RRB NTPC UG CBT-1 Exam Day Based Paper Mock 2

Q.1 **In July 2025, which Union Minister introduced the National Anti-Doping (Amendment) Bill 2025 in Lok Sabha?**

A. Kiren Rijiju
B. Anurag Thakur
C. Rajnath Singh
D. Mansukh Mandaviya

Answer: D

Sol: The correct answer is **(d) Mansukh Mandaviya**

Explanation:

- Union Minister **Mansukh Mandaviya** introduced the **National Anti-Doping (Amendment) Bill 2025** in the Lok Sabha in July 2025.
- Mandaviya assumed the charge of the **Ministry of Youth Affairs and Sports** following the 2024 General Elections.
- The amendment bill aims to **strengthen the framework** of the National Anti-Doping Agency (NADA) to ensure **drug-free sports** in India.
- It focuses on aligning Indian anti-doping laws with the latest **World Anti-Doping Agency (WADA)** codes and standards.
- The bill also proposes enhanced **investigative powers** and stricter penalties for those facilitating doping among athletes.

Information Booster:

- The original **National Anti-Doping Act** was passed in 2022 to provide a statutory framework for the functioning of **NADA** and the National Dope Testing Laboratory (NDTL).
- Mansukh Mandaviya also holds the portfolio for **Labour and Employment** in the Union Cabinet.

Additional Knowledge:

Kiren Rijiju (Option a)

- He is a former Sports Minister who currently holds the portfolio of **Ministry of Parliamentary Affairs** and Minority Affairs.

Anurag Thakur (Option b)

- He served as the **Minister of Youth Affairs and Sports** prior to the 2024 cabinet reshuffle and oversaw the 2022 Act.

Rajnath Singh (Option c)

- He is the **Union Minister of Defence** and is not involved in introducing bills related to sports and anti-doping.

So the correct answer is (d)

Q.2 **During which era was the Hazara Rama Temple, situated in Hampi, India, first established?**

A. Early 11th century
B. Early 15th century
C. Early 13th century
D. Early 19th century

Answer: B

Sol: **The correct answer is (b) Early 15th century**

Explanation:

- The **Hazara Rama Temple** was constructed during the **early 15th century** under the reign of **Devaraya I**, one of the rulers of the **Vijayanagara Empire**.
- It served as a **private temple for the royal family** and is located in the **Royal Enclosure of Hampi**, Karnataka.
- The temple is named "Hazara Rama" due to its extensive **bas-relief panels depicting scenes from the Ramayana**, with “Hazara” (thousand) symbolizing the numerous images.

Information Booster:

- Hampi was the capital of the **Vijayanagara Empire**, which flourished from the **14th to 17th centuries**.
- The temple is renowned for:
  - **Intricate wall carvings**
  - **Narrative friezes of the Ramayana**
  - **Elegant Dravidian architecture**

