RRB NTPC UG CBT-1 Exam Day Based Paper Mock 1

Q.1 **Which Five-Year Plan introduced the concept of poverty alleviation programs in India?**

A. First Five-Year Plan
B. Third Five-Year Plan
C. Fifth Five-Year Plan
D. Seventh Five-Year Plan

Answer: C

Sol: The correct answer is **(C) Fifth Five-Year Plan**

Explanation:
• The Fifth Five-Year Plan (1974-1978) introduced the slogan 'Garibi Hatao' (Remove Poverty).
• It focused on self-reliance and social justice through specific poverty alleviation schemes.

Information Booster:
• This plan was terminated one year early in 1978 by the Janata Party government.

Additional Knowledge:
• First Five-Year Plan (Option A): Focused primarily on agriculture and irrigation.

Q.2 **The 24th Constitutional Amendment gave the Parliament which of the following powers?**

A. Override judicial review
B. Suspend the High Court judgment
C. Suspend elections
D. Amend Fundamental Rights

Answer: D

Sol:
The correct answer is **(d) Amend Fundamental Rights**
Explanation:
· The **24th Constitutional Amendment Act, 1971**, was enacted to provide the Parliament with the explicit power to amend any part of the Constitution, including **Fundamental Rights**.
· It was a direct response to the Supreme Court's judgment in the **Golaknath case (1967)**, which had previously ruled that Parliament could not take away or abridge Fundamental Rights.
· The amendment modified **Article 13** and **Article 368**, clarifying that nothing in Article 13 (which prohibits laws that take away fundamental rights) would apply to constitutional amendments made under Article 368.
· It also made it **obligatory** for the President to give his assent to a Constitutional Amendment Bill once it is passed by both Houses of Parliament.
· This amendment affirmed that Parliament has the power to alter the "spirit" of the Constitution, although this was later balanced by the **"Basic Structure Doctrine"** established in the Kesavananda Bharati case (1973).
Information Booster:
· **Article 13:** Originally interpreted by the judiciary as a safeguard that "law" includes constitutional amendments, thereby protecting Fundamental Rights from being diluted.
· **Article 368:** The specific article that outlines the procedure and power of the Parliament to amend the Constitution.
· **44th Amendment:** Later (in 1978) removed the **Right to Property** from the list of Fundamental Rights and made it a legal right under **Article 300A**.
Additional Knowledge:
· **Override judicial review (Option a):** While the amendment sought to limit the scope of judicial interference regarding amendments, judicial review remains a "basic feature" of the Constitution that cannot be entirely abolished.
· **Suspend the High Court judgment (Option b):** Amendments generally change the law or the Constitution; they do not provide a generic power to "suspend" specific court judgments, though a change in law can make a previous judgment ineffective.
· **Suspend elections (Option c):** The power to postpone or manage elections is governed by the Representation of the People Act and Emergency provisions, not the 24th Amendment.

Q.3 **As of January 19, 2026, approximately how many subscribers have enrolled in the Atal Pension Yojana?**

A. 5.50 crore
B. 10.2 crore
C. 8.66 crore
D. 6.45 crore

Test Prime By Adda247

ALL EXAMS, ONE SUBSCRIPTION

Test. Analyze. Improve. Repeat.

Don't just prepare. Perform.

Test Prime — built only for mock tests.

1,50,000+ Mock Tests

25,000+ Previous Year Papers

800+ Exam Covered

500% Refund on Selection

5 lakh+ Free Quizzes

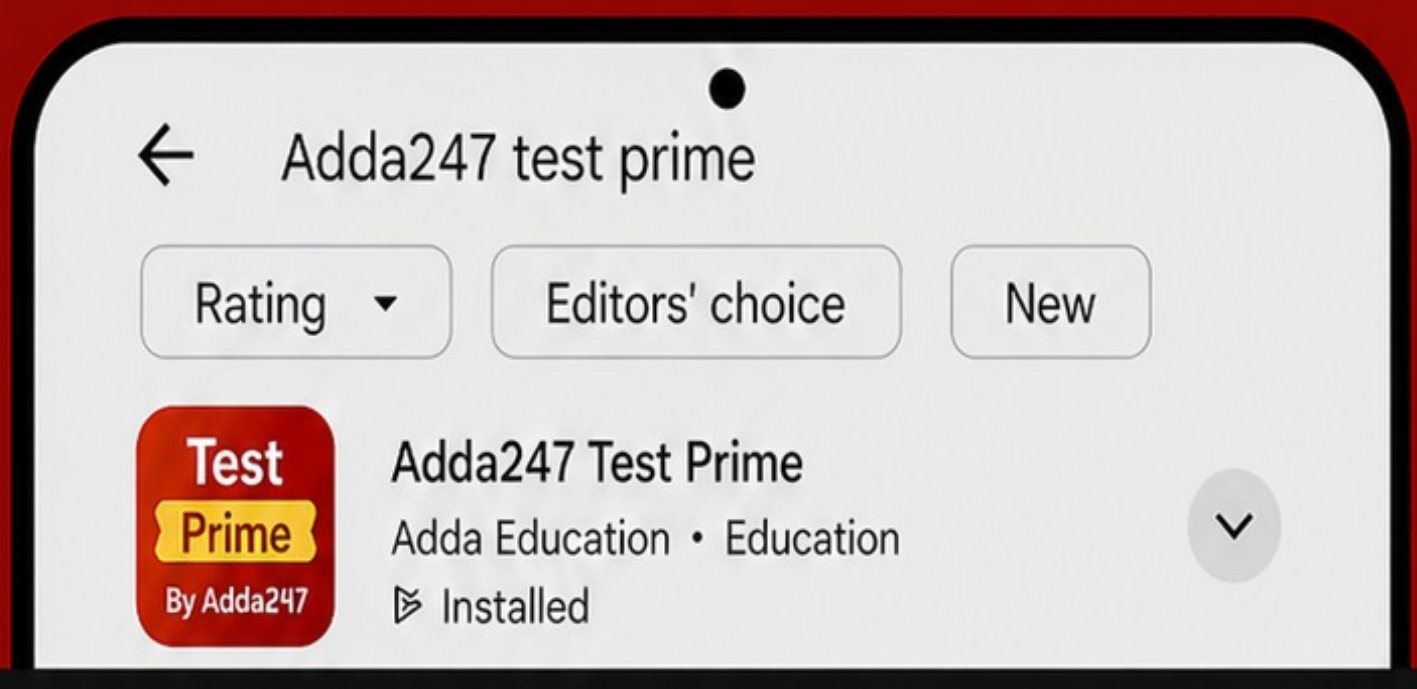
Daily Free PDFs

Job Alerts Stay Updated

- Multilingual
- Detailed Solution
- Strong and Weak Areas

All India Rankings

Compete with lakhs.
Rank. Improve. Repeat.



DOWNLOAD THE APP

Answer: C

Sol:

The correct answer is (c) 8.66 crore

Explanation:

· **Current Adoption:** As per the data provided for January 19, 2026, the Atal Pension Yojana has achieved a subscriber base of over **8.66 crore**.

· **Growth Trajectory:** This figure reflects the strong adoption and steady growth of the scheme since its launch in 2015.

· **Trust Factor:** The large subscriber base indicates a high level of **trust among beneficiaries** in the government-backed social security framework.

· **Implementation Success:** The number highlights the success of awareness campaigns and the effective reach of banking networks in **rural and informal sectors**.

Information Booster:

· **Key Pillar:** The scheme has emerged as a **key pillar** of India's social security infrastructure, specifically for the unorganized sector.

· **Future Goals:** With the extension till 2030-31, the government expects to further **widen this coverage**, bringing more unorganized workers into the formal financial fold.

· **Financial Inclusion:** The high enrollment numbers signify successful **financial inclusion**, linking millions of low-income earners to the formal banking and pension ecosystem.

Additional Knowledge:

· **Option (a) & (d):** These figures underrepresent the actual success and reach of the scheme as of 2026.

· **Launch Year:** The scheme started with zero subscribers in **2015**, making the growth to 8.66 crore a significant developmental milestone.

· **Demographic Transition:** Such high enrollment is crucial for managing India's demographic transition towards an aging population.

Q.4 **Which state government introduced the Drone Promotion and Utilisation Policy, 2025?**

A. Madhya Pradesh
B. Jharkhand
C. Punjab
D. Odisha

Answer: A

Sol: The correct answer is **A. Madhya Pradesh**

Explanation:

● The **Madhya Pradesh Government** introduced the **Drone Promotion and Utilisation Policy, 2025** to expand drone use in agriculture, disaster management, mining, and infrastructure monitoring.

● The policy also aims to make the state a **hub for drone manufacturing and services** by offering incentives to startups and industries.

Information Booster:

● Launched to boost **drone-based public services** across districts.
● Encourages setting up drone training and pilot certification centres.
● Supports startups through financial incentives and incubation facilities.
● Helps modernize agriculture through drone spraying and mapping.
● Aligns with the national "Drone Shakti" vision for widespread drone adoption.

Q.5 **Which of the following constitutional amendments lowered the voting age from 21 to 18?**

A. 42nd Amendment
B. 44th Amendment
C. 60th Amendment
D. 61st Amendment

Answer: D

Sol: The correct answer is **(D) 61st Amendment**

Explanation:

• The **61st Constitutional Amendment Act, 1988** (which came into force in 1989) lowered the voting age for elections to the Lok Sabha and the State Legislative Assemblies from 21 years to 18 years.

• This was done by amending **Article 326** of the Constitution, which deals with elections to the House of the People and to the Legislative Assemblies of States to be on the basis of adult suffrage.

• The rationale behind this move was to provide the unrepresented youth of the country an opportunity to become part of the political process and express their feelings.

Information Booster:

• **PM at the time:** Rajiv Gandhi was the Prime Minister who championed this amendment.

• **Effect:** The move added millions of new voters to the electoral rolls, making the Indian electorate one of the youngest and largest in the world.

• **Election Commission:** Following this increase in voters, the Election Commission was made a multi-member body (with two additional commissioners) in October 1989.

Additional Knowledge:
• **42nd Amendment (Option A):** Known as the 'Mini-Constitution', it introduced the words Socialist, Secular, and Integrity into the Preamble.
• **44th Amendment (Option B):** Enacted to nullify many of the distortions introduced by the 42nd amendment; it removed the Right to Property as a Fundamental Right.
• **60th Amendment (Option C):** Raised the ceiling on profession tax from ₹250 to ₹2500 per annum.

Q.6 **In Microsoft Word, when should you prefer using a numbered list instead of a bulleted list?**

A. When listing random facts
B. When steps must be followed in sequence
C. When the order of items does not matter
D. When decorating the text

Answer: B

Sol: The correct answer is **(B) When steps must be followed in sequence**

Explanation:
• Numbered lists (ordered lists) are used when the hierarchy or the chronological order of items is essential to the meaning.
• Typical examples include recipes, assembly instructions, or procedural steps where Step 1 must be completed before Step 2.
• Bulleted lists (unordered lists) are preferred for collections of items that have equal value and no specific required order.

Information Booster:
• **Multilevel Lists:** Word allows for nested lists where you can use a combination of numbers and bullets for complex outlines.
• **Shortcut:** You can start a numbered list automatically by typing "1." followed by a space at the start of a new line.

Additional Knowledge:
• **Option A & C:** These scenarios describe unordered data, which is the primary use case for bullet points.
• **Option D:** While lists add visual structure, they are functional tools for readability and logical organization rather than purely decorative elements.

Q.7 **The 18th Pravasi Bharatiya Divas Convention (PBD) 2025 was held in which month of 2025 in Bhubaneswar?**

A. April
B. January
C. February
D. March

Answer: B

Sol: **The correct answer is (b) January**
Explanation
· The **18th Pravasi Bharatiya Divas Convention** was held in **January 2025**.
· Venue: **Bhubaneswar, Odisha**.
· PBD is celebrated annually to engage with the **Indian diaspora**.
Information Booster
· PBD is observed on **9 January**, marking Mahatma Gandhi's return from South Africa.
Additional Knowledge
· Ministry involved: **Ministry of External Affairs**.
· Theme-based conventions are organised each year.

Q.8 **Who released the 'Basic Animal Husbandry Statistics (BAHS-2025)' on National Milk Day 2025?**

A. Rajiv Ranjan Singh
B. Prof. S.P. Singh Baghel
C. George Kurien
D. Narendra Singh Tomar

Answer: B

Sol: **Correct Answer: (b) Prof. S.P. Singh Baghel**

Explanation:

- **Union MoS Prof. S.P. Singh Baghel** (MoFAHD & MoPR) released **BAHS-2025** on **National Milk Day (26 November 2025)** at Sushma Swaraj Bhawan, New Delhi.

Information Booster:

- India's **total milk production**: **247.87 MT** (+3.58% YoY)
- **Top milk-producing state**: Uttar Pradesh (15.66%)
- BAHS provides national data on **milk, eggs, meat, wool**
- Based on **Integrated Sample Survey (ISS)** for March 2024–Feb 2025

About Ministry of Fisheries, Animal Husbandry & Dairying (MoFAHD):

· Union Minister- Rajiv Ranjan Singh alias Lalan Singh (Constituency- Munger, Bihar)

· Minister of State (MoS)- Prof. S.P. Singh Baghel (Constituency- Agra, Uttar Pradesh, UP); George Kurien (Rajya Sabha- Madhya Pradesh, MP)

Q.9 **What is used as the anode during electrolytic refining?**

A. A rod of graphite
B. A strip of pure metal to be refined
C. A strip of impure metal to be refined
D. An inert electrode

Answer: C

Sol: The correct answer is **(C) A strip of impure metal to be refined**

Explanation:
• Electrolytic refining is a process used to purify metals like copper, zinc, and gold.
• In this setup, a thick block of impure metal serves as the Anode (positive electrode), while a thin strip of pure metal serves as the Cathode (negative electrode).

Information Booster:
• Upon passing current, pure metal from the anode dissolves into the electrolyte and deposits onto the cathode.
• Soluble impurities stay in the solution, while insoluble ones settle below the anode as "anode mud".

Additional Knowledge:
• Cathode (Option B): The electrode where pure metal is collected.

