go Back to Q53](#)

Solution

Concept — Surds (Rationalisation): Multiply by $\frac{\sqrt{5} + 1}{\sqrt{5} + 1}$:

$$\frac{(3 + \sqrt{5})(\sqrt{5} + 1)}{(\sqrt{5})^2 - 1^2} = \frac{3\sqrt{5} + 3 + 5 + \sqrt{5}}{4} = \frac{4\sqrt{5} + 8}{4} = \sqrt{5} + 2.$$

Why other options are wrong:

- Q54.**
- (B) $3 + \sqrt{5}$: the original numerator, not the simplified form.
 - (C) $1 + 2\sqrt{5}$: error in collecting like terms.
 - (D) $4 + \sqrt{5}$: incorrect constant term.

Final Answer: $2 + \sqrt{5} \Rightarrow \boxed{\text{A}}$

Answer: (A) [Go Back to Q54](#)

Solution

Concept — Surds (Comparing Radicals): Raise both to the 12th power (LCM of 4 and 3):

$$(\sqrt[4]{5})^{12} = 5^3 = 125 \text{ and } (\sqrt[3]{3})^{12} = 3^4 = 81.$$

Since $125 > 81$, we have $\sqrt[4]{5} > \sqrt[3]{3}$. **Why other options are wrong:**



- Q55.**
- (A) $\sqrt[3]{3}$ is not greater.
 - (B) They are not equal.
 - (D) Comparison is determinable by the 12th-power method.

Final Answer: $\sqrt[4]{5}$ is greater $\Rightarrow$ C

Answer: (C) [Go Back to Q55](#)

Solution

Concept — Surds (Simplification): $\sqrt{75} = 5\sqrt{3}$, $\sqrt{48} = 4\sqrt{3}$, $\sqrt{27} = 3\sqrt{3}$.
 $5\sqrt{3} + 4\sqrt{3} - 3\sqrt{3} = 6\sqrt{3}$. **Why other options are wrong:**

- Q56.**
- (A) $5\sqrt{3}$: omits $\sqrt{48}$ contribution.
 - (C) $7\sqrt{3}$: adds all without subtracting $\sqrt{27}$.
 - (D) $4\sqrt{3}$: arithmetic error in combining.

Final Answer: $6\sqrt{3} \Rightarrow$ B

Answer: (B) [Go Back to Q56](#)

Solution

Concept — Probability (Two Dice): Total outcomes = 36. Favourable (sum=8):
 $(2, 6), (3, 5), (4, 4), (5, 3), (6, 2) = 5$ outcomes.
 $P = \frac{5}{36}$. **Why other options are wrong:**

- Q57.**
- (A) $1/9 = 4/36$: only 4 outcomes counted (omits $(4, 4)$ or overcounts).
 - (B) $7/36$: incorrect count.
 - (C) $1/6 = 6/36$: includes one extra outcome.

Final Answer: $\frac{5}{36} \Rightarrow$ D

Answer: (D) [Go Back to Q57](#)

Solution

Concept — Probability (Mutually Exclusive Events): $P(\text{ace or king}) = \frac{4}{52} + \frac{4}{52} = \frac{8}{52} = \frac{2}{13}$. (Ace and king are mutually exclusive.) **Why other options are wrong:**

- Q58.**
- (B) $1/13 = 4/52$: counts only aces.
 - (C) $3/13 = 12/52$: counts 3 ranks, not 2.
 - (D) $4/13 = 16/52$: counts 4 ranks.

Final Answer: $\frac{2}{13} \Rightarrow$ A

Answer: (A) [Go Back to Q58](#)



Solution

Concept — Conditional Probability (Without Replacement): Given first ball is red, 9 balls remain: 2 red, 5 blue, 2 green.

$P(\text{second is blue} | \text{first is red}) = \frac{5}{9}$. **Why other options are wrong:**

- Q59.**
- (A) $5/10$: uses original count of 10 balls, ignoring that one has been removed.
 - (B) $1/2$: treats remaining as only red/non-red.
 - (D) $5/18$: combines unconditional probabilities incorrectly.

Final Answer: $\frac{5}{9} \Rightarrow \boxed{\text{C}}$

Answer: (C) [Go Back to Q59](#)

Solution

Concept — Probability (Addition Rule for Mutually Exclusive Events): For mutually exclusive events: $P(A \cup B) = P(A) + P(B) = 0.4 + 0.3 = 0.7$.