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

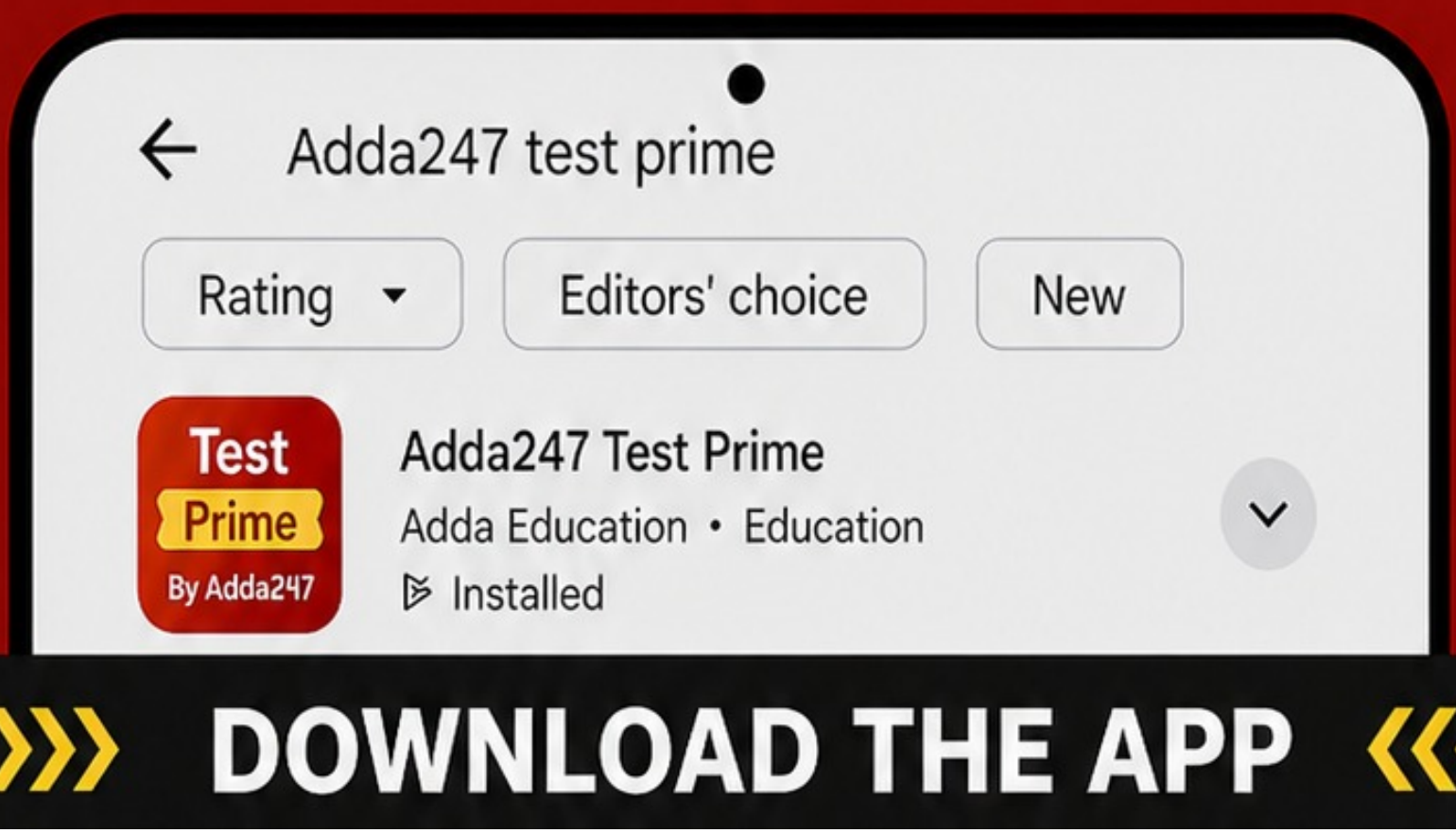
Daily Free PDFs

Job Alerts Stay Updated

- Multilingual
- Detailed Solution
- Strong and Weak Areas

All India Rankings

Compete with lakhs.
Rank. Improve. Repeat.



DOWNLOAD THE APP

Additional Knowledge:

- **(a) Early 11th century** – Period of the Chola and Western Chalukya dynasties, before the Vijayanagara Empire.
- **(c) Early 13th century** – Prior to the establishment of Vijayanagara in 1336 CE.
- **(d) Early 19th century** – Colonial period; no major Hindu temple constructions from Vijayanagara architecture then.

Q.3 **To facilitate smoother international travel, the Citizenship (Amendment) Rules, 2026, link OCI biometric data with which of the following?**

A. Global Visa Waiver Program
B. Fast Track Immigration Programmes (e-gates)
C. International Driver's License Registry
D. INTERPOL Red Notice Database

Answer: B

Sol:

The correct answer is (b) Fast Track Immigration Programmes (e-gates)
Explanation:
• The 2026 Rules introduce a Biometric Integration feature where applicants must consent to share their biometric data.
• This data is used for automatic enrollment in the government's Fast Track Immigration Programmes, commonly referred to as e-gates at airports.
• The primary objective is to reduce wait times at immigration counters for the Indian diaspora returning to or visiting the country.
• By linking the e-OCI registration with airport security infrastructure, the government intends to provide a seamless travel experience.
• This digital linkage is part of the broader modernization of identity services handled by the Ministry of Home Affairs.
Information Booster:
• The e-OCI registration (Form XXIX) can be issued alongside or instead of the traditional physical OCI booklets.
• The ociservices.gov.in portal acts as the single window for all such technological integrations.
Additional Knowledge:
• Visa Waiver (Option a): India does not currently have a widespread global visa-waiver program; OCI holders already have lifelong visa-free entry to India.
• Driver's License (Option c): Driver's licenses are governed by the Ministry of Road Transport and Highways and are not linked to OCI citizenship rules.
• INTERPOL (Option d): While security checks are standard, the 2026 rules focus on facilitating travel through e-gates rather than criminal databases.