Q.10 **Which of the following introduced dyarchy by dividing subjects into Reserved and Transferred lists?**

A. Indian Councils Act, 1892
B. Government of India Act, 1909
C. Government of India Act, 1935
D. Government of India Act, 1919

Answer: D

Sol: The correct answer is **(D) Government of India Act, 1919**

Explanation:
• The 1919 Act (Montagu-Chelmsford Reforms) introduced 'Dyarchy' (rule of two) at the provincial level.
• Provincial subjects were divided into 'Reserved' (administered by the Governor) and 'Transferred' (administered by ministers responsible to the legislature).

Information Booster:
• This act also introduced bicameralism and direct elections in the country for the first time.

Additional Knowledge:
• 1935 Act (Option C): Abolished dyarchy in provinces and introduced it at the Centre (though the latter part never came into effect).
• 1909 Act (Option B): Known as Morley-Minto Reforms, famous for separate electorates for Muslims.

Q.11 **Which of the following statements is correct?**
Statement 1: The magnetic field lines produced around a straight current-carrying conductor form concentric circles centred along the wire.
Statement 2: The direction of these magnetic field lines can be determined using the right-hand thumb rule.

A. Both statements 1 and 2 are correct
B. Both statements 1 and 2 are incorrect
C. Statement 1 is incorrect, but 2 is correct
D. Statement 1 is correct, but 2 is incorrect

Answer: A

Sol: The correct answer is **(A) Both statements 1 and 2 are correct**

Explanation:
• When current passes through a straight wire, the magnetic field produced forms concentric circles around the wire (Statement 1).
• The Right-Hand Thumb Rule states that if you point your thumb in the direction of the current, your fingers curl in the direction of the magnetic field lines (Statement 2).

Information Booster:
• The magnitude of the magnetic field is directly proportional to the current and inversely proportional to the distance from the wire.

Additional Knowledge:
• Maxwell's Corkscrew rule is another way to determine the direction of the magnetic field.

Q.12 **Which Tughlaq Sultan introduced 'token currency' (copper coins for silver)?**

A. Ghiyasuddin Tughlaq
B. Firoz Shah Tughlaq
C. Nasir-ud-din Mahmud
D. Muhammad bin Tughlaq

Answer: D

Sol: The correct answer is **(D) Muhammad bin Tughlaq**

Explanation:
• Muhammad bin Tughlaq (1325–1351) is known for his ambitious but often failed experiments.
• In 1329-30, he introduced copper and brass coins as 'token currency', which were to have the same value as silver 'tanka'.

Information Booster:
• The experiment failed because the government could not prevent massive counterfeiting by people.
• He had to eventually withdraw the currency and pay back the people in genuine gold and silver coins.

Additional Knowledge:
• Firoz Shah Tughlaq (Option B): Was known for public welfare works, hospitals, and building extensive canal systems.

Q.13 **The Digital Personal Data Protection (DPDP) Rules, 2025 were notified by which ministry on 13 November 2025?**

A. Ministry of Home Affairs
B. Ministry of Electronics & Information Technology
C. Ministry of Corporate Affairs
D. Ministry of Law & Justice

Answer: B

Sol: The correct answer is (b) Ministry of Electronics & Information Technology
• MeitY notified the Digital Personal Data Protection Rules, 2025 on 13 November 2025.
• The rules operationalise the Digital Personal Data Protection Act, 2023.
• They focus on consent, breach reporting, vulnerable users, and SDF compliance.

Information Booster:
• Implementing authority: Data Protection Board of India (DPBI).
• DPDP Act was enacted on 11 August 2023.
• Framework follows SARAL (Simple, Accessible, Rational, Actionable, Logical).
• Seven principles: Consent, Transparency, Purpose Limitation, Minimisation, Accuracy, Storage Limitation, Security, Accountability.
• Phased rollout: Some rules apply immediately, others in 1 year and 18 months.

Additional Knowledge:
• DPBI has a Chairperson + 3 Members.

- Chairperson is selected by a committee headed by the Cabinet Secretary.
- Rule 4 (Consent Managers) becomes effective from 13 Nov 2026.
- Significant Data Fiduciaries must conduct audits and algorithmic risk assessments.

Q.14 **Where will the World Health Summit Regional Meeting 2025 take place from 25–27 April 2025?**

A. Hyderabad
B. Bengaluru
C. New Delhi
D. Mumbai

Answer: C

Sol: **Correct Answer:** C

Explanation:

- The World Health Summit Regional Meeting 2025 is taking place in **New Delhi, India**, from 25–27 April 2025.
- The venue is specified as **Bharat Mandapam, Pragati Maidan, New Delhi**.
- The theme of the meeting is **"Scaling Access to Ensure Health Equity"** and it convenes stakeholders in global health, making New Delhi the correct location in this case.

Information Booster:

- The World Health Summit is an international strategic forum that holds its main annual event in Berlin, and "Regional Meetings" in different global locations to focus on regional health challenges.
- This 2025 meeting in New Delhi is hosted by institutions such as NIMS University with co-hosts including Manipal Academy of Higher Education and Ashoka University.
- Key topics include digital health, AI in healthcare, planetary health, innovation, health diplomacy, and equity of access

---

Q.15 **What economic indicator does the 'Gini Coefficient' primarily measure?**

A. Inflation
B. Economic growth (GDP)
C. Income inequality
D. Unemployment rate

Answer: C

Sol: The correct answer is **(C) Income inequality**

Explanation:

• The Gini coefficient is a statistical measure used to gauge economic inequality, specifically income or wealth distribution among a population.
• It ranges from 0 (perfect equality) to 1 (perfect inequality).

Information Booster:

• It is derived from the Lorenz Curve, which plots the cumulative share of income against the cumulative share of the population.

Additional Knowledge:

• Inflation (Option A): Measured by indices like CPI and WPI.
• GDP (Option B): Measures the total value of goods and services produced.

Q.16 **What was the theme of the World Bank Land Conference 2025 (WBLC 2025)?**

A. Land Governance and Climate Action
B. Securing Land Tenure and Access for Climate Action: Moving from Awareness
C. Sustainable Land Practices for Climate Change
D. Global Land Reforms for Climate Action

Answer: B

Sol: The theme of the World Bank Land Conference 2025 (WBLC 2025) was "Securing Land Tenure and Access for Climate Action: Moving from Awareness." This theme focused on strategies to secure land tenure and modernize land administration for climate-responsive governance, highlighting the role of land reforms in achieving sustainable development and combating climate change.

Information Booster:

- The conference emphasized securing land tenure and land access as critical components in climate action efforts.
- The focus on climate action underscores the intersection of land governance and the global challenge of climate change.
- The theme aimed to move beyond awareness to implement actionable strategies for land tenure reform.
- The WBLC 2025 brought together a wide range of participants, including government representatives, private sector, civil society, and academia.
- India was honored as a Country Champion for its leadership in inclusive land governance.
- The theme aligns with global sustainable development goals, especially those concerning climate resilience and inclusive governance.

Q.17 **A region where most rivers are ephemeral, where the Luni is the only significant river, and where streams often vanish into salty lakes or playas due to low precipitation and high evaporation, represents which type of drainage characteristic?**

A. Dendritic drainage
B. Trellis drainage
C. Inland drainage
D. Radial drainage

Answer: C

Sol: The correct answer is **(C) Inland drainage**

Explanation:

• **Inland Drainage** occurs when rivers do not reach the sea or an ocean but instead flow into lakes, inland seas, or disappear into the sand of a desert.
• The Thar Desert in western Rajasthan is the most prominent region of inland drainage in India. Due to low and erratic rainfall and high rates of evaporation, most rivers here are ephemeral (temporary), flowing only during the rainy season.
• The **Luni River** is the largest and most significant river in this region. It originates in the Pushkar valley of the Aravalli Range and eventually ends in the marshy lands of the Rann of Kutch, never reaching the Arabian Sea.
• Several other streams in this region flow into brackish or salty lakes called **Playas** (like the Sambhar Lake). These lakes are important sources of common salt.
• The lack of a slope toward the ocean and the porous nature of the sandy soil contribute to this drainage pattern.

Information Booster:

• Other examples of inland drainage include the Ghaggar-Hakra River system, which is believed to be a remnant of the ancient Saraswati River.
• Inland drainage basins are often closed (endorheic basins).
• The water in these rivers often becomes increasingly saline as they flow towards their terminus due to the high mineral content of the desert soil and lack of outflow.

Additional Knowledge:

• **Dendritic drainage (Option A):** This is a tree-like pattern where tributaries join the main river at acute angles. It develops where the river channel follows the slope of the terrain, common in the North Indian Plains.
• **Trellis drainage (Option B):** This pattern occurs when the primary tributaries flow parallel to each other and secondary tributaries join them at right angles. It is found in folded mountainous regions like the Himalayas.
• **Radial drainage (Option C):** This occurs when rivers originate from a central high point (like a dome or volcano) and flow out in all directions. Examples include the rivers originating from the Amarkantak plateau (Narmada, Son).

Q.18 **What does the term 'devaluation' mean in economic policy?**

A. Increasing the value of a currency
B. Decreasing the value of a currency
C. Printing new currency
D. Banning a currency

Answer: B

Sol: The correct answer is **(B) Decreasing the value of a currency**

Explanation:
• Devaluation is the deliberate downward adjustment of the value of a country's currency relative to another currency or standard.
• It is a tool used in a fixed or semi-fixed exchange rate system.

Information Booster:
• Countries often devalue their currency to boost exports (as they become cheaper for foreigners) and reduce trade deficits.

Additional Knowledge:
• Depreciation: A similar decrease in currency value, but caused by market forces (supply and demand) in a floating exchange rate system.

Q.19 How many daughter cells are formed during binary fission?

A. Two
B. Four
C. Zero
D. One

Answer: A

Sol: The correct answer is **(A) Two**

Explanation:
• Binary fission is a type of asexual reproduction where a single parent cell divides into two equal halves.
• Each half then grows into an independent daughter cell.

Information Booster:
• Amoeba and Bacteria are common organisms that reproduce through binary fission.

Additional Knowledge:
• Multiple fission (e.g., in Plasmodium) results in many daughter cells simultaneously.

Q.20 Which Mughal structure in Fatehpur Sikri served as the emperor's hall for public audience and court proceedings?

A. Diwan-i-Khas
B. Diwan-i-Aam
C. Panch Mahal
D. Buland Darwaza

Answer: B

Sol: The correct answer is **(B) Diwan-i-Aam**

Explanation:
• The **Diwan-i-Aam** (Hall of Public Audience) was used by Emperor Akbar to meet the general public and hear their grievances.
• It is a large rectangular hall with a pavilion where the emperor sat. It is located near the main entrance of the palace complex in Fatehpur Sikri.
• It signifies the accessible nature of the Mughal administration to the common subjects.

Information Booster:
• **Fatehpur Sikri** was founded by Emperor Akbar in 1571 and served as the capital of the Mughal Empire for about 14 years.
• The architectural style is a blend of Persian, Indian, and Central Asian influences, predominantly using red sandstone.
• Fatehpur Sikri is a **UNESCO World Heritage Site**.

Additional Knowledge:
• **Diwan-i-Khas (Option A):** The Hall of Private Audience, used for discussing state secrets and meeting high-ranking officials. It contains the famous central pillar with a circular platform.
• **Panch Mahal (Option C):** A five-story columnar structure used for relaxation and entertainment, especially by the royal ladies.
• **Buland Darwaza (Option D):** The "Gate of Magnificence," built by Akbar to commemorate his victory over Gujarat. It is the highest gateway in the world.

Q.21 Which of the following is an example of a system software, and which is an example of an application software?

A. MS Word (System Software), Windows OS (Application Software)

B. Windows OS (System Software), MS Excel (Application Software)
C. Antivirus Software (Application Software), MS PowerPoint (System Software)
D. Google Chrome (System Software), Linux OS (Application Software)

Answer: B

Sol: The correct answer is **(B) Windows OS (System Software), MS Excel (Application Software)**

Explanation:

• **System Software:** These are programs that control and manage the basic operations of a computer. The Operating System (like Windows, Linux, or macOS) is the most critical system software because it manages hardware and provides a platform for other programs.

• **Application Software:** These are programs designed to help users perform specific tasks. MS Excel is specifically for spreadsheets, making it an application.

Information Booster:

• **Hierarchy:** Hardware < System Software < Application Software < User.

• **Utility Software:** A sub-category of system software that includes tools like disk defragmenters and backup utilities.

Additional Knowledge:

• **Option A:** Incorrect; MS Word is an application, and Windows is system software.

• **Option C:** Incorrect; Antivirus is usually considered system utility software, and PowerPoint is an application.

• **Option D:** Incorrect; Google Chrome is an application (web browser), and Linux is system software.

Q.22 **Which state's physiography is largely defined by the Indo-Gangetic Plain?**

A. Rajasthan
B. Uttar Pradesh
C. Sikkim
D. Jharkhand

Answer: B

Sol: The correct answer is (b) Uttar Pradesh

Explanation:

• Indo-Gangetic Plain is an extensive alluvial plain.
• Uttar Pradesh lies almost entirely within this plain.
• Formed by Ganga and its tributaries.
• Characterized by flat, fertile Bhangar and Khadar soils.
• Supports dense population and intensive agriculture.

Information Booster:

• Known as one of the most fertile regions of India.
• Major contributor to food grain production.

Additional Knowledge:

Option (a)
• Rajasthan is dominated by the Thar Desert.
Option (c)
• Sikkim is a Himalayan mountainous state.
Option (d)
• Jharkhand is part of the Chota Nagpur Plateau.

Q.23 **Which among the following is the main reason for classifying economic activities into different sectors in India?**

A. To divide labour across sectors
B. To reduce employment in capital-intensive sectors
C. To increase taxes across sectors
D. To understand their functioning and interdependence

Answer: D

Sol: **The correct answer is (D) To understand their functioning and interdependence**

Explanation:

● Economic activities in India are grouped into Primary, Secondary and Tertiary sectors mainly to **study how each sector works and how they support each other**.
● This classification helps in analysing growth, employment, national income and structural changes in the economy.
● It also helps the government in planning, policy-making and allocation of resources for balanced development.
● Understanding sector-wise contribution helps evaluate economic progress and future needs of the country.

Information Booster:

- Primary sector includes agriculture, fishing, forestry and mining.
- Secondary sector includes manufacturing and industries.
- Tertiary sector includes services like banking, trade and communication.
- India's economy has shifted from primary dominance to service dominance.
- Sector-wise GDP share shows economic development pattern.