(No intersection term since $P(A \cap B) = 0$.) **Why other options are wrong:**

- Q60.**
- (A) $0.12 = P(A) \times P(B)$: this is $P(A \cap B)$ for independent events; mutually exclusive events cannot intersect.
 - (C) $0.1 = P(B) - P(A)$: difference, not union.
 - (D) 0.5 : no standard derivation gives this.

Final Answer: $0.7 \Rightarrow \boxed{\text{B}}$

Answer: (B) [Go Back to Q60](#)

Solution

Concept — Data Interpretation (Percentage Growth): State S: $\frac{260 - 190}{190} \times$

$100 = \frac{70}{190} \times 100 \approx 36.8\%$ (highest).

State T: $\frac{80}{310} \times 100 \approx 25.8\%$; P: $\frac{60}{420} \times 100 \approx 14.3\%$; Q: $\frac{40}{280} \times 100 \approx 14.3\%$. **Why other options are wrong:**

- Q61.**
- (B) T: 25.8% is second highest.
 - (C) P: 14.3% is tied for lowest.
 - (D) Q: 14.3%.

Final Answer: State S ($\approx 36.8\%$ growth) $\Rightarrow \boxed{\text{A}}$

Answer: (A) [Go Back to Q61](#)



Solution

Concept — Data Interpretation (Summation): $480 + 320 + 340 + 260 + 390 = 1790$ thousand. **Why other options are wrong:**

- Q62.**
- (A) 1650: uses 2020-21 data (1550) + 100 error.
 - (B) 1720: arithmetic error (misreads one bar).
 - (D) 1850: overcounts by 60.

Final Answer: 1790 thousand $\Rightarrow$

Answer: (C) [Go Back to Q62](#)

Solution

Concept — Data Interpretation (Trend Analysis): State R: 350 (2020-21) $\rightarrow$ 340 (2022-23) = decline of 10 thousand. All other states increased. **Why other options are wrong:**

- Q63.**
- (A) P: 420 $\rightarrow$ 480 (increase).
 - (C) Q: 280 $\rightarrow$ 320 (increase).
 - (D) T: 310 $\rightarrow$ 390 (increase).

Final Answer: State R $\Rightarrow$

Answer: (B) [Go Back to Q63](#)

Solution

Concept — Data Interpretation (Ratio): State P (2020-21) = 420; State S = 190.

Ratio = $420 : 190 = 42 : 19$ (HCF of 420 and 190 = 10; 42 : 19 is fully reduced).

Why other options are wrong:

- Q64.**
- (A) 21:9: GCD simplification error (190 is not divisible by 20).
 - (B) 14:6: incorrectly simplifies.
 - (C) 7:3: $7/3 = 2.33 \neq 420/190 = 2.21$.

Final Answer: 42 : 19 $\Rightarrow$

Answer: (D) [Go Back to Q64](#)

Solution

Concept — Data Interpretation (Average): Average = $\frac{310 + 390}{2} = \frac{700}{2} = 350$ thousand. **Why other options are wrong:**

- Q65.**
- (B) 375: arithmetic error (adds 10 to correct answer).
 - (C) 310: only 2020-21 value.



- (D) 390: only 2022-23 value.

Final Answer: 350 thousand $\Rightarrow$ **A**

Answer: (A) [Go Back to Q65](#)

Solution

Concept — Data Interpretation (Absolute Change): Coal: $450 - 480 = -30$ (decrease). Gas: $180 - 160 = 20$. Renewable: $225 - 120 = 105$ (highest). Nuclear: $45 - 40 = 5$. **Why other options are wrong:**

- Q66.**
- (A) Gas: only 20 TWh increase.
 - (B) Coal: actually decreased.
 - (D) Nuclear: only 5 TWh increase.

Final Answer: Renewable (105 TWh increase) $\Rightarrow$ **C**

Answer: (C) [Go Back to Q66](#)

Solution

Concept — Data Interpretation (Percentage Point Change): Coal share: Year 1 = 60%, Year 2 = 50%. Decline = $60 - 50 = 10$ percentage points. **Why other options are wrong:**

- Q67.**
- (A) 5 pp: half the actual decline.
 - (C) 15 pp: overstates.
 - (D) 20 pp: doubles the actual decline.

Final Answer: 10 percentage points $\Rightarrow$ **B**

Answer: (B) [Go Back to Q67](#)

Solution

Concept — Data Interpretation (Ratio): Renewable Y1 = $15\% \times 800 = 120$ TWh; Y2 = $25\% \times 900 = 225$ TWh.