Q.4 **Providing water to crops at optimal times during their growth cycle directly contributes to what outcome?**

A. Decreased nutrient uptake
B. Higher expected yields
C. Increased vulnerability to pests
D. Delayed maturation

Answer: B

Sol: The correct answer is (b) **Higher expected yields**

Explanation:

- Providing water to crops at optimal times, known as **irrigation**, is essential for maintaining plant health and maximizing productivity.
- Consistent and well-timed water supply ensures that crops can perform vital processes like photosynthesis and **nutrient uptake** effectively.
- In arid or semi-arid regions, such as the Thar Desert, large-scale irrigation projects like the **Indira Gandhi Canal** have dramatically transformed the landscape, enabling successful **agriculture** where it was previously impossible.
- Strategic water management helps in achieving **higher expected yields** by preventing water stress during critical growth stages, such as flowering or grain filling.
- Proper irrigation also supports human settlement and long-term food security in regions with unpredictable rainfall.

Information Booster:

- The **Indira Gandhi Canal** is India's largest irrigation project, stretching approximately **650 km** to provide water to Rajasthan's desert areas.
- In Northern India, **Western Disturbances** provide crucial winter rain that is vital for the success of **Rabi crops** like wheat.
- Excessive dependence on certain types of irrigation, such as groundwater for water-intensive crops like **paddy**, can lead to environmental issues like the overexploitation of water tables.

Additional Knowledge:

- **Decreased nutrient uptake** (Option a): This is incorrect; optimal watering actually **increases** a plant's ability to absorb essential minerals from the soil.
- **Increased vulnerability to pests** (Option c): This is incorrect; generally, healthy and well-irrigated plants are more resilient, whereas **water-stressed** plants are often more susceptible to infestations.
- **Delayed maturation** (Option d): This is incorrect; while extreme over-watering can sometimes affect timing, optimal irrigation typically ensures a **steady and predictable** growth cycle, preventing delays caused by drought stress.

Q.5 **In the context of Microsoft Word, a feature called 'Gutter Margin' is used for which of the following?**

A. to improve the clarity of graphics and images
B. to manage better document binding
C. to improve the clarity of the printed text
D. to facilitate insertion of page numbers

Answer: B

Sol: The correct answer is (B) to manage better document binding
Explanation:

. A gutter margin is an extra space added to the side margin, top margin, or inside margins of a document that you plan to bind.

. Its primary purpose is to ensure that text is not hidden or obscured by the binding (such as spiral binding, stitching, or gluing) after the document is printed.

. In Microsoft Word, users can specifically set the 'Gutter' size and 'Gutter position' (usually Left or Top) in the Page Setup dialog box.

. This feature is essential for professional documents, manuscripts, and reports that are intended to be converted into physical books or booklets.

. It differs from regular margins as it specifically accounts for the physical space consumed by the binding process itself.

Information Booster:

. 'Mirror margins' is a related setting used for double-sided documents (like books) where the inside margins of the left and right pages are symmetrical.

. The default margin in modern versions of Microsoft Word is typically 1 inch (2.54 cm) on all sides, but this does not include a gutter unless manually specified.

Additional Knowledge:

to improve the clarity of graphics and images (Option a)

. Image clarity is handled through 'Resolution' settings or 'Picture Format' tools (Compress Pictures).

. Margins do not affect the internal quality or DPI of an image file.

to improve the clarity of the printed text (Option c)

. Text clarity is determined by font choice, size, and the 'Print Quality' settings in the printer driver.

. While margins improve readability by providing white space, they do not change the physical clarity of the characters.

to facilitate insertion of page numbers (Option d)

. Page numbers are managed through the 'Header & Footer' tools.

. While page numbers are placed within the margin area, the 'Gutter' is not the specific tool designed for their insertion.

Q.6 **What unique experience does the Rajasthan Homestay Scheme 2026 emphasize for visiting tourists?**

A. Modern high-rise apartment living
B. Interaction with local traditions, food, and lifestyle
C. Standardized Western hotel amenities
D. Access to exclusive government-only heritage zones

Answer: B

Sol:

The correct answer is (b) Interaction with local traditions, food, and lifestyle.