Q.24 **Who presented the ₹4.48 lakh crore Karnataka State Budget for the Financial Year 2026–27 in March 2026?**

A. Basavaraj Bommai
B. D. K. Shivakumar
C. Siddaramaiah
D. H. D. Kumaraswamy

Answer: C

Sol: **Answer:** (c)

Solution

· In March 2026, **Siddaramaiah** presented the **Karnataka State Budget for FY 2026–27**.
· The total budget size was **₹4,48,004 crore**.
· The budget emphasized **technology-driven growth, infrastructure development, and environmental sustainability**.
· The budget was presented in the **Karnataka Legislative Assembly in Bengaluru**.

Information Booster

· Estimated **revenue receipts:** ₹3,15,050 crore.
· Estimated **capital expenditure:** ₹74,682 crore (4.6% increase from FY26).
· **Fiscal deficit:** ₹97,449 crore (about **2.95% of GSDP**).

Additional Knowledge

· Key sector allocations:
· **Agriculture & allied sector:** ₹8,373 crore
· **Health & family welfare:** ₹17,817 crore
· **Animal husbandry & fisheries:** ₹4,084 crore
· **Women & child development:** ₹36,929 crore
· **Energy sector:** ₹29,947 crore allocation.
· **Tourism:** ₹100 crore for Chamundi Hill development.

Q.25 **In February 2025, who won the men's title at the 2025 Asian Snooker Championship held in Doha, Qatar?**

A. Pankaj Advani
B. Narantuya Bayarsaikhan
C. Chang Yu Kiu
D. Amir Sarkosh

Answer: A

Sol: The correct answer is **(A) Pankaj Advani**

Explanation:

• Indian legend Pankaj Advani secured his 28th world title equivalent by winning the Asian Snooker Championship in February 2025.
• He defeated Amir Sarkosh in the final to clinch the title in Doha.

Information Booster:

• Pankaj Advani is the only player to have won world titles in all formats of both Billiards and Snooker.

Additional Knowledge:

• Amir Sarkosh (Option D): The Iranian player who was the runner-up in the tournament.

Q.26 **Which function key is used for opening the Spelling and Grammar window in MS Word 2007?**

A. F11 Key
B. F7 Key
C. F2 Key
D. F5 Key

Answer: B

Sol: The correct answer is **(B) F7 Key**

Explanation:
• In Microsoft Word (including the 2007 version), the F7 key is the universal shortcut to launch the 'Spelling and Grammar' check.
• It scans the document for misspelled words (underlined in red) and grammatical errors (underlined in green/blue) and provides suggestions for correction.
• This tool is found under the 'Review' tab on the Ribbon.

Information Booster:
• **Thesaurus:** Pressing Shift + F7 opens the Thesaurus for the selected word, providing synonyms and antonyms.
• **Automatic Check:** Word also performs 'Check spelling as you type,' which can be toggled in the Proofing section of Word Options.

Additional Knowledge:
• **F11 Key (Option A):** Often used to go to the next field in a document containing fields, or to enter full-screen mode in browsers.
• **F2 Key (Option C):** Generally used to 'Rename' a file in Windows Explorer or edit a cell in Excel; in Word, it is used to move text or graphics.
• **F5 Key (Option D):** Opens the 'Go To' tab in the Find and Replace dialog box in Word; it is also used to 'Refresh' in browsers or start a slideshow in PowerPoint.

Q.27 **"Ayni Air Base" is an air facility that India uses for strategic purposes. In which country is this base located?**

A. Kazakhstan
B. Tajikistan
C. Bhutan
D. Uzbekistan

Answer: B

Sol: The correct answer is **(B) Tajikistan**

Explanation:
• Also known as Gissar Air Base, it is located near Dushanbe, the capital of Tajikistan.
• India has provided significant financial and technical assistance to renovate this base.

Information Booster:
• It is India's first overseas air base, though it is used jointly with Tajikistan.

Additional Knowledge:
• Farkhor Air Base: Another strategic facility in Tajikistan that India has been involved with.

Q.28 **Vinaya Pitaka is a division of the Tipitaka that comprises the rules related to _____.**

A. Meditation techniques
B. Monastic discipline and ethics
C. Philosophical doctrines
D. Rituals and ceremonies

Answer: B

Sol: The correct answer is **(B) Monastic discipline and ethics**

Explanation:
• Vinaya Pitaka is one of the three baskets (Tipitaka) of Buddhism.
• It primarily contains the code of conduct (rules of discipline) for the Sangha (monks and nuns).

Information Booster:
• It is the oldest of the three Pitakas.
• It includes stories explaining the origin of each rule.

Additional Knowledge:
• Sutta Pitaka contains Buddha's sermons/doctrines.
• Abhidhamma Pitaka deals with philosophical analysis.

Q.29 **Which Chola king took the title 'Gangaikonda' (Conqueror of the Ganga) and built a new capital?**

A. Rajendra I
B. Aditya I
C. Kulothunga I
D. Rajaraja I (Inferred)

Answer: A

Sol: The correct answer is **(A) Rajendra I**

Explanation:
• Rajendra Chola I, the son of Rajaraja I, expanded the Chola Empire to its greatest extent.
• After his successful expedition to the Ganges in North India, he assumed the title 'Gangaikonda' and founded the city 'Gangaikonda Cholapuram'.

Information Booster:
• He also built a massive temple at Gangaikonda Cholapuram, similar to the Brihadisvara Temple at Thanjavur.

Additional Knowledge:
• Rajaraja I (Option D): Built the Brihadisvara Temple (Thanjavur) and was the first to establish Chola naval supremacy.

Q.30 **Besides resolving disputes, what power do the Nyaya Panchayats have in India?**

A. Levying taxes for village development
B. Managing village agriculture
C. Imposing fines on offenders
D. Issuing binding contracts

Answer: C

Sol: **The correct answer is (C) Imposing fines on offenders**
Explanation:
● Nyaya Panchayats are village-level judicial bodies meant to settle minor civil and criminal disputes.
● Apart from dispute resolution, they have the authority to **impose fines**, but not imprisonment.
● They deal with petty cases like small thefts, public nuisance, and minor injuries.
● Their decisions aim for quick, low-cost justice at the grassroots level.
● They do not handle major criminal matters or taxation.
Information Booster:
● Nyaya Panchayats work under the **Panchayati Raj system**.
● They reduce the burden on regular courts.
● Members are either elected or nominated at the village level.
Additional Knowledge:
● Article 243A – Gram Sabha.
● Article 243B – Constitution of Panchayats.
● Article 243C – Composition of Panchayats.
● Article 243K – State Election Commission for Panchayat elections.
● Article 243G – Powers, authority & responsibilities of Panchayats.

Q.31 **The painting "Mahishasura," which blends mythology with expressionism, is the work of:**

A. S. H. Raza
B. Jogen Chowdhury
C. Tyeb Mehta
D. Anjolie Ela Menon

Answer: C

Sol: The correct answer is **(C) Tyeb Mehta**

Explanation:
• Tyeb Mehta's "Mahishasura" is one of the most iconic works of modern Indian art.
• It depicts the struggle between the goddess Durga and the buffalo demon Mahishasura.

Information Booster:
• Tyeb Mehta was a part of the Progressive Artists' Group in Bombay.

Additional Knowledge:

• S. H. Raza (Option A): Famous for his 'Bindu' series.
• Jogen Chowdhury (Option B): Known for his distinctive lines and distorted figures.

Q.32 **Which of the following island groups in India is known to have an active volcano on Barren Island?**

A. Andaman and Nicobar Islands
B. Lakshadweep Islands
C. Minicoy Islands
D. Rameswaram Islands

Answer: A

Sol: The correct answer is **(A) Andaman and Nicobar Islands**

Explanation:

• Barren Island is located in the Andaman Sea and is part of the Andaman and Nicobar chain.
• It is the only confirmed active volcano in South Asia.

Information Booster:

• Narcondam Island, also in the Andamans, is another volcanic island, but it is classified as extinct or dormant.

Additional Knowledge:

• Lakshadweep (Option B): Is a coral island group (atolls) in the Arabian Sea, with no volcanic activity.

Q.33 **Affordable Rental Housing Complexes (ARHCs) were launched by the Ministry of Housing and Urban Affairs as a sub-scheme under:**

A. AMRUT
B. Smart Cities Mission
C. Pradhan Mantri Awas Yojana – Urban
D. National Urban Livelihoods Mission

Answer: C

Sol: The correct answer is **(C) Pradhan Mantri Awas Yojana – Urban**

Explanation:

• ARHC is a sub-scheme under PMAY-U to provide dignified living to urban migrants/poor near their workplace.
• It was launched as part of the Atmanirbhar Bharat Abhiyan package.

Information Booster:

• It uses existing government-funded vacant houses to convert them into rental complexes.

Additional Knowledge:

• AMRUT (Option A): Focuses on basic infrastructure like water supply and sewerage in 500 cities.

Q.34 **Which article of the Indian constitution provides protection against arrest and detention in certain cases?**

A. Article 25
B. Article 32
C. Article 22
D. Article 28

Answer: C

Sol: The correct answer is **(C) Article 22**

Explanation:

• Article 22 of the Indian Constitution provides protection to persons who are arrested or detained.
• It covers two types of detention: Punitive (after a trial) and Preventive (without trial, on suspicion).
• It grants rights such as the right to be informed of the grounds of arrest, the right to consult a legal practitioner, and the right to be produced before a magistrate within 24 hours.

Information Booster:

• **Preventive Detention:** Under Article 22, a person can be detained for up to 3 months. Extension beyond that requires the recommendation of an Advisory Board.
• **Fundamental Right:** This article is part of the 'Right to Freedom' group (Articles 19–22).

Additional Knowledge:
• **Article 25 (Option A):** Freedom of conscience and free profession, practice, and propagation of religion.
• **Article 32 (Option B):** Right to Constitutional Remedies (the 'Heart and Soul' of the Constitution), allowing citizens to move the Supreme Court for enforcement of rights.
• **Article 28 (Option D):** Freedom as to attendance at religious instruction or religious worship in certain educational institutions.

Q.35 **Who was India's first woman photojournalist, capturing historic moments of early independent India and breaking barriers in journalism and photography?**

A. Homai Vyarawalla
B. Kiran Bedi
C. Leela Seth
D. Nilima Sheikh

Answer: A

Sol: The correct answer is **(A) Homai Vyarawalla**

Explanation:
• Homai Vyarawalla (1913–2012) was India's first female photojournalist.
• She is best known for photographing the transition from British Raj to independent India, including the funeral of Mahatma Gandhi and the first Republic Day parade.

Information Booster:
• She published her work under the pseudonym 'Dalda 13'.

Additional Knowledge:
• Kiran Bedi (Option B): India's first female IPS officer.
• Leela Seth (Option C): First woman Chief Justice of a state High Court (Himachal Pradesh).

Q.36 **President Droupadi Murmu appointed Praveen Vashista to which position in January 2026?**

A. Central Information Commissioner
B. Vigilance Commissioner in CVC
C. UPSC Member
D. Deputy CAG of India

Answer: B

Sol: **Answer:** (b) Vigilance Commissioner in CVC
Solution: Praveen Vashista, a 1991-batch IPS officer, was appointed as Vigilance Commissioner in the Central Vigilance Commission.
Information Booster
· CVC consists of one Chairperson and two Commissioners
· Established under CVC Act, 2003
· Tenure: 4 years or up to 65 years of age
Additional Knowledge
· CVC is a statutory body
· Based on Santhanam Committee recommendations

Q.37 **Which hormone is primarily responsible for regulating blood glucose levels in the human body, ensuring cells receive adequate energy while maintaining normal blood sugar concentrations?**

A. Insulin
B. Adrenaline
C. Thyroxine
D. Cortisol

Answer: A

Sol: The correct answer is **(A) Insulin**

Explanation:
• Insulin is produced by the beta cells of the pancreas.
• It facilitates the uptake of glucose by cells, thereby lowering blood sugar levels after a meal.

Information Booster:
• Glucagon, also produced by the pancreas, works opposite to insulin by raising blood glucose levels.

Additional Knowledge:
• Adrenaline (Option B): The 'fight or flight' hormone that increases heart rate and blood flow during stress.

Q.38 **What is the primary function of an operating system in a computer system?**

A. It manages hardware and software resources.
B. It powers off the computer.
C. It only stores user documents.
D. It connects to the internet.

Answer: A

Sol: The correct answer is **(A) It manages hardware and software resources.**

Explanation:
• An Operating System (OS) acts as an intermediary between the computer hardware and the user.
• Its primary role is resource management, which includes managing the CPU time, memory allocation, storage space, and peripheral devices.
• It provides a platform for application software to run and ensures that different programs do not interfere with each other.

Information Booster:
• **Kernel:** The core part of the OS that manages system resources and communication between hardware and software components.
• **Examples:** Common operating systems include Microsoft Windows, macOS, Linux, Android, and iOS.

Additional Knowledge:
• **Option B:** While the OS facilitates the shutdown process, 'powering off' is a hardware-level electrical function triggered by the system.
• **Option C:** Storage is managed by the OS through file systems (like NTFS or FAT32), but the OS itself is not just a storage container.
• **Option D:** Connectivity is a feature of the OS using network drivers and protocols, but it is not the OS's primary defining function.

Q.39 **What is the southern part of the Western Coastal Plain known as?**

A. Konkan Coast
B. Malabar Coast
C. Coromandel Coast
D. Kanara Coast

Answer: B

Sol: The correct answer is **(B) Malabar Coast**

Explanation:
• The Western Coastal Plain of India is a narrow strip of land between the Western Ghats and the Arabian Sea.
• It is divided into three distinct parts: the northern part is called the **Konkan** (Mumbai-Goa), the central stretch is called the **Kannada Plain** (or Kanara), and the southern stretch is referred to as the **Malabar Coast**.
• The Malabar Coast is famous for its backwaters, locally known as 'Kayals', and is a major hub for spice trade.

Information Booster:
• **Geographical Extent:** The Malabar Coast extends from the southern part of Karnataka to Kanyakumari in Tamil Nadu, primarily covering the state of Kerala.
• **Vembanad Lake:** This is the largest lake on the Malabar Coast and is a Ramsar site.
• **Rainfall:** This coast receives heavy rainfall from the South-West Monsoon.