Ratio = $120 : 225 = 8 : 15$ (divide by 15). **Why other options are wrong:**

- Q68.**
- (B) 4:7: $4/7 \approx 0.571$, but $120/225 = 0.533 \neq 4/7$.
 - (C) 3:5: $3/5 = 0.6 \neq 8/15$.
 - (D) 2:3: $2/3 = 0.667 \neq 8/15$.

Final Answer: 8 : 15 $\Rightarrow$ **A**

Answer: (A) [Go Back to Q68](#)



Solution

Concept — Data Interpretation (Back-Calculation): Year 2 = Year 1 $\times$ 1.125.
 Year 1 = $900/1.125 = 800$ TWh (consistent with the pie chart data). **Why other options are wrong:**

- Q69.**
- (A) 750: $750 \times 1.125 = 843.75 \neq 900$.
 - (B) 850: $850 \times 1.125 = 956.25 \neq 900$.
 - (C) 950: already exceeds Year 2 total.

Final Answer: 800 TWh $\Rightarrow$ D

Answer: (D) [Go Back to Q69](#)

Solution

Concept — Data Interpretation (Absolute Change): Gas Y1 = $20\% \times 800 = 160$ TWh; Y2 = $20\% \times 900 = 180$ TWh.
 Increase = $180 - 160 = 20$ TWh. **Why other options are wrong:**

- Q70.**
- (A) 10 TWh: underestimates (uses $5\% \times 200$).
 - (B) 15 TWh: arithmetic error.
 - (D) 25 TWh: overestimates.

Final Answer: 20 TWh $\Rightarrow$ C

Answer: (C) [Go Back to Q70](#)

Solution

Concept — Data Interpretation (Maximum): Bed occupancy: A=78%, B=85%, C=72%, D=90%. Hospital D has the highest. **Why other options are wrong:**

- Q71.**
- (A) A: 78% (second lowest).
 - (C) B: 85% (second highest).
 - (D) C: 72% (lowest).

Final Answer: Hospital D (90%) $\Rightarrow$ B

Answer: (B) [Go Back to Q71](#)

Solution

Concept — Data Interpretation (Summation): $180 + 240 + 150 + 200 = 770$ crore. **Why other options are wrong:**

- Q72.**
- (A) 690: omits Hospital B's revenue contribution of 80.
 - (B) 720: arithmetic error.
 - (C) 750: omits 20 from the total.



Final Answer: ₹770 crore $\Rightarrow$ **D**

Answer: (D) [Go Back to Q72](#)

Solution

Concept — Data Interpretation (Ratio Comparison): A: $420/850 \approx 0.494$; B: $380/1200 \approx 0.317$; C: $500/650 \approx 0.769$; D: $310/950 \approx 0.326$.

Hospital C has the highest ratio. **Why other options are wrong:**

- Q73.**
- (A) A: 0.494 (second highest).
 - (B) B: 0.317 (second lowest).
 - (D) D: 0.326 (third highest).

Final Answer: Hospital C $\Rightarrow$ **C**

Answer: (C) [Go Back to Q73](#)

Solution

Concept — Data Interpretation (Percentage Increase): Hospital A current revenue = 180 crore.

New revenue = $180 \times 1.25 = 180 + 45 = 225$ crore. **Why other options are wrong:**

- Q74.**
- (B) ₹215 crore: corresponds to 19.4% increase.
 - (C) ₹230 crore: corresponds to 27.8% increase.
 - (D) ₹240 crore: corresponds to 33.3% increase.

Final Answer: ₹225 crore $\Rightarrow$ **A**

Answer: (A) [Go Back to Q74](#)

Solution

Concept — Data Interpretation (Average): Total OPD = $850 + 1200 + 650 + 950 = 3650$.

Average = $3650/4 = 912.5$. **Why other options are wrong:**

- Q75.**
- (A) 900: underestimates by 12.5.
 - (C) 925: overestimates.
 - (D) 937.5: corresponds to a total of 3750.

Final Answer: 912.5 $\Rightarrow$ **B**

Answer: (B) [Go Back to Q75](#)



Solution

Concept — Logical Reasoning (Linear Seating Arrangement): From clues (i) + (ii): P=seat 1, Q=seat 2.

From clue (iii): $R \in \{3, 4\}$ (right of Q, not extreme right).

If $R=3$: remaining S, T at seats 4, 5. Seats 4 and 5 are adjacent. Violates clue (iv).