Explanation:

· The Homestay Scheme 2026 is designed to ensure that tourists experience **local traditions and culture** firsthand.

· Guests stay in a **safe and regulated environment** while enjoying authentic local food and experiencing the rural lifestyle.

· It promotes **community-based tourism**, which bridges the gap between the visitor and the host's heritage.

· The focus is on providing **affordable stays** that are culturally rich, making Rajasthan tourism more inclusive.

· This approach helps in **preserving traditional culture** by making it a valuable asset for tourism.

Information Booster:

· Rajasthan's tourism is heavily supported by its **vibrant traditions, desert landscapes, and festivals**.

· The scheme allows visitors to move beyond the "surface level" of tourism seen in large hotels to a deeper, **authentic connection** with the state.

· By promoting rural stays, the scheme highlights the **forts, palaces, and heritage** found in smaller towns.

Additional Knowledge:

· **High-rise living (Option a):** Rajasthan is known more for its historical architecture and rural charm than for modern high-rise tourism.

· **Western amenities (Option c):** While hygiene standards are required, the value proposition is the **authentic local experience**, not a replica of Western hotels.

· **Exclusive zones (Option d):** The scheme is about opening up private homes to the public, not restricting access to government zones.

Q.7 **Which of the following terms describes the ability of major oil producers to quickly adjust production levels to prevent market crashes and gluts?**

A. Fiscal Neutrality
B. Resource Sovereignty
C. Global Rebalancing
D. Spare Capacity

Answer: D

Sol:

The correct answer is (d) Spare Capacity

Explanation:

• Spare capacity is the ability of certain members to quickly increase or decrease production in response to market signals.

• Members like Saudi Arabia and the UAE hold the majority of this capacity, which acts as a buffer for the global economy.

• It is the primary tool used by OPEC+ to prevent price crashes during periods of oversupply or spikes during shortages.

• This capability was crucial during the COVID-19 pandemic to manage the unprecedented drop in global demand.

• The UAE's exit is significant because its spare capacity will no longer be under the collective control of the organization.

Information Booster:

• OPEC aims to secure fair and stable prices for petroleum producers through these capacity adjustments.

• The group manages supply through collective adjustments to prevent "inventory gluts" (excessive unsold oil).

Additional Knowledge:

Fiscal Neutrality (Option a)

• This is an economic concept where government taxing and spending does not affect demand; it is unrelated to oil production.

Resource Sovereignty (Option b)

• This refers to the legal right of a country to control its natural resources, a principle defended in the 1968 Declaratory Statement.

Global Rebalancing (Option c)

• This is a general term for the aim of the DoC, but it is not the name of the physical production capability held by members.

Q.8 **Paging is related to the concept of:**

A. Virtual memory
B. Memory allocation
C. Deadlock prevention
D. Memory-management scheme

Answer: D

Sol: The correct answer is (d) Memory-management scheme

Explanation:

- **Paging** is a **memory-management scheme** that eliminates the need for contiguous allocation of physical memory.
- It allows the physical address space of a process to be non-contiguous.
- In this scheme, **logical memory** is broken into blocks of the same size called **pages**.
- **Physical memory** is broken into fixed-sized blocks called **frames**.
- The **Page Table** is used to map logical pages to physical frames.

Information Booster:

- Paging helps in avoiding **External Fragmentation**, which is a major problem in contiguous memory allocation.
- While it is the foundation for **Virtual Memory (Option A)**, in its most fundamental technical definition, it is categorized as a memory-management scheme.

Additional Knowledge: **Segmentation**

- Another memory-management scheme where memory is divided into variable-sized segments based on logical divisions (like functions or arrays).

Internal Fragmentation

- A downside of paging where the last page of a process may not fill an entire frame, leaving some space wasted.

So the correct answer is (d)

Q.9 **Which feature of the 10th-century CE Lingaraja Temple in Bhubaneswar reflects the Nagara architectural style?**

A. Curvilinear shikhara tower
B. Stepped pyramid vimana
C. Ornate gopuram entrance
D. Circular stupa dome

Answer: A

Sol: The correct answer is **(A) Curvilinear shikhara tower**

Explanation:
• The Lingaraja Temple is a masterpiece of the Kalinga style, which is a sub-style of the Nagara architecture.
• Its main feature is the tall, curvilinear tower known as the 'Deul' or Shikhara.