Additional Knowledge:
• **Konkan Coast (Option A):** This is the northern portion, extending from Daman to Goa.
• **Coromandel Coast (Option C):** This is the southern part of the **Eastern** Coastal Plain, located between the Krishna River delta and Kanyakumari.
• **Kanara Coast (Option D):** This is the central part of the Western Coastal Plain, primarily located in the state of Karnataka.

Q.40 **In June 2025, the Bonn Climate Change Conference 2025 was held in:**

A. Germany
B. Switzerland
C. Paris
D. France

Answer: A

Sol: The correct answer is **(a) Germany**

Explanation:

- The **Bonn Climate Change Conference 2025** was held in **Bonn, Germany**, in June 2025.
- It serves as the **62nd sessions** of the Subsidiary Body for Scientific and Technological Advice (**SBSTA**) and the Subsidiary Body for Implementation (**SBI**).
- These conferences are crucial mid-year meetings designed to prepare the groundwork for the upcoming **COP30** (Conference of the Parties).
- The primary focus included technical discussions on **climate finance**, emission reduction targets, and adaptation strategies.
- It brings together delegates from nearly **200 countries** to negotiate the operational details of the **Paris Agreement**.

Information Booster:

- The **UNFCCC Secretariat** is headquartered in Bonn, Germany, making it the permanent host for these intermediate technical sessions.
- The 2025 session focused heavily on the **New Collective Quantified Goal (NCQG)** on climate finance.

Additional Knowledge:

Switzerland (Option b)

- Often hosts World Economic Forum (WEF) meetings in Davos but was not the venue for this specific climate conference.

Paris (Option c)

- Famous for the 2015 **Paris Agreement** (COP21), but is a city in France.

France (Option d)

- Hosted the landmark COP21 in 2015; however, the annual mid-year SB sessions are hosted in Germany.

So the correct answer is (a)

Q.41 **If 2820 is divided into two parts such that one-fifth of the first part and one-eighth of the second part are in the ratio 3 : 4, what is the ratio of the first part to the second part?**

A. 18 : 19
B. 15 : 32
C. 15 : 37
D. 17 : 36

Answer: B

Sol: **Given**

Total amount = 2820 (which is extra information for finding the ratio)

Ratio of one-fifth of the first part to one-eighth of the second part = 3 : 4

Solution

Let the first part be A and the second part be B.

According to the problem statement:

$$\frac{\frac{A}{5}}{\frac{B}{8}} = \frac{3}{4}$$

$$\frac{A}{5} \times \frac{8}{B} = \frac{3}{4}$$

$$\frac{8A}{5B} = \frac{3}{4}$$

$$\frac{A}{B} = \frac{3}{4} \times \frac{5}{8}$$

$$\frac{A}{B} = \frac{15}{32}$$

The ratio of the first part to the second part is 15 : 32.

Final Answer

So the correct answer is (b)

Q.42 Find the surface area (rounded off to the nearest integer) of a sphere of radius 6.5 cm. (Take π = 22/7)

A. 534 cm^2
B. 540 cm^2
C. 531 cm^2
D. 530 cm^2

Answer: C

Sol: **Given**

Radius (r) = 6.5 cm

π = 22/7

Formula Used

Surface Area of Sphere = $4\pi r^2$

Solution

Surface Area = $4 \times \frac{22}{7} \times (6.5)^2$

Surface Area = $4 \times \frac{22}{7} \times 42.25$

Surface Area = $\frac{3718}{7}$

Surface Area ≈ 531.14 cm^2

Rounding off to nearest integer, we get 531 cm^2.

Final Answer

So the correct answer is (c)

Q.43 The price of each article of type P, Q, and R is ₹280, ₹180 and ₹115, respectively. Tejas buys articles of each type in the ratio 4 : 2 : 5 for ₹6,165. How many articles of type Q did he purchase?

A. 14
B. 6
C. 3
D. 12

Answer: B

Sol: **Given**

Price of type P = ₹280

Price of type Q = ₹180

Price of type R = ₹115

Ratio of articles bought = 4 : 2 : 5

Total cost = ₹6165

Formula Used

Total Cost = Sum of (Price of each item × Quantity)

Solution

Let the number of articles of type P, Q, and R be 4x, 2x, and 5x respectively.

Formulate the total cost equation:

(280 × 4x) + (180 × 2x) + (115 × 5x) = 6165

1120x + 360x + 575x = 6165

2055x = 6165

x = \frac{6165}{2055} = 3

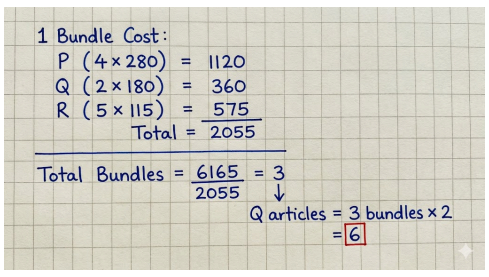
Number of articles of type Q purchased = 2x

Number of articles of type Q = 2 × 3 = 6

Final Answer

So the correct answer is (b)

Exam Hall Method:



Q.44 The simple interest on a certain sum for 2 years is Rs. 600 and the compound interest is Rs. 645. What is the rate of interest?

A. 10%
B. 12%
C. 15%
D. 18%

Answer: C

Sol: **Given**

SI (2 years) = Rs. 600
CI (2 years) = Rs. 645

Formula Used

$$\text{Rate} = \frac{2 \times (CI - SI)}{SI} \times 100$$

Solution

Difference = 645 - 600 = 45.
SI for 1 year = 600 / 2 = 300.
Rate of interest is the interest on Rs. 300 for 1 year.
Rate = $\frac{45}{300} \times 100 = 15\%$.

Final Answer

So the correct answer is (c)

Q.45 A cistern has two inlets I1 and I2 which can fill it in 16 hours and 20 hours, respectively. An outlet can empty the full cistern in 12 hours. If all the three pipes are opened together in the empty cistern, how much time will they take to fill the cistern completely?

A. $33\frac{6}{7}$ hours
B. $34\frac{2}{6}$ hours
C. $34\frac{2}{7}$ hours
D. $36\frac{5}{6}$ hours

Answer: C

Sol: **Given**

Time taken by I1 = 16 hours
Time taken by I2 = 20 hours
Time taken by outlet = 12 hours

Formula Used

Total Work = LCM of times
Efficiency = $\frac{\text{Total Work}}{\text{Time}}$

Solution

Total capacity = LCM(16, 20, 12) = 240 units
Efficiency of I1 = $\frac{240}{16}$ = +15 units/hour
Efficiency of I2 = $\frac{240}{20}$ = +12 units/hour
Efficiency of outlet = $\frac{240}{-12}$ = -20 units/hour
Net efficiency = 15 + 12 - 20 = 7 units/hour
Time taken to fill = $\frac{240}{7} = 34\frac{2}{7}$ hours

Final Answer

So the correct answer is (c)

Q.46 A field is in the shape of a rhombus whose side is 122 m. The length of one of its diagonals is 240 m. What is the area (in m^2) of the field?

A. 5280
B. 1320

C. 1760
D. 3080

Answer: A

Sol: **Given:**

A rhombus field with:

Side length = 122 m

Length of one diagonal = 240 m

Formula Used:

Area of rhombus $= \frac{1}{2} \times \text{Diagonal}_1 \times \text{Diagonal}_2$

Solution:

Since the diagonals bisect each other at right angles, each half of the diagonals forms a right-angled triangle with the sides of the rhombus.

The half of the first diagonal is:

$$\frac{240}{2} = 120\,\text{m}$$

Using the Pythagorean theorem in the right-angled triangle:

$$\left(\frac{\text{Diagonal}_2}{2}\right)^2 + 120^2 = 122^2$$

$$\left(\frac{\text{Diagonal}_2}{2}\right)^2 + 14400 = 14884$$

$$\left(\frac{\text{Diagonal}_2}{2}\right)^2 = 14884 - 14400 = 484$$

$$\frac{\text{Diagonal}_2}{2} = \sqrt{484} = 22$$

$$\text{Diagonal}_2 = 2 \times 22 = 44\,\text{m}$$

Area = $\frac{1}{2} \times 240 \times 44 = \frac{1}{2} \times 10560 = 5280\,\text{m}^2$

Thus, the area of the field is 5280 m².

Q.47 **From the top of a tower, the angles of depression of two objects, on the ground on the same side of it are observed to be 60° and 30°, respectively, and the height of the tower is 450 m. The distance between the objects (in m) is:**

A. 450 √3
B. 150 √3
C. 100 √3
D. 300 √3

Answer: D

Sol: **Given**

Height of tower (h) = 450 m

Angles of depression = $60^\circ and 30^\circ$

Formula Used

$\tan(\theta) = \frac{\text{Perpendicular}}{\text{Base}}$

Solution

Let the distances of the objects from the base of the tower be x and y (where y > x).

$\text{For angle } 60^\circ : \tan(60^\circ) = \frac{450}{x}$

$\sqrt{3} = \frac{450}{x}$

$x = \frac{450}{\sqrt{3}} = 150\sqrt{3}m$

For angle $30^\circ : \tan(30^\circ) = \frac{450}{y}$

$\frac{1}{\sqrt{3}} = \frac{450}{y}$

$y = 450\sqrt{3}m$

Distance between objects = y - x

Distance = $450\sqrt{3} - 150\sqrt{3} = 300\sqrt{3}m$

Final Answer

So the correct answer is (d)

Q.48 **What is the mode of the following data?**

65, 86, 86, 85, 69, 90, 71, 60, 86, 71, 86, 65, 81, 82, 67, 72, 84, 66, 75, 85, 68, 78, 61, 64, 74, 90

A. 69
B. 86
C. 65
D. 85

Answer: B

Sol: **Given:**

Data set: 65, 86, 86, 85, 69, 90, 71, 60, 86, 71, 86, 65, 81, 82, 67, 72, 84, 66, 75, 85, 68, 78, 61, 64, 74, 90

Formula Used:

Mode = Value with highest frequency

Solution:

Count frequencies:

86 occurs 4 times.

85 occurs 2 times.

90 occurs 2 times.

71 occurs 2 times.

65 occurs 2 times.

The value **86** has the maximum frequency.

Final Answer:

So the correct answer is (b).

Q.49 **A shopkeeper purchased 59 dozens of articles at the rate of ₹520 per dozen. He sold each one of them at the rate of ₹52. What percentage profit did he make?**

A. 19%
B. 23%
C. 21%
D. 20%

Answer: D

Sol: **Given**

Cost Price of 59 dozens = ₹520 per dozen

Selling Price of 1 article = ₹52

Formula Used

Profit = Selling Price - Cost Price

Profit Percentage = $\frac{Profit}{CostPrice} \times 100$

Solution

Cost Price of 1 dozen (12 articles) = ₹520

Cost Price of 1 article = $\frac{520}{12} = \frac{130}{3}$

Selling Price of 1 article = 52

Profit on 1 article = $52 - \frac{130}{3} = \frac{156 - 130}{3} = \frac{26}{3}$

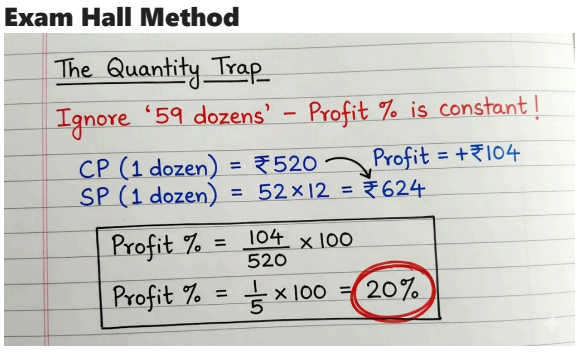
Profit Percentage = $\frac{26/3}{130/3} \times 100$

Profit Percentage = $\frac{26}{130} \times 100 = \frac{1}{5} \times 100 = 20\%$

Final Answer

So the correct answer is (d)

Exam Hall Method



Q.50 **Five bells commence tolling together and toll at intervals of 3, 6, 12, 15 and 18 seconds respectively. They tolled at 9:58:45 hours then at which time they will again toll together?**

A. 10:01:15
B. 10:02:45
C. 10:00:15
D. 10:01:45

Answer: D

Sol: **Given:**

Bells toll intervals = 3 s, 6 s, 12 s, 15 s, 18 s

First tolling together = 9:58:45

Solution:

Find LCM of (3, 6, 12, 15, 18):

Prime factors:

3 = 3

6 = 2 × 3

12 = $2^2 \times 3$

15 = 3 × 5

18 =2×3^2

Take highest powers: $2^2 \times 3^2 \times 5 = 4 \times 9 \times 5$ = 180

So, LCM = 180 seconds = 3 minutes

Add 180 seconds (3 minutes) to 9:58:45:

=9:58:45 + 3:00 = 10:01:45

They will toll together again at 10:01:45 hours

Q.51 **The amount on a sum of ₹2,800 at 10% per annum compound interest, compounded annually, in 2 years will be:**

A. ₹2,647

B. ₹3,604
C. ₹3,274
D. ₹3,388

Answer: D

Sol: **Given:**

Principal (P) = ₹2,800
Rate (R) = 10% per annum
Time (T) = 2 years

Formula Used:

Amount (A) = $P(1 + \frac{R}{100})^T$

Solution:

Substitute the values into the compound interest amount formula:

A = $2800 \times (1 + \frac{10}{100})^2$

= 2800 × $(\frac{110}{100})^2$

= 2800 × $(\frac{11}{10})^2$

= 2800 × $\frac{121}{100}$

= 28 × 121
= 3388
The amount will be ₹3,388.

Final Answer

So the correct answer is (d)

Q.52 **A man bought goods worth ₹8,000 and sold half of them at a gain of 10%. At what gain percentage must he sell the remaining goods so as to gain 20% on the whole?**

A. 28%
B. 32%
C. 30%
D. 25%

Answer: C

Sol: **Given**

Total cost price of goods = ₹8000
Profit on first half of goods = 10%
Overall required profit = 20%

Formula Used

Profit = $\frac{\text{Profit Percentage}}{100} \times \text{Cost Price}$

Solution

Total desired profit on the whole transaction is 20% of ₹8000:

Total Profit = $\frac{20}{100} \times 8000$ = 1600

The cost price of half of the goods is:

$\frac{8000}{2} = 4000$

The profit earned on selling this first half at a 10% gain is:

Profit on first half = $\frac{10}{100} \times 4000$ = 400

The remaining profit needed to achieve the total target is:

1600 - 400 = 1200

The cost price of the remaining half of the goods is ₹4000.