×

If $R=4$: S, T at seats 3, 5. $|3 - 5| = 2$ (not adjacent). Clue (v): S not between P(1) and R(4), so $S \neq \text{seat } 3$. Therefore $S=\text{seat } 5$, $T=\text{seat } 3$.

Arrangement: P(1), Q(2), T(3), R(4), S(5). **Why other options are wrong:**

- Q76.**
- (A) Seat 1 = P.
 - (B)/(C) Seats 3/4 = T/R respectively.

Final Answer: Seat 5 (rightmost) $\Rightarrow$ D

Answer: (D) [Go Back to Q76](#)

Solution

Concept — Logical Reasoning (Linear Seating): Arrangement: P(1), Q(2), T(3), R(4), S(5).

T is at seat 3; immediately to the right of seat 3 is seat 4 = R. **Why other options are wrong:**

- Q77.**
- (A) Q is at seat 2 (left of T).
 - (B) S is at seat 5 (two positions right).
 - (D) P is at seat 1 (far left).

Final Answer: R $\Rightarrow$ C

Answer: (C) [Go Back to Q77](#)

Solution

Concept — Logical Reasoning (Extreme Positions): Extreme ends are seats 1 and 5 = P and S. Among the four options (P, T, R, Q), only P (seat 1) sits at an extreme end. **Why other options are wrong:**

- Q78.**
- (B) T is at seat 3 (middle).
 - (C) R is at seat 4 (inner).
 - (D) Q is at seat 2 (inner).

Final Answer: P $\Rightarrow$ A

Answer: (A) [Go Back to Q78](#)



Solution

Concept — Logical Reasoning (Counting between positions): P is at seat 1, S at seat 5. Persons between them (seats 2, 3, 4): Q, T, R = **3 persons**. **Why other options are wrong:**

- Q79.**
- (A) 2: misses one person.
 - (C) 4: includes P or S in the count.
 - (D) 1: severely undercounts.

Final Answer: 3 $\Rightarrow$ **B**

Answer: (B) [Go Back to Q79](#)

Solution

Concept — Logical Reasoning (Swap and Re-evaluate): Original: P(1), Q(2), T(3), R(4), S(5).

T and Q swap: P(1), T(2), Q(3), R(4), S(5).

Immediately to the right of P (seat 1) is seat 2 = **T**. **Why other options are wrong:**

- Q80.**
- (A) S: remains at seat 5.
 - (B) Q: moves to seat 3 after swap.
 - (C) R: remains at seat 4.

Final Answer: T $\Rightarrow$ **D**

Answer: (D) [Go Back to Q80](#)

Solution

Concept — Coding-Decoding (Reverse Caesar +3 Shift): Decode by subtracting 3: P(16) $\rightarrow$ M(13), D(4) $\rightarrow$ A(1), Q(17) $\rightarrow$ N(14), J(10) $\rightarrow$ G(7), R(18) $\rightarrow$ O(15).

Decoded word: **MANGO**. **Why other options are wrong:**

- Q81.**
- (A) MAPLE: M-A-P-L-E would encode to PDSMH, not PDQJR.
 - (B) MARCH: encodes to PDUFK.
 - (D) MANOR: encodes to PDQRU.

Final Answer: MANGO $\Rightarrow$ **C**

Answer: (C) [Go Back to Q81](#)

Solution

Concept — Coding-Decoding (Caesar +3 Shift): T(20) $\rightarrow$ W(23), R(18) $\rightarrow$ U(21), A(1) $\rightarrow$ D(4), D(4) $\rightarrow$ G(7), E(5) $\rightarrow$ H(8).

Code: **WUDGH**. **Why other options are wrong:**

- Q82.**
- (B) TRADE: the original word, not encoded.



- (C) VSDGE: corresponds to a +2 shift for T but +3 for others.
- (D) XVEGF: corresponds to a +4 shift.

Final Answer: WUDGH $\Rightarrow$ A

Answer: (A) [Go Back to Q82](#)

Solution

Concept — Coding-Decoding (Letter Mapping): PAPER $\rightarrow$ SDSHV: P $\rightarrow$ S, A $\rightarrow$ D, P $\rightarrow$ S, E $\rightarrow$ H, R $\rightarrow$ V.

The 4th letter 'H' in the code corresponds to the 4th letter 'E' in PAPER. **Why other options are wrong:**

- Q83.**
- (A) A $\rightarrow$ D (2nd position), not H.
 - (B) P $\rightarrow$ S (1st and 3rd positions), not H.
 - (C) R $\rightarrow$ V (5th position), not H.