Information Booster:
• It is dedicated to Harihara (a form of Shiva and Vishnu).

Additional Knowledge:
• **Stepped pyramid (Option B):** Typical of the Dravida style (South India).
• **Gopuram (Option C):** The monumental gateway characteristic of Dravida temples.
• **Stupa (Option D):** Feature of Buddhist architecture.

Q.10 **In how many cities did Maharaja Jai Singh II build Jantar Mantar?**

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

Answer: A

Sol: The correct answer is A. Five.
Explanation:
Maharaja Jai Singh II, the founder of Jaipur and a keen astronomer, built a total of five Jantar Mantars in different cities across northern India.
These astronomical observatories were constructed between approximately 1724 and 1735.
The five cities where he built these observatories are:
Delhi: The first to be built.
Jaipur: The largest and most well-preserved, and a UNESCO World Heritage Site.
Ujjain: Located in present-day Madhya Pradesh.
Varanasi: Located in present-day Uttar Pradesh.
Mathura: This observatory no longer exists, having been destroyed before the Indian Rebellion of 1857.
Information Booster:
The Jantar Mantars were built with large, masonry instruments to improve the accuracy of astronomical observations, as Jai Singh II believed smaller instruments were less precise.
He intended the observatories to be used for a variety of astronomical measurements, including determining local time, planetary positions, and predicting eclipses.
The observatories are a significant testament to the scientific and astronomical knowledge of the period.

Q.11 **A neuron receives nerve impulse from another neuron through ____.**

A. Cell body
B. Synapse
C. Axon
D. Dendrite

Answer: D

Sol: The correct answer is **(D) Dendrite**

Explanation:
• Dendrites are short, branched projections of a neuron that receive signals or impulses from other neurons.
• The information acquired at the dendritic tip sets off a chemical reaction that creates an electrical impulse.

Information Booster:
• The impulse travels from the dendrite to the cell body, then along the axon to its end.

Additional Knowledge:
• Synapse (Option B): The microscopic gap between two neurons where the signal is transmitted chemically.
• Axon (Option C): Transmits the electrical impulse away from the cell body.

Q.12 **How do you make all cells in a table row the same height in MS Word 2021?**

A. Use the Table Tools Layout' tab and click 'Distribute Rows'
B. Click 'Table Properties' and select 'Equal Height'
C. Right-click the row and select 'Equal Height'
D. Click 'Resize Table'

Answer: A

Sol: The correct answer is **(A) Use the Table Tools Layout' tab and click 'Distribute Rows'**

Explanation:
• "Distribute Rows" is a command in MS Word that takes the total height of the selected rows and divides it equally among them.
• This ensures that every row in the selection has the exact same height, providing a professional and uniform look to the table.
• To find this, you must first select the table or specific rows, then look for the 'Layout' tab that appears under 'Table Tools'.

Information Booster:
• **Distribute Columns:** A similar command exists to make all selected columns the same width.
• **Manual Entry:** In the same Layout tab, you can also specify an exact height in inches or centimeters using the 'Height' box in the Cell Size group.

Additional Knowledge:
• **Option B:** 'Table Properties' allows you to set a 'Minimum' or 'Exact' height for a row, but doesn't have a single-click 'Equal Height' button.
• **Option C:** While right-clicking opens a context menu, 'Equal Height' is not a standard standalone command in that menu.
• **Option D:** 'Resize Table' generally refers to dragging the handle at the corner of the table to change its overall scale, which doesn't necessarily equalize row heights.

Q.13 **In June 2025, which ministry/institution released the Sustainable Development Goals – National Indicator Framework Progress Report, 2025?**

A. Ministry of Statistics and Programme Implementation
B. Ministry of Finance
C. Ministry of Environment, Forest and Climate Change
D. NITI Aayog

Answer: A

Sol: The correct answer is **(A) Ministry of Statistics and Programme Implementation**

Explanation:
• The Sustainable Development Goals (SDGs) – National Indicator Framework (NIF) Progress Report, 2025, was officially released in June 2025 by the Ministry of Statistics and Programme Implementation (MoSPI). This report is the definitive statistical document tracking India's progress toward the 17 global goals set by the UN for 2030.
• The NIF is a set of several hundred indicators specifically developed to measure the SDGs within the Indian context. Unlike general indices, the NIF report provides granular data based on official statistics collected from various ministries