To find the required gain percentage on the remaining goods:

Required Gain% = $\frac{1200}{4000} \times 100$

= 30%

Final Answer

So the correct answer is (c)

Q.53 If 5cosA = 4, find the value of $\frac{3\sqrt{\text{cosec}^2 A - 1}}{4\sqrt{\sec^2 A - 1}}$

A. 1
B. 4/3
C. 3/4
D. 16/9

Answer: B

Sol: **Given:**

5cos A = 4

Formula Used:

$\cos A = \frac{Base}{Hypotenuse}$

$\sqrt{\text{cosec}^2 A - 1} = \cot A$

$\sqrt{\sec^2 A - 1} = \tan A$

$\cot A = \frac{1}{\tan A}$

Solution:

From the given equation, $\cos A = \frac{4}{5}$.

In a right-angled triangle, Base = 4 and Hypotenuse = 5.

Using Pythagoras theorem, Perpendicular = $\sqrt{5^2 - 4^2} = \sqrt{25 - 16} = \sqrt{9} = 3$.

$\tan A = \frac{Perpendicular}{Base} = \frac{3}{4}$

$\cot A = \frac{Base}{Perpendicular} = \frac{4}{3}$

The given expression to evaluate is:

$\frac{3\sqrt{\csc^2 A - 1}}{4\sqrt{\sec^2 A - 1}}$

$= \frac{3\cot A}{4\tan A}$

Now, substitute the values of $\cot A$ and $\tan A$:

$= \frac{3 \times \frac{4}{3}}{4 \times \frac{3}{4}}$

$= \frac{4}{3}$

Final Answer

So the correct answer is (b)

Q.54 **The HCF and LCM of two numbers are 42 and 9282 respectively. If one of the numbers lies between 500 and 600, then what is the product of the digits of the other number?**

A. 28
B. 120
C. 12
D. 10

Answer: A

Sol: **Given**

HCF = 42

LCM = 9282

Formula Used

$HCF \times LCM = \text{Product of two numbers}$

The numbers can be written as 42a and 42b, where a and b are co-prime.

Solution

$42a \times 42b = 42 \times 9282$

$42ab = 9282$

$ab = 221$

Co-prime factors of 221 are (13, 17) and (1, 221).

If a = 13, number = $42 \times 13 = 546$.

If b = 17, number = $42 \times 17 = 714$.

One number (546) is between 500 and 600. So the other number is 714.

Product of digits of 714 = $7 \times 1 \times 4 = 28$.

Final Answer

So the correct answer is (a)

Q.55 **The sides of a triangle are 80 cm, 44 cm, and 52 cm. What is the length of its altitude corresponding to the side with a length of 44 cm?**

A. 49 cm
B. 94 cm
C. 48 cm
D. 61 cm

Answer: C

Sol: **Given:**

Sides of the triangle: a = 80 cm, b = 44 cm, c = 52 cm

Base side for altitude = 44 cm

Formula Used:

Semi-perimeter (s) = $\frac{a+b+c}{2}$

Area of triangle (Heron's Formula) = $\sqrt{s(s-a)(s-b)(s-c)}$

Area triangle = $\frac{1}{2} \times \text{base} \times \text{altitude}$

Solution:

Find the semi-perimeter s:

s = $\frac{80+44+52}{2} = \frac{176}{2} = 88 \text{ cm}$

Calculate the area using Heron's formula:

Area = $\sqrt{88(88-80)(88-44)(88-52)}$

$= \sqrt{88 \times 8 \times 44 \times 36}$

$= \sqrt{(2 \times 44) \times 8 \times 44 \times 36}$

$= \sqrt{16 \times 44^2 \times 36}$

$= 4 \times 44 \times 6 = 1056 \text{ cm}^2$

Now, equate this to the basic area formula where base = 44 cm

$1056 = \frac{1}{2} \times 44 \times h$

1056 = $22 \times h$

h = $\frac{1056}{22} = 48 \text{ cm}$

Final Answer

So the correct answer is (c)

Q.56 **A number when increased by 25% becomes equal to another number, which is 20% less than a third number. What is the ratio of the first number to the third number?**

A. 9:16
B. 25:36
C. 16:25
D. 27:38

Answer: C

Sol: **Given**

First number increased by 25% = Second number

Second number = Third number decreased by 20%

Formula Used

Percentage Increase = Value $\times(1 + \frac{Rate}{100})$

Percentage Decrease = Value $\times(1 - \frac{Rate}{100})$

Solution

Let the third number be 100.

Second number = 100 - 20% of 100 = 80.

Let the first number be x.

$x \times (1 + \frac{25}{100}) = 80$

$x \times 1.25 = 80$

$x = \frac{80}{1.25} = 64$

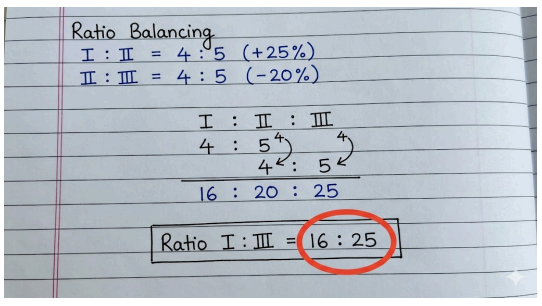
Ratio of the first number to the third number = 64 : 100

Simplifying the ratio = 16 : 25

Final Answer

So the correct answer is (c)

Exam Hall Method:



Q.57 Which ratio is the largest among 5 : 12, 14 : 31, 8 : 33 and 17 : 39?

A. 8 : 33
B. 14 : 31
C. 5 : 12
D. 17 : 39

Answer: B

Sol: **Given**

Ratios: 5 : 12, 14 : 31, 8 : 33, 17 : 39

Solution

$\frac{5}{12} \approx 0.416$

$\frac{14}{31} \approx 0.451$

$\frac{8}{33} \approx 0.242$

$\frac{17}{39} \approx 0.435$

Comparing the decimal values, 0.451 is the largest.

Therefore, the largest ratio is 14 : 31.

Final Answer

So the correct answer is (b)

Q.58 The population of a village was 10500. In a year with the increase in population of males by 10% and that of females by 15%, the population of the village becomes 11,718. What as the difference in the number of males and females in the village initially?

A. 3850
B. 3500
C. 3780
D. 3608

Answer: C

Sol: **Given**

Initial population = 10500

Final population = 11718

Male population increase = 10%

Female population increase = 15%

Formula Used

Total increase = Final population - Initial population

Solution

Overall increase = 11718 - 10500 = 1218

Let the initial number of males be M and females be F.

M + F = 10500

10% of M + 15% of F = 1218

0.10M + 0.15F = 1218

Multiply the entire equation by 100:

10M + 15F = 121800

Multiply the first equation (M + F = 10500) by 10:

10M + 10F = 105000

Subtracting the equations:
5F = 16800
F = 3360
Males (M) = 10500 - 3360 = 7140
Difference = 7140 - 3360 = 3780
Final Answer
So the correct answer is (c)

Q.59 **Akash, Ajay, Sonia, Anju and Rohit are in a group. The average marks scored by their group is 27. Akash left the group and now the average of the remaining students is 24. How many marks did Akash score?**

A. 32
B. 39
C. 15
D. 35

Answer: B

Sol: **Given:**

Group of 5 people: Akash, Ajay, Sonia, Anju, and Rohit.

Average marks of the group = 27.

After Akash left, the average marks of the remaining 4 people = 24.

Formula Used:

Average = $\frac{(\text{Sum of values})}{(\text{Number of values})}$

Solution:

Total marks of the 5 people = Average × Number of people = 27 × 5 = 135.

Total marks of the 4 people = Average × Number of people = 24 × 4 = 96.

Akash's marks = Total marks of the original group - Total marks of the remaining group = 135 - 96 = 39.

Therefore, Akash scored 39 marks.

Alternate Method:

The average mark was reduced by 27 - 24 = 3 marks.

This reduction of 3 marks was experienced by each of the 4 remaining people, therefore the total reduction of marks is 3 × 4 = 12 marks.

Therefore Akash's score was the original average plus the total reduction. 27 + 12 = 39.

Therefore Akash scored 39 marks.

Q.60 **Three friends X, Y and Z started a business by investing a sum of money in the ratio of 4 : 2 : 5. After 6 months, X withdraws half of his capital. If the sum invested by Z is ₹23,000, then out of a total annual profit of ₹37,000, what is the difference between X's and Y's profit?**

A. ₹3700
B. ₹5015
C. ₹3065
D. ₹4255

Answer: A

Sol: **Given**

Initial investment ratio of X, Y, Z = 4 : 2 : 5

X withdraws half capital after 6 months

Z's investment = ₹23,000 (Information not needed to calculate ratios)

Total annual profit = ₹37,000

Formula Used

Profit Ratio = (Capital × Time Period)

Solution

Let the initial investments be 4k, 2k, and 5k.

Equivalent investment of X for 12 months = (4k × 6) + (2k × 6) = 24k + 12k = 36k

Equivalent investment of Y for 12 months = 2k × 12 = 24k

Equivalent investment of Z for 12 months = 5k × 12 = 60k

Ratio of their profit shares = 36k : 24k : 60k = 3 : 2 : 5

Total ratio parts = 3 + 2 + 5 = 10 parts

Total profit = ₹37,000

Value of 1 part = $\frac{37000}{10} = ₹3700$

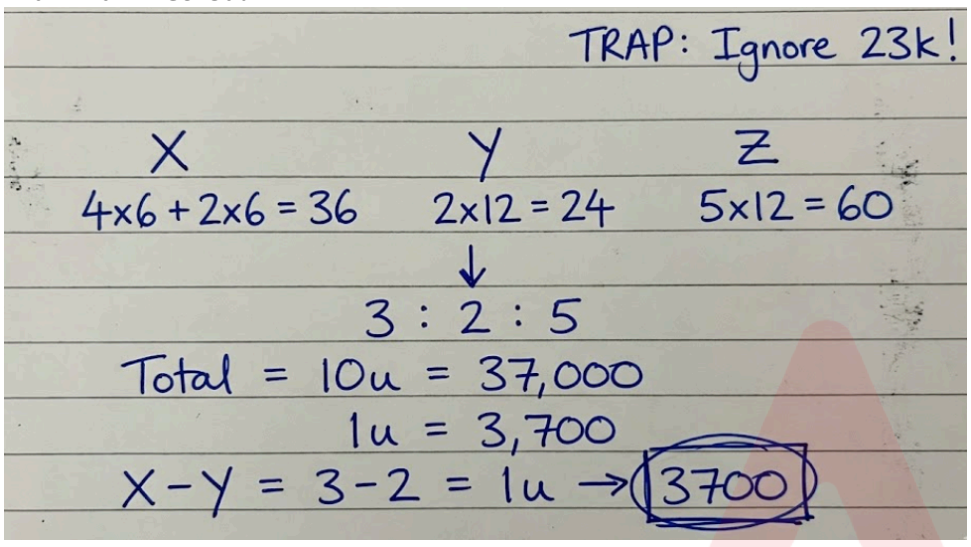
Difference between X's and Y's parts = 3 parts - 2 parts = 1 part

Difference in profit = 1 × 3700 = ₹3700

Final Answer

So the correct answer is (a)

Exam Hall Method:



Q.61 **Rajesh and Naresh start a business by investing ₹66,000 and ₹29,000, respectively. Rajesh invests his money for 2 months and Naresh for 12 months. At the end of the year, 5% of the total profit is ₹7,036. What is Naresh's share of the profit (in ₹)?**

A. 1,03,156
B. 1,02,022
C. 1,02,145
D. 1,03,148

Answer: B

Sol: **Given**

Rajesh's investment = ₹66,000

Time for Rajesh = 2 months

Naresh's investment = ₹29,000

Time for Naresh = 12 months

5% of total profit = ₹7,036

Formula Used

Profit Ratio = Ratio of (Investment × Time period)

Solution

Rajesh's effective investment = $66000 \times 2 = 132000$

Naresh's effective investment = $29000 \times 12 = 348000$

Ratio of their profit shares = 132000 : 348000

Ratio = 132 : 348 = 33 : 87 = 11 : 29

Total parts of profit = 11 + 29 = 40 parts

5% of total profit = ₹7,036

Total profit = $7036 \times \frac{100}{5} = 7036 \times 20 = 140720$

Naresh's share = $\frac{29}{40} \times 140720$

Naresh's share = $29 \times 3518 = 102022$

Final Answer

So the correct answer is (b)

Q.62 **The ratio of the present ages of Shreya and her mother is 3 : 5 and the ratio of present ages of her mother and her grandmother is 10 : 13. If the average age of Shreya, her mother and her grandmother is 58 years, then find the present age of her mother.**

A. 78 years
B. 36 years
C. 84 years
D. 60 years

Answer: D

Sol: **Given:**
Ratio of Shreya to Mother (S : M) = 3 : 5
Ratio of Mother to Grandmother (M : G) = 10 : 13
Average age of Shreya, Mother, and Grandmother = 58 years
Formula Used:
Total Age = Average Age × 3
Combined ratio formulation: a : b and b : c leads to a : b : c.
Solution:
First, equalize the ratio for Mother in both given ratios.
S : M = 3 : 5 = 6 : 10
Since M : G = 10 : 13, the combined ratio is:
S : M : G = 6 : 10 : 13
Let their ages be 6x, 10x, and 13x.
Sum of their ages = 6x + 10x + 13x = 29x
We know the average age is 58, so the total age is 58 × 3 = 174 years.
29x = 174
$x = \frac{174}{29} = 6$
The present age of the mother is 10x:
Mother's age = 10 × 6 = 60 years.
Final Answer
So the correct answer is (d)

Q.63 **A salesman marks his goods 10% above the cost price and gives a discount of 80% on them. Find his loss percentage.**

A. 79%
B. 77%
C. 70%
D. 78%

Answer: D

Sol: **Given**
Markup percentage = 10% above Cost Price
Discount percentage = 80% on Marked Price
Formula Used
Marked Price = Cost Price + Markup
Selling Price = Marked Price - Discount
Loss Percentage = $\frac{\text{Cost Price} - \text{Selling Price}}{\text{Cost Price}} \times 100$
Solution
Let the Cost Price (CP) be 100.
The Marked Price (MP) is 10% above CP:
MP = 100 + 10 = 110
The discount offered is 80% on the MP:
$\text{Discount} = \frac{80}{100} \times 110 = 88$
Calculate the Selling Price (SP):
SP = 110 - 88 = 22
Determine the loss amount:
Loss = CP - SP = 100 - 22 = 78
The loss percentage is:
$\text{Loss } \% = \frac{78}{100} \times 100 = 78\%$
Final Answer
So the correct answer is (d)

Q.64 The downstream speed is 125 km/hr and the upstream speed is 25 km/hr. It takes a total of 25 hours to go to a place and come back. What is the total distance (in km) travelled by boat?