Final Answer: E $\Rightarrow$ D

Answer: (D) [Go Back to Q83](#)

Solution

Concept — Coding-Decoding (Reverse Shift): O(15) $\rightarrow$ L(12), L(12) $\rightarrow$ I(9), J(10) $\rightarrow$ G(7), K(11) $\rightarrow$ H(8), W(23) $\rightarrow$ T(20).

Decoded: LIGHT. **Why other options are wrong:**

- Q84.**
- (A) NIGHT encodes to QLJKW (N $\rightarrow$ Q, not O $\rightarrow$ L).
 - (C) MIGHT encodes to PLJKW.
 - (D) FIGHT encodes to ILJKW.

Final Answer: LIGHT $\Rightarrow$ B

Answer: (B) [Go Back to Q84](#)

Solution

Concept — Coding-Decoding (Caesar +3 Shift): S(19) $\rightarrow$ V(22), P(16) $\rightarrow$ S(19), E(5) $\rightarrow$ H(8), E(5) $\rightarrow$ H(8), D(4) $\rightarrow$ G(7).

Code: VSHHG. **Why other options are wrong:**

- Q85.**
- (A) UQHHE: corresponds to +2 shift for S (gives U) but +3 for others— inconsistent.
 - (B) VTHIG: T instead of S at position 2 is a shift error.
 - (D) WSIIG: corresponds to +4 shift for S.

Final Answer: VSHHG $\Rightarrow$ C



Answer: (C) [Go Back to Q85](#)

Solution

Concept — Logical Reasoning (Input-Output Machine): Input: salt 42 mine 63 road 15 gold 78

Step 1 (odd → largest number 78 placed): **78** | salt 42 mine 63 road 15 gold

Step 2 (even → first alpha word 'gold' placed): **78 gold** | salt 42 mine 63 road 15

Step 3 (odd → next largest 63 placed): **78 gold 63** | salt 42 mine road 15

Full display at Step 3 (placed + remaining in original order): **78 gold 63 salt 42 mine road 15**. **Why other options are wrong:**

Q86. • (B)/(C)/(D): Incorrect placement sequence or incorrect remaining order.

Final Answer: 78 gold 63 salt 42 mine road 15 ⇒

Answer: (A) [Go Back to Q86](#)

Solution

Concept — Logical Reasoning (Input-Output Machine): Continuing from Step 3: Step 4 (even → next alpha word 'mine' placed): 78 gold 63 mine | salt 42 road 15

Step 5 (odd → next largest number 42 placed): 78 gold 63 mine 42 | salt road 15

Full arrangement at Step 5: **78 gold 63 mine 42 salt road 15**.

Position 4 = **mine**. **Why other options are wrong:**

Q87. • (A) 42 is at position 5.
• (B) road is at position 7.
• (C) salt is at position 6.

Final Answer: mine ⇒

Answer: (D) [Go Back to Q87](#)

Solution

Concept — Logical Reasoning (Input-Output Machine): Continuing: Step 6 (even → next alpha word 'road' placed): 78 gold 63 mine 42 road | salt 15

Step 7 (odd → next largest 15 placed): **78 gold 63 mine 42 road 15** | salt

Full arrangement at Step 7: **78 gold 63 mine 42 road 15 salt**.

This matches the target arrangement. **Why other options are wrong:**

Q88. • (A) Step 4: arrangement is 78 gold 63 mine salt 42 road 15.
• (B) Step 5: 42 is placed but road not yet moved.
• (D) Step 6: 15 not yet placed.

Final Answer: Step 7 ⇒



Answer: (C) [Go Back to Q88](#)

Solution

Concept — Logical Reasoning (Input-Output Machine — Generalisation): For N elements, $N - 1$ steps are needed: the last element falls into its position automatically in the penultimate step, and the arrangement is complete after $N - 1$ steps.

For $N = 10$: steps needed = $10 - 1 = 9$. **Why other options are wrong:**

- Q89.**
- (A) 7: too few ($N - 3$).
 - (C) 8: one step short.
 - (D) 10: overcounts by 1.

Final Answer: 9 steps $\Rightarrow$ **B**

Answer: (B) [Go Back to Q89](#)

Solution

Concept — Logical Reasoning (Input-Output Machine): After Step 2: arranged = [78, gold]; remaining = [salt, 42, mine, 63, road, 15].