A. $520\frac{1}{6}$
B. $520\frac{5}{6}$
C. $1041\frac{2}{3}$
D. $1041\frac{1}{3}$

Answer: C

Sol: **Given:**
Downstream speed = 125 km/hr
Upstream speed = 25 km/hr
Total time = 25 hours

Formula Used:
$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

Solution:

Let one-way distance = D km.
$$\frac{D}{125} + \frac{D}{25} = 25$$

$$\frac{D + 5D}{125} = 25$$

$$\frac{6D}{125} = 25$$

D = $\frac{25 \times 125}{6} = \frac{3125}{6}\text{km}$

Total distance = 2D = $2 \times \frac{3125}{6} = 1041\frac{2}{3}\text{km}$

Q.65 A, B and C together can complete a task in 20 days. A and B together can do it in 30 days, and B and C together can do it in 24 days. How long would B alone take to complete the entire work?

A. 48 days
B. 40 days
C. 45 days
D. 54 days

Answer: B

Sol: **Given**
Time taken by A, B and C together = 20 days
Time taken by A and B together = 30 days
Time taken by B and C together = 24 days
Formula Used
Total Work = Efficiency × Time
Solution
Let total work be the LCM of 20, 30 and 24.
Total work = 120 units
Efficiency of A, B and C together = $\frac{120}{20}$ = 6 units/day

Efficiency of A and B together = $\frac{120}{30}$ = 4 units/day

Efficiency of B and C together = $\frac{120}{24}$ = 5 units/day

Efficiency of C alone = Efficiency of (A, B and C) - Efficiency of (A and B)

Efficiency of C = 6 - 4 = 2 units/day

Efficiency of B alone = Efficiency of (B and C) - Efficiency of C

Efficiency of B = 5 - 2 = 3 units/day

Time taken by B alone = $\frac{120}{3}$ = 40 days

Final Answer

So the correct answer is (b)

Q.66 **If the mode of a data exceeds its mean by 27.3, then the mode exceeds the median by _____. (Use empirical formula to find the answer.)**

A. 27.1

B. 18.2

C. 24.9

D. 15.8

Answer: B

Sol: **Given**

Mode - Mean = 27.3

Formula Used

Mode = 3 Median - 2 Mean

Solution

From the empirical formula:

Mode - Mean = 3 Median - 3 Mean

Mode - Mean = 3(Median - Mean)

27.3 = 3(Median - Mean)

Median - Mean = $\frac{27.3}{3} = 9.1$

We need to find (Mode - Median).

Mode - Median = (Mode - Mean) - (Median - Mean)

Mode - Median = 27.3 - 9.1 = 18.2

Final Answer

So the correct answer is (b)

Q.67 **Shan has ₹1407 with him. He divides this amount between his two sons, Piyush and Manoj, and asks them to invest their respective shares at a compound interest rate of 10% per annum, compounded annually. It is observed that Piyush's investment amounts to the same value after 18 years as Manoj's investment does after 19 years.**

How much (in ₹) did Shan give to Manoj?

A. 670

B. 837

C. 737

D. 520

Answer: A

Sol: **Given**

Total amount = ₹1407

Rate of interest (R) = 10% per annum

Time for Piyush = 18 years

Time for Manoj = 19 years

Amount received by both sons is equal

Formula Used

Amount in Compound Interest = P$(1 + \frac{R}{100})^n$

Solution

Let the share of Piyush be P and the share of Manoj be M.

Equate their final amounts based on the given condition:

$P(1 + \frac{10}{100})^{18} = M(1 + \frac{10}{100})^{19}$

$$P = M(1 + \frac{10}{100})^1$$

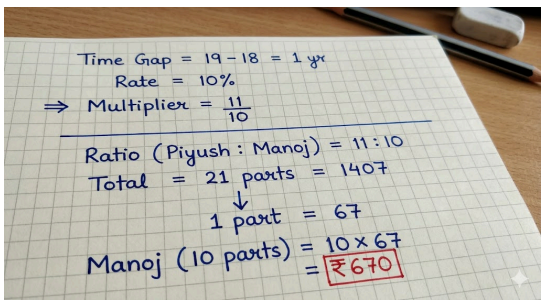
$$P = M(1 + \frac{1}{10})$$

$$P = M(\frac{11}{10})$$

$$\frac{P}{M} = \frac{11}{10}$$

The ratio of their shares (P : M) is 11 : 10.
Total ratio parts = 11 + 10 = 21
Value of 1 part = $\frac{1407}{21} = 67$
Manoj's share = 10 × 67 = ₹670
Final Answer
So the correct answer is (a)

Exam Hall Method:



Q.68 In an election between two candidates, 80% of the registered voters cast their vote and 10% of the votes polled were found invalid. Winning candidate got 89% of the valid votes and won the election by a margin of 351 votes. How many voters were registered?

A. 625
B. 650
C. 600
D. 675

Answer: A

Sol: **Given**
Votes cast = 80% of registered voters
Invalid votes = 10% of votes cast
Winner's share = 89% of valid votes
Winning margin = 351 votes
Formula Used
Valid Votes = Votes Cast - Invalid Votes
Margin of Victory = (Winner's % - Loser's %) × Valid Votes
Solution
Let the total number of registered voters be x.
Total votes cast = $\frac{80}{100}x = 0.8x$
Valid votes = 90% of the votes cast (since 10% were invalid) = $\frac{90}{100} \times 0.8x = 0.72x$
The winning candidate secured 89% of the valid votes.
The losing candidate secured (100% - 89%) = 11% of the valid votes.
Difference in percentage = 89% - 11% = 78%
Margin of victory is 78% of the valid votes:
$351 = \frac{78}{100} \times 0.72x$

$351 = \frac{78 \times 72}{10000} \times x$

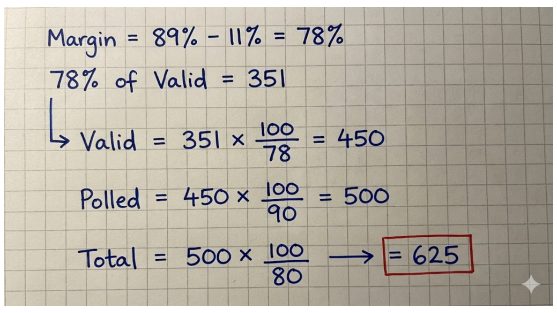
$x = \frac{351 \times 10000}{78 \times 72}$

$x = \frac{4.5 \times 10000}{72}$

$x = \frac{45000}{72}$
x = 625
Final Answer

So the correct answer is (a)

Exam Hall Method:



Q.69 **A sum of money amounts to Rs. 11100 at 8% per annum simple interest in 6 years. The simple interest on the same sum for 9 months at 7.5% per annum is:**

A. Rs. 420.875
B. Rs. 428.875
C. Rs. 431.875
D. Rs. 421.875

Answer: D

Sol: **Given**

Amount = Rs. 11100
Rate = 8%, Time = 6 years

Formula Used

$$A = P(1 + \frac{RT}{100})$$

$$SI = \frac{P \times R \times T}{100}$$

Solution

Step 1: Find P.

$$11100 = P(1 + \frac{8 \times 6}{100}) = P(1.48)$$

$$P = \frac{11100}{1.48} = 7500.$$

Step 2: Find SI for 9 months (3/4 year) at 7.5%.

$$SI = \frac{7500 \times 7.5 \times 0.75}{100}$$

$$SI = 75 \times 5.625 = 421.875.$$

Final Answer

So the correct answer is (d)

Q.70 **Train A is 260 m long and crosses a platform of length 160 m in 28 seconds. Train B is 340 m long and passes a stationary man in 20 seconds. Both trains travel at constant speeds on parallel straight tracks. Find the time (in seconds) taken when the faster train completely overtakes the slower train while moving in the same direction?**

A. 250
B. 300
C. 360
D. 320

Answer: B

Sol: **Given**

Length of Train A = 260 m, Length of platform = 160 m, Time A = 28 s
Length of Train B = 340 m, Time B (to cross man) = 20 s

Formula Used

Speed = $\frac{\text{Distance}}{\text{Time}}$

Relative Speed (same direction) = Speed of faster train - Speed of slower train

Time taken to overtake = $\frac{\text{Sum of lengths of both trains}}{\text{Relative Speed}}$

Solution

Speed of Train A = $\frac{260+160}{28} = \frac{420}{28} = 15m/s$

Speed of Train B = $\frac{340}{20} = 17m/s$

Relative Speed = 17 - 15 = 2 m/s

Total distance to overtake = 260 + 340 = 600 m

Time taken = $\frac{600}{2} = 300s$

Final Answer

So the correct answer is (b)

Q.71 **A, B, C, Q, R and S live on six different floors of the same building. The lowermost floor is numbered 1 and the topmost is numbered 6. Q lives on floor 5. B lives above Q. Only R lives below C. A lives on an even-numbered floor. How many people live below S?**

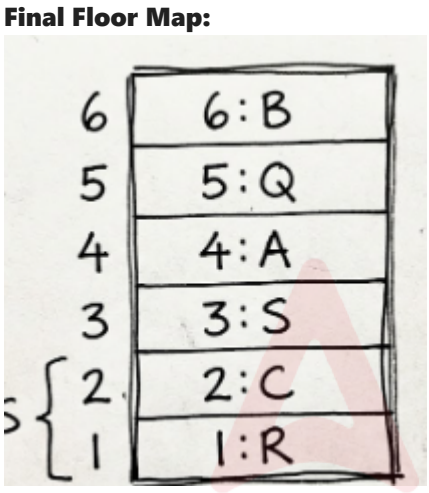
A. Four
B. Two
C. Three
D. One

Answer: B

Sol: **Statements Analysis:**

Total Floors: 1, 2, 3, 4, 5, 6.
Q's Floor: Q lives on floor 5.
B's Position: B lives above Q. Since Q is on 5, B must be on floor 6.
R and C: "Only R lives below C." This implies C is on floor 2 and R is on floor 1.
A's Position: A lives on an even-numbered floor. Floors 2, 4, and 6 are even. Since 2 (C) and 6 (B) are occupied, A must be on floor 4.
S's Position: The only remaining floor is floor 3. Thus, S lives on floor 3.

Final Floor Map:



Conclusion: Since S is on floor 3, there are two people (C and R) living below S.
Final Verdict: B - Two

Q.72 **8 is related to 41 following a certain logic. Following the same logic, 81 is related to 406. To which of the following is 13 related, following the same logic?**

A. 64
B. 66
C. 68
D. 62

Answer: B

Sol: **Information Given:**

8 → 41
81 → 406
Find: 13 → ?

Logic:
Pattern: (number × 5) + 1

Explanation:
Logic: Multiply by 5, then add 1

8 × 5 + 1 = 41 ✔
81 × 5 + 1 = 406 ✔

13 × 5 + 1 = 65 + 1 = 66

Final Answer:
66

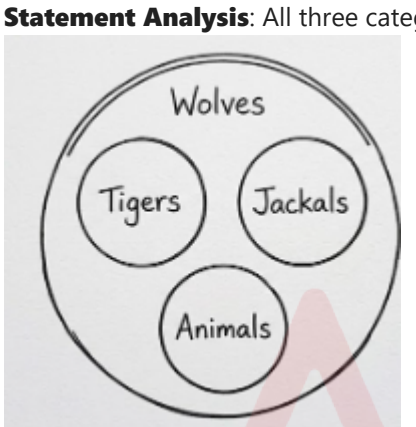
Final Correct Option:
B

Q.73 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statements.
Statements: All tigers are wolves.
All jackals are wolves.
All animals are wolves.
Conclusions:
(I) Some animals are tigers.
(II) Some jackals are animals.

A. Only conclusion (I) follows.
B. Neither conclusion (I) nor (II) follows.
C. Both conclusions (I) and (II) follow.
D. Only conclusion (II) follows.

Answer: B

Sol: **Statement Analysis**: All three categories (Tigers, Jackals, and Animals) are subsets of the larger category Wolves.



Conclusion I: "Some animals are tigers" — Does not follow. There is no definite intersection between the Animals circle and the Tigers circle.
Conclusion II: "Some jackals are animals" — Does not follow. There is no definite intersection between the Jackals circle and the Animals circle.

2. Step-by-Step Logic
Basic Diagram: Draw a large circle for Wolves. Inside it, draw three separate circles: one for Tigers, one for Jackals, and one for Animals.
Logic for (I): While both Tigers and Animals are inside Wolves, they are independent circles. No statement connects them; therefore, no definite relation exists.
Logic for (II): Similarly, Jackals and Animals are both within Wolves but do not necessarily touch or overlap. Without a direct statement, we cannot assume they meet.

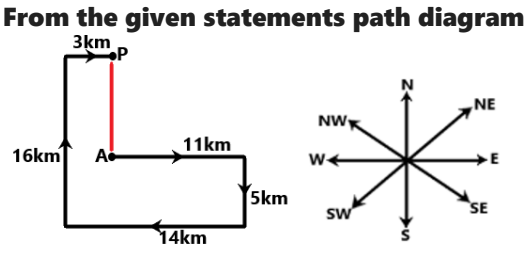
Final Answer: B (Neither conclusion I nor (II) follows.)

Q.74 **Mr. Akai starts from Point A and drives 11 km towards east. He then takes a right turn, drives 5 km, turns right and drives 14 km. He then takes a right turn and drives 16 km. He takes a final right turn, drives 3 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again? (All turns are 90 degrees turns only unless specified)**

A. 11 km to the south
B. 7 km to the east
C. 11 km to the north
D. 7 km to the north

Answer: A

Sol: **Given**:
Mr. Akai starts from Point A and drives 11 km towards east.
He then takes a right turn, drives 5 km, turns right and drives 14 km.
He then takes a right turn and drives 16 km.
He takes a final right turn, drives 3 km and stops at Point P.
From the given statements path diagram will be.