Position 2 = **gold**. **Why other options are wrong:**

- Q90.**
- (B) 63 is a remaining (unplaced) element at this step.
 - (C) mine is unplaced.
 - (D) salt is unplaced.

Final Answer: gold $\Rightarrow$ **A**

Answer: (A) [Go Back to Q90](#)

Solution

Concept — General Awareness (International Events): The inaugural AI Safety Summit was held on 1–2 November 2023 at Bletchley Park, Milton Keynes, England, resulting in the Bletchley Declaration on AI Safety signed by 28 countries.

Why other options are wrong:

- Q91.**
- (A) Geneva hosts CERN and UN bodies; not the AI Safety Summit.
 - (C) Washington D.C. hosted subsequent AI governance discussions, not the inaugural summit.
 - (D) Tokyo has hosted G7 AI discussions but not the 2023 AI Safety Summit.

Final Answer: Bletchley Park, England $\Rightarrow$ **B**

Answer: (B) [Go Back to Q91](#)



Solution

Concept — General Awareness (India Space Policy): The Indian Space Policy 2023 and IN-SPACe roadmap target India's space economy to reach \$44 billion by 2033, representing a five-fold increase from the current ~\$8 billion. **Why other options are wrong:**

- Q92.**
- (A) \$22 billion: the 2025 interim target mentioned in some documents.
 - (B) \$33 billion: not a standard official figure.
 - (C) \$50 billion: the commonly cited 2040 target, not 2033.

Final Answer: \$44 billion ⇒ **D**

Answer: (D) [Go Back to Q92](#)

Solution

Concept — General Awareness (Government Bodies): NITI Aayog (National Institution for Transforming India) was established on 1 January 2015, replacing the Planning Commission that had been in existence since 1950. **Why other options are wrong:**

- Q93.**
- (B) Finance Commission is a constitutional body; it continues to exist.
 - (C) National Development Council was not replaced by NITI Aayog.
 - (D) Economic Advisory Council functions separately.

Final Answer: Planning Commission ⇒ **A**

Answer: (A) [Go Back to Q93](#)

Solution

Concept — General Awareness (Digital Regulation): The Digital Personal Data Protection Act 2023 establishes the **Data Protection Board of India** as the adjudicatory body for processing complaints and imposing penalties on data fiduciaries. **Why other options are wrong:**

- Q94.**
- (A) "Data Protection Authority" was the proposed name in the earlier 2019 draft; the 2023 Act uses "Board."
 - (B) Information Commissioner's Office is the UK regulator.
 - (D) Digital Regulatory Commission does not exist in Indian law.

Final Answer: Data Protection Board of India ⇒ **C**

Answer: (C) [Go Back to Q94](#)



Solution

Concept — General Awareness (Defence): INS Vikrant (IAC-1), India's first indigenous aircraft carrier, was commissioned by Prime Minister Narendra Modi on 2 September **2022** at Cochin Shipyard Limited, Kochi. **Why other options are wrong:**

- Q95.**
- (A) 2020: construction phase; not commissioned.
 - (C) 2021: sea trials phase.
 - (D) 2023: post-commissioning service period.

Final Answer: 2022 ⇒ **B**

Answer: (B) [Go Back to Q95](#)

Solution

Concept — General Awareness (National Honours): On 23 January 2024, the Government of India announced Bharat Ratna for former Bihar Chief Minister **Karpoori Thakur** (posthumously), making him the first for 2024. Subsequent 2024 recipients included LK Advani and PV Narasimha Rao. **Why other options are wrong:**

- Q96.**
- (A) APJ Abdul Kalam received Bharat Ratna in 1997.
 - (B) Sachin Tendulkar received it in 2014.
 - (C) Atal Bihari Vajpayee received it in 2015 (posthumously in 2024 honour was a separate award).

Final Answer: Karpoori Thakur (posthumous) ⇒ **D**

Answer: (D) [Go Back to Q96](#)

Solution

Concept — General Awareness (Innovation Rankings): India ranked **39th** in the Global Innovation Index 2024, published by WIPO, maintaining its position as the leading innovation economy in the Central and Southern Asia region. **Why other options are wrong:**

- Q97.**
- (B) 46th: India's rank in GII 2021.
 - (C) 52nd: India's approximate rank in 2019.
 - (D) 61st: India's rank in earlier years (2016–2017).