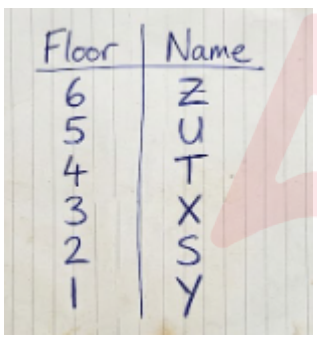
16 - 5 = 11 km
So, he far **11 km** and towards **South** direction should he drive in order to reach Point A again.
Thus, correct option is (a).

Q.75 **X, Y, Z, S, T and U live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6. Only Z lives above U. T lives immediately below U. Only Y lives below S. Who lives on floor numbered 4?**

A. Z
B. T
C. S
D. U

Answer: B

Sol: **Given**:
There are six floors numbered 1 to 6, where 1 is the bottom and 6 is the top.
Only Z lives above U.
T lives immediately below U.
Only Y lives below S.
From the given information seating arrangement will be:
Floor Number Person



Final Answer Statement:
T lives on floor numbered 4.

Thus, the correct option is (B).

Q.76 **Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of :: ?**
 # : ZJR :: PZH : %

A. # = TDL % = VFN
B. # = UDL % = VFN
C. # = TDM % = VFN
D. # = TDL % = VCN

Answer: A

Sol: **Information Given:**
Pattern: # : ZJR :: PZH : %

Logic:
Left + 6 (each letter) = Right

Explanation:
Logic: Check backward shift

Z → T (−6)
J → D (−6)
R → L (−6)

So # = TDL

Apply same to PZH:

P → V (+6)
Z → F (+6 cyclic)
H → N (+6)

So % = VFN

Final Answer:
= TDL, % = VFN

Final Correct Option:
A

Q.77 **In a certain code language, 'VAJR' is coded as '102' and 'DOTG' is coded as '92'. What is the code for 'ZELW' in the given code language?**

A. 121
B. 132
C. 124
D. 138

Answer: B

Sol: **1. Information Given:**

VAJR → 102
DOTG → 92
Need to find: ZELW → ?

Alphabet positions:
A = 1, B = 2, ..., Z = 26

2. Formula Used:
Code = (Sum of alphabetical positions of letters) × 2

3. **Explanation**:

Check VAJR:
V = 22, A = 1, J = 10, R = 18
Sum = 22 + 1 + 10 + 18 = 51
Code = 51 × 2 = 102 ✔

Check DOTG:
D = 4, O = 15, T = 20, G = 7
Sum = 4 + 15 + 20 + 7 = 46
Code = 46 × 2 = 92 ✔

Now solve for ZELW:
Z = 26, E = 5, L = 12, W = 23
Sum = 26 + 5 + 12 + 23 = 66

Code = 66 × 2 = 132

Final Answer:

ZELW → 132

Correct Option: B

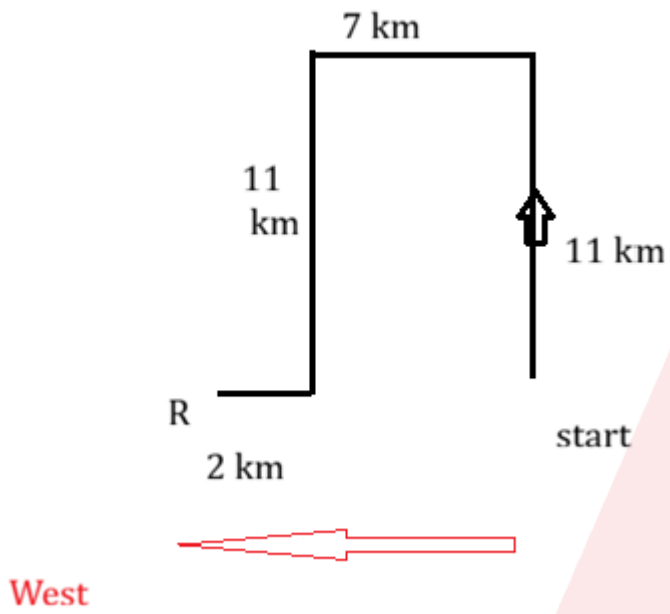
Q.78 **Vihaana walks 11 km North, then turns left and walks 7 km. She then turns left again and walks 11 km. She turns right and walks 2 km to reach point R. How far and in which direction is point R from the starting point? (All turns are 90-degree turns only, unless specified.)**

A. 9 km, West
B. 11 km, East
C. 8 km, East
D. 10 km, West

Answer: A

Sol: Vihaana walks 11 km North, then turns left and walks 7 km.
She then turns left again and walks 11 km.

She turns right and walks 2 km to reach point R.



Required direction = West

Required distance = 7 km + 2 km = 9 km

Q.79 **If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 21673458, what will be the product of the greatest and smallest digit in the new number thus formed?**

A. 0
B. 9
C. 8
D. 16

Answer: C

Sol: **1. Information Given:**
Number: 21673458
Rule:
Odd digits → +1
Even digits → −1

Explanation:

Apply the rule to each digit:
2 → 1 (even −1)
1 → 2 (odd +1)
6 → 5 (even −1)
7 → 8 (odd +1)
3 → 4 (odd +1)
4 → 3 (even −1)

5 → 6 (odd +1)
8 → 7 (even −1)

New number: 1 2 5 8 4 3 6 7

Now find:

Greatest digit = 8
Smallest digit = 1

Product = 8 × 1 = 8

Final Answer:
8

✔ **Correct Option:** C

Q.80 **What will come in the place of the '?' in the following equation, if '+' and '−' are interchanged and '×' and '÷' are interchanged?**
156 × 12 − 13 ÷ 8 + 71 = ?

A. 41
B. 45
C. 46
D. 43

Answer: C

Sol: **1. Information Given:**
Original expression: 156 × 12 − 13 ÷ 8 + 71
Interchange rules:
+ becomes −
− becomes +
× becomes ÷
÷ becomes ×

2. **Formula Used:**
Apply operator interchange first, then solve using BODMAS rule

3. **Explanation**:
After interchanging operators:
156 ÷ 12 + 13 × 8 − 71
Now solve using BODMAS:
156 ÷ 12 = 13
13 × 8 = 104

Now substitute:
13 + 104 − 71
= 117 − 71
= 46

Final Answer:
46

Correct Option: C

Q.81 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
IJG 19, HIF 15, GHE 11, FGD 7, ?

A. EMV 2
B. EEB 2
C. EFC 3

D. EGB 3

Answer: C

Sol: **Information Given:**
Series: IJG 19, HIF 15, GHE 11, FGD 7, ?

Logic:
Letters: each position −1
Numbers: −4 pattern

Explanation:
Logic: Decrease letters by 1 step each

I H G F → next E
J I H G → next F
G F E D → next C
→ EFC

Numbers: 19, 15, 11, 7 → next = 3
So, term = EFC 3

Final Answer:
EFC 3

Final Correct Option:
C

Q.82 **In a row of 50 students facing North, Shruti is 23rd from the left end. If Daksh is 17th to the right of Shruti, what is Daksh's position from the right end of the line?**

A. 12th
B. 11th
C. 10th
D. 9th

Answer: B

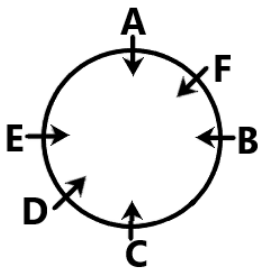
Sol: **Given**: In a row of 50 students facing North, Shruti is 23rd from the left end. If Daksh is 17th to the right of Shruti.
Solution:
Daksh is 17 positions to the right of Shruti:
Daksh's position from left = 23 + 17 = 40th
Now find position from the right:
50 - 40 + 1 = 11
So, **11th** is Daksh's position from the right end of the line.
Thus, correct option is (b).

Q.83 **A, B, C, D, E and F are sitting around a circular table facing the centre. D sits second to the left of B. E sits second to the right of F. C is on the immediate right of D. Who is sitting on the immediate left of A?**

A. F
B. E
C. B
D. C

Answer: A

Sol: **Given**:
A, B, C, D, E and F are sitting around a circular table facing the centre.
D sits second to the left of B.
E sits second to the right of F.
C is on the immediate right of D.
From the given information seating arrangement will be.



So, **F** is sitting on the immediate left of A.
Thus, correct option is (a).

Q.84 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on the first number results in the second number. Similarly, a certain mathematical operation on the second number results in the third number, and so on. Which of the given options follows the same set of operations as in the question?**
100 – 50 – 60 – 30 ;

300 – 150 – 160 – 80

A. 160 – 80 – 90 – 180
B. 220 – 110 – 120 – 30
C. 100 – 50 – 40 – 20
D. 80 – 40 – 50 – 25

Answer: D

Sol: **1. Information Given:**
Series 1: 100 → 50 → 60 → 30
Series 2: 300 → 150 → 160 → 80

2. Formula Used:
Pattern: ÷2 → +10 → ÷2

3. **Explanation**:
Check pattern in first series:
100 → 50 (÷2)
50 → 60 (+10)
60 → 30 (÷2)

Second series follows same:
300 → 150 (÷2)
150 → 160 (+10)
160 → 80 (÷2)

Now check options:
A)
160 → 80 (÷2) ✔
80 → 90 (+10) ✔
90 → 180 (×2 ✘ wrong pattern)

B)
220 → 110 (÷2) ✔
110 → 120 (+10) ✔
120 → 30 (÷4 ✘ wrong)

C)
100 → 50 (÷2) ✔
50 → 40 (−10 ✘ wrong)

D)
80 → 40 (÷2) ✔
40 → 50 (+10) ✔
50 → 25 (÷2) ✔

Final Answer:
80 → 40 → 50 → 25

✅ **Correct Option:** D

Q.85 Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only.
(Left) B * £ J E % $ * V € G * D H @ A £ O V $ T Y (Right)

How many such letters are there, each of which is immediately preceded by a symbol and also immediately followed by a symbol?

A. 2
B. 4
C. 5
D. 3

Answer: D

Sol: **Information Given:**
Series: B * £ J E % $ * V € G * D H @ A £ O V $ T Y

Condition: Letter must be preceded by a symbol and followed by a symbol

Logic:
Check each letter → symbol before & symbol after

Explanation:
Logic: Symbol–Letter–Symbol pattern
Check:

B * £ J E % $ * V € G * D H @ A £ O V $ T Y

Final Answer:
3

F**inal Correct Option:**
D

Q.86 What should come in place of the question mark (?) in the given series?
29, 49, 69, 89, 109, ?

A. 119
B. 121
C. 129
D. 131

Answer: C

Sol: **Given**: 29, 49, 69, 89, 109, ?
Logic: Numbers are increasing + 20 place.
29 + 20 = 49
49 + 20 = 69
69 + 20 = 89
89 + 20 = 109
109 + 20 = 129
So, the missing term is **129**.
Thus, correct option is (c).

Q.87 In a certain code language, 'ALIT' is coded as '2159' and 'HILT' is coded as '6912'. What is the code for 'H' in the given code language?

A. 2
B. 9
C. 6
D. 1

Answer: C

Sol: **Given**:

In a certain code language, 'ALIT' is coded as '2159'.

'HILT' is coded as '6912'.

We need to find the code for the letter 'H'.

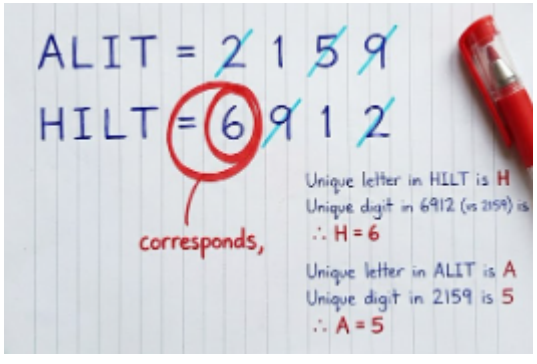
Transition Sentence: From the given information seating arrangement will be.

1. Comparison of ALIT and HILT:

Common letters in both words: L, I, T.

Common digits in both codes: 2, 1, 9 (appearing in both '2159' and '6912').

2. Identifying the unique code for 'H':



Therefore, the code for H is 6.

Final Answer Statement: The code for the letter 'H' is 6.

Conclusion: Thus, the correct option is (C).

Q.88 In a certain code language,

A 3 B means 'A is the brother of B'
A 6 B means 'A is the mother of B'
A 7 B means 'A is the husband of B'
A 4 B means 'A is the daughter of B'

Based on the above, how is X related to M if 'M 6 N 3 P 7 Q 4 X'?

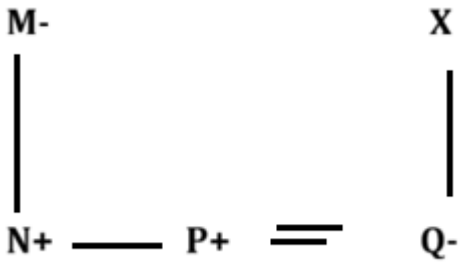
A. Son
B. Son's Wife
C. Son's wife's parent
D. Son's Mother

Answer: C

Sol: **In a certain code language,**

A 3 B means 'A is the brother of B'
A 6 B means 'A is the mother of B'
A 7 B means 'A is the husband of B'
A 4 B means 'A is the daughter of B'

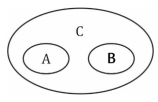
Based on the above, how is X related to M if 'M 6 N 3 P 7 Q 4 X'.

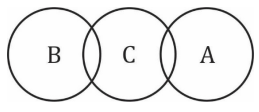


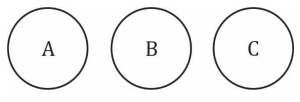
X is M's Son's (P's) Wife's (Q's) Parent.

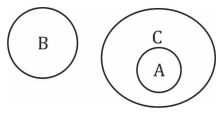
Q.89 Which of the following correctly represents the relationship between the given classes?

A) Spades
B) Hearts
C) Deck of cards

A. 

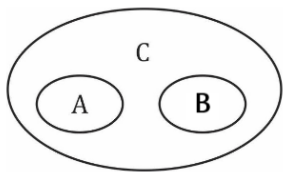
B. 