Final Answer: 39th ⇒ **A**

Answer: (A) [Go Back to Q97](#)



Solution

Concept — General Awareness (Infrastructure Programmes): The Sagarmala Programme, launched in 2016 by the Ministry of Ports, Shipping and Waterways, aims to modernise India's ports, enhance port connectivity, promote port-led industrialisation, and develop coastal communities—collectively termed port-led development. **Why other options are wrong:**

- Q98.**
- (A) Inland waterways = Jal Marg Vikas Project / NW-1.
 - (B) Naval expansion = Ministry of Defence programme.
 - (D) Fishing zones = under Ministry of Fisheries.

Final Answer: Modernise ports and promote port-led development ⇒ **C**

Answer: (C) [Go Back to Q98](#)

Solution

Concept — General Awareness (Geography): India's total coastline length, including the Andaman & Nicobar Islands and Lakshadweep, is **7,516.6 km**, making it the 7th longest coastline in the world among peninsular nations. **Why other options are wrong:**

- Q99.**
- (A) 5,422 km: mainland coastline only (excluding island territories).
 - (C) 6,100 km: not an official figure.
 - (D) 8,200 km: overestimates the total.

Final Answer: 7,516 km ⇒ **B**

Answer: (B) [Go Back to Q99](#)

Solution

Concept — General Awareness (Financial Regulation): In June 2024, India was placed in the **Regular Follow-up** category by FATF—the highest compliance category—following its 4th Mutual Evaluation Report, recognising India as a largely compliant member with a robust AML/CFT framework. **Why other options are wrong:**

- Q100.**
- (A) Grey list (enhanced monitoring): India was never on the FATF grey list.
 - (B) Black list: applies to very high-risk jurisdictions; India is not on it.
 - (C) Under observation: not a standard FATF category.

Final Answer: Regular Follow-up (largely compliant) ⇒ **D**

Answer: (D) [Go Back to Q100](#)



Solution

Concept — General Awareness (Finance & Investment): The National Investment and Infrastructure Fund (NIIF), established in 2015, is India's quasi-sovereign wealth fund managed to attract long-term domestic and foreign investment into infrastructure and allied sectors. **Why other options are wrong:**

- Q101.**
- (B) Forex reserve management = Reserve Bank of India.
 - (C) Development finance institution = NaBFID/NABARD.
 - (D) Export-import bank = EXIM Bank of India.

Final Answer: Sovereign wealth fund ⇒

Answer: (A) [Go Back to Q101](#)

Solution

Concept — General Awareness (Education): IIT Kharagpur, established on 18 August 1951, was India's first IIT. It preceded IIT Bombay (1958), IIT Madras (1959), and IIT Delhi (1961). **Why other options are wrong:**

- Q102.**
- (A) Mumbai (IIT Bombay): established 1958.
 - (B) Madras: established 1959.
 - (D) Delhi: established 1961.

Final Answer: Kharagpur ⇒

Answer: (C) [Go Back to Q102](#)

Solution

Concept — General Awareness (International Finance): CIPS (Cross-Border Interbank Payment System) is a payment system operated by **China** (People's Bank of China), launched in 2015 to internationalise the Chinese yuan (RMB) in cross-border settlements. **Why other options are wrong:**

- Q103.**
- (A) USA operates CHIPS (Clearing House Interbank Payments System); CIPS is different.
 - (C) EU operates TARGET2 for euro transactions.
 - (D) Russia operates SPFS; not CIPS.

Final Answer: China ⇒

Answer: (B) [Go Back to Q103](#)

Solution

Concept — General Awareness (Social Schemes): Pradhan Mantri Ujjwala Yojana (PMUY), launched in May 2016, provides free LPG connections specifically to



women from Below Poverty Line (BPL) households to replace biomass cooking fuels and improve health outcomes. **Why other options are wrong:**

- Q104.**
- (A) All BPL families: the scheme specifically targets women as the beneficiary.
 - (B) Farmers with <2 acres: not a criterion for PMUY.
 - (C) Urban slum dwellers: not the primary targeted group.

Final Answer: Women from BPL households ⇒

Answer: (D) [Go Back to Q104](#)

Solution

Concept — General Awareness (Infrastructure Policy): The National Monetisation Pipeline (NMP), launched by NITI Aayog in August 2021, covers the four-year period **FY 2021-22 to FY 2024-25**, targeting aggregate monetisation of ₹6 lakh crore from core infrastructure assets. **Why other options are wrong:**

- Q105.**
- (B) 2020-21 to 2025-26: incorrect start and end year.
 - (C)/(D): Future periods; the NMP was already launched with 2021-22 as its first year.

Final Answer: 2021-22 to 2024-25 ⇒

Answer: (A) [Go Back to Q105](#)

Solution

Concept — General Awareness (International Forums): South Africa holds the G20 Presidency in 2025, following Brazil's 2024 presidency and India's 2023 presidency. The 2025 G20 Summit is scheduled in Johannesburg. **Why other options are wrong:**

- Q106.**
- (A) Brazil: G20 Presidency in 2024.
 - (B) India: G20 Presidency in 2023.
 - (D) Italy: G20 Presidency in 2021.

Final Answer: South Africa ⇒

Answer: (C) [Go Back to Q106](#)

Solution

Concept — General Awareness (Policy): India's National Logistics Policy was launched by Prime Minister Narendra Modi on 17 September **2022**, aiming to reduce logistics costs from 13-14% of GDP to under 8% by 2030, aligned with PM GatiShakti. **Why other options are wrong:**



- Q107.**
- (A) 2020: no National Logistics Policy was launched then.
 - (C) 2021: PM GatiShakti (National Master Plan) launched in October 2021, not the Logistics Policy.
 - (D) 2023: post-launch implementation phase.

Final Answer: 2022 ⇒ **B**

Answer: (B) [Go Back to Q107](#)

Solution

Concept — General Awareness (Semiconductor Manufacturing): A **greenfield fab** is a fully new semiconductor fabrication facility covering complete front-end wafer processing (lithography, etching, deposition, etc.). A **fablight** model focuses on back-end operations: assembly, testing, and packaging (ATMP), which are less capital-intensive and can leverage existing infrastructure. **Why other options are wrong:**

- Q108.**
- (B) Both models may use domestic or imported equipment; this is not the defining distinction.
 - (C) Both types can receive government subsidies (e.g., India's SPS scheme).
 - (D) Greenfield fabs can also produce legacy chips; node generation is a separate dimension.

Final Answer: Greenfield = full front-end processing; fablight = assembly and testing ⇒ **A**

Answer: (A) [Go Back to Q108](#)

Solution

Concept — General Awareness (Payments): As of 2024, RuPay cards are accepted in approximately **30+ countries** through international partnerships with Discover/Diners Club, JCB, and bilateral agreements. The network is expanding under India's financial diplomacy efforts. **Why other options are wrong:**

- Q109.**
- (A) 50+ countries: exceeds the 2024 verified figure.
 - (B) 15+ countries: understates the current network.
 - (C) 100+ countries: the aspiration for future coverage, not yet achieved as of 2024.

Final Answer: 30+ countries ⇒ **D**

Answer: (D) [Go Back to Q109](#)



Solution

Concept — General Awareness (Policy & Ministries): India's Blue Economy Policy 2023 was released by the **Ministry of Earth Sciences**, which oversees ocean services, marine science, technology, and management, including coastal and deep-sea initiatives. **Why other options are wrong:**

- Q110.**
- (A) Ministry of Ports handles port infrastructure; not the Blue Economy Policy author.
 - (B) Ministry of External Affairs handles diplomacy; not the issuing ministry.
 - (D) Ministry of Commerce handles trade; the Blue Economy Policy is a science and ocean governance document.

Final Answer: Ministry of Earth Sciences ⇒

[Go Back to Q110](#)



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	A	3	D	4	B	5	C
6	D	7	B	8	A	9	C	10	D
11	B	12	C	13	A	14	D	15	B
16	A	17	D	18	C	19	B	20	D
21	A	22	C	23	B	24	A	25	C
26	B	27	D	28	A	29	C	30	B
31	D	32	A	33	D	34	C	35	B
36	B	37	D	38	A	39	C	40	B
41	D	42	A	43	C	44	B	45	D
46	A	47	C	48	B	49	D	50	A
51	C	52	B	53	D	54	A	55	C
56	B	57	D	58	A	59	C	60	B
61	A	62	C	63	B	64	D	65	A
66	C	67	B	68	A	69	D	70	C
71	B	72	D	73	C	74	A	75	B
76	D	77	C	78	A	79	B	80	D
81	C	82	A	83	D	84	B	85	C
86	A	87	D	88	C	89	B	90	A
91	B	92	D	93	A	94	C	95	B
96	D	97	A	98	C	99	B	100	D
101	A	102	C	103	B	104	D	105	A
106	C	107	B	108	A	109	D	110	C