C. 

D. 

Answer: A

Sol: **Given**: A) Spades B) Hearts C) Deck of cards



Spades and **Hearts** are types of suits in a **deck of cards**.
Thus, correct option is (a).

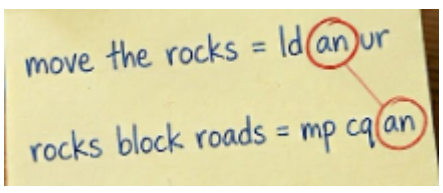
Q.90 In a certain code language, 'move the rocks' is coded as 'ld an ur' and 'rocks block roads' is coded as 'mp cq an'. How is 'rocks' coded in the given language?

A. cq
B. mp
C. an
D. ur

Answer: C

Sol: **Given**:
• In a certain code language, 'move the rocks' is coded as 'ld an ur'.
• 'rocks block roads' is coded as 'mp cq an'.
From the given information seating arrangement will be.
By comparing the two statements

Rocks in common word in both statement so this code also which will be common



The code for 'rocks' is 'an'.
Thus, the correct option is (C).

Q.91 Select the set in which the numbers are related in the same way as are the numbers of the following sets. (NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
(19,21,55)

(8,9,23)

A. (22,21,67)
B. (1,21,19)
C. (7,5,3)
D. (20,12,79)

Answer: A

Sol: **Information Given:**
Sets: (19,21,55), (8,9,23)
Check logic: third = first × 4 − second

Logic:
Logic: third = first × 4 − second

Explanation:
Logic: Apply directly

(19,21):
19 × 4 = 76
76 − 21 = 55 ✔

(8,9):
8 × 4 = 32
32 − 9 = 23 ✔

✔ **Logic works perfectly for both sets Options:**
A) (22,21,67)
B) (1,21,19)
C) (7,5,3)
D) (20,12,79

A:
22 × 4 = 88
88 − 21 = 67 ✔

B:
1 × 4 = 4
4 − 21 = −17 ≠ 19 ✘

C:
7 × 4 = 28
28 − 5 = 23 ≠ 3 ✘

D:
20 × 4 = 80
80 − 12 = 68 ≠ 79 ✘

Final Answer:
(22,21,67)

Final Correct Option:
A

Q.92 **What should come in place of the question mark (?) in the given series?**
20, 22, 25, 30, 37, ?

A. 49
B. 55
C. 48
D. 51

Answer: C

Sol: **Information Given:**
Series: 20, 22, 25, 30, 37, ?
Logic:
Differences increase by +1 each time.
Explanation:
Logic: Check consecutive differences.
22−20 = 2
25−22 = 3

30−25 = 5
37−30 = 7
Pattern: +2, +3, +5, +7 → next = +11
So next term:
37 + 11 = 48
Short Trick:
Differences follow prime numbers: 2, 3, 5, 7, 11
Final Answer:
48
Final Correct Option:
C

Q.93 **In a code language, 'ONE' is coded as 9 and 'FOUR' is coded as 16. How will 'FIFTEEN' be coded in the same language?**

A. 49
B. 18
C. 24
D. 36

Answer: A

Sol: **Given**: In a code language, 'ONE' is coded as 9 and 'FOUR' is coded as 16.
Logic: (Number of letters)^2= Number
For, ONE - 9
Number of letters = 3, $3^2 = 9$
For, FOUR - 16
Number of letters = 4, 4^2= 16
Similarly,
FIFTEEN - ?
Number of letters = 7, 7^2= 49
So, FIFTEEN is coded as **49**.
Thus, correct option is (a).

Q.94 **Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statement.**

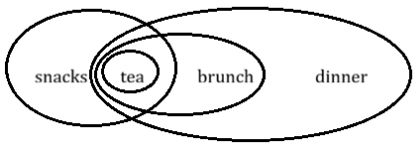
Statements:
All tea is a snack.
All tea is brunch.
All brunches are dinner.

Conclusions:
(I) All tea is dinner.
(II) Some brunches are snacks.

A. Only conclusion (I) follows.
B. Neither conclusion (I) nor (II) follows.
C. Both conclusions (I) and (II) follow.
D. Only conclusion (II) follows.

Answer: C

Sol: **Statement Analysis**: Tea is a subset of both Snack and Brunch. Since Brunch is a subset of Dinner, everything inside Brunch (including Tea) is also inside Dinner.



Conclusion (I): "All tea is dinner" — Follows. Since All Tea is Brunch and All Brunch is Dinner, All Tea must be Dinner.
Conclusion (II): "Some brunches are snacks" — Follows. Since all Tea is inside both Brunch and Snack, the area occupied by Tea is the common intersection between Brunch and Snack.

Final Answer: C (Both conclusions (I) and (II) follow.)

Q.95 **If + means ÷, − means ×, × means −, and ÷ means +, then what will come in place of the question mark (?) in the following equation?**
639 + 9 × 6 − 44 ÷ 279 = ?

A. 89
B. 81
C. 86
D. 80

Answer: C

Sol: **Given**: 639 + 9 × 6 − 44 ÷ 279 = ?

Given Sign+ - × ÷

New Sign ÷ × - +

Using **BODMAS** rule.

Operation preference wise	Symbol
Brackets	$[], , ()$
Orders, of	$(power), \sqrt{(root)}, of$
Division	$\div$
Multiplication	$\times$
Addition	$+$
Subtraction	$-$

New equation: 639 ÷ 9 - 6 × 44 + 279 = ?
71 - 6 × 44 + 279 = ?
71 - 264 + 279 = ?
350 - 264 = ?
? = **86**
Thus, correct option is (c).

Q.96 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
KIE 88 CAW 95 USO 102 MKG 109 ?

A. ECY 116
B. EDX 116
C. EBX 115
D. EGJ 115

Answer: A

Sol: **1. Information Given:**
Series: KIE 88, CAW 95, USO 102, MKG 109, ?
Pattern:
Letters follow a backward shift, Move −8 positions
Numbers increase consistently, add +7 each step

Explanation:
Step 1: Analyze Letters

Test Prime By Adda247

Previous Year Papers PDF

PRACTICE MORE, SCORE HIGHER!

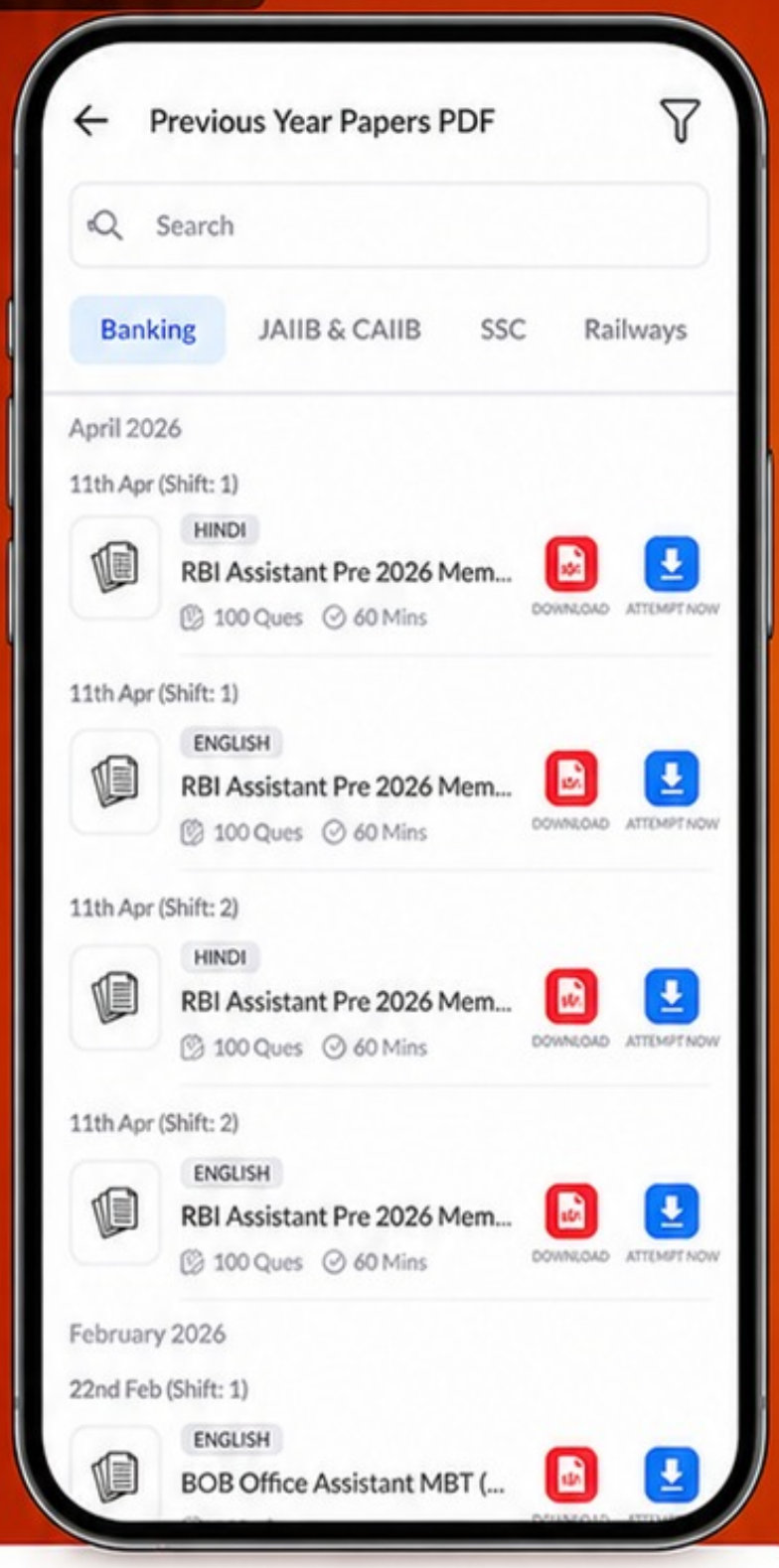
PDF

Free 25,000+ PDF's

High-Quality | Exam-Wise | Updated Regularly

ATTEMPT AS MOCK

Turn PDFs into real exam experience.
Analyze. Improve. Succeed.



- Topic-wise & Exam-wise PDFs
- Download & Study Offline
- Attempt as Mock & Track Score
- Smart Analysis & Performance

AVAILABLE IN

Banking | SSC | Railway | Teaching | UGC | Agriculture | Nursing

Bihar | UP | Punjab | WB | Odisha | TN | AP & Telangana | Haryana

DOWNLOAD THE APP

We check each position separately:

First letters:
K → C → U → M
K − 8 = C
C − 8 = U
U − 8 = M
M − 8 = E

Second letters:
I → A → S → K
I − 8 = A
A − 8 = S
S − 8 = K
K − 8 = C

Third letters:
E → W → O → G
E − 8 = W
W − 8 = O
O − 8 = G
G − 8 = Y
So, next letters = ECY

Step 2: Analyze Numbers
88 → 95 → 102 → 109
Each step:
+7

Next number:
109 + 7 = 116

Final Answer:
ECY 116

✔ **Correct Option:** A

Q.97 **If 'A' stands for '÷' , 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-' , what will come in place of question mark '?' in the following equation?**
29 B 6 C 243 A 9 D 33 = ?

A. 171
B. 168
C. 166
D. 173

Answer: B

Sol: **Given**: 29 B 6 C 243 A 9 D 33 = ?

Given LettersA B C D

New Sign ÷ × + -

Using **BODMAS** rule.

Operation preference wise	Symbol
Brackets	$[], , ()$
Orders, of	$(power), \sqrt{(root)}, of$
Division	$\div$
Multiplication	$\times$
Addition	$+$
Subtraction	$-$

New equation: 29 × 6 + 243 ÷ 9 - 33 = ?
29 × 6 + 27 - 33 = ?
174 + 27 - 33 = ?
201 - 33 = ?
? = **168**
Thus, correct option is (b).

Q.98 D, E, F, G, L, M and N are sitting in a straight line, facing north. Only two people sit to the right of D. Only two people sit between D and G. Only two people sit between E and F. F sits to the immediate left of D. N sits to the immediate right of M. Who sits at the third position from the left end of the line?

A. M
B. L
C. D
D. G

Answer: B

Sol: **Given**:
D, E, F, G, L, M and N are sitting in a straight line, facing north.
Only two people sit to the right of D.
Only two people sit between D and G.
Only two people sit between E and F.
F sits to the immediate left of D.
N sits to the immediate right of M.
From the given information seating arrangement will be.

So, **L** sits at the third position from the left end of the line.
Thus, correct option is (b).

Q.99 In a row of 47 students facing north, Neha is 21st from the right end. If Kinjal is 8th to the left of Neha, what is Kinjal's position from the left end of the line?

A. 19th
B. 18th
C. 20th
D. 17th

Answer: A

Sol: **Given**: In a row of 47 students facing north, Neha is 21st from the right end. If Kinjal is 8th to the left of Neha.
Solution:
Total students = 47
Neha is 21st from the right, so from the left:
47 - 21 + 1 = 27
Neha is 27th from the left.
Kinjal is 8 places to the left of Neha:
= 27 - 8
= 19
So, **19th** is Kinjal's position from the left end of the line.
Thus, correct option is (a).

Q.100 In a certain code language,
A + B means 'A is the son of B',
A - B means 'A is the brother of B',
A x B means 'A is the wife of B',
and A & B means 'A is the father of B'.
How is K related to V if 'K & T - R x Z + V'?

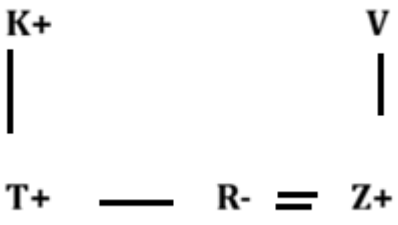
A. Son
B. Father
C. Son's wife's brother
D. Son's wife's father

Answer: D

Sol: **In a certain code language,**
A + B means 'A is the son of B',
A - B means 'A is the brother of B',

A x B means 'A is the wife of B',
and A & B means 'A is the father of B'.
How is K related to V if 'K & T - R x Z + V'?

Symbol in Diagram	Meaning
- / O	Female
+ / □	Male
=	Married Couple
—	Siblings
|	Difference Of Generation



K is V's Son's wife's father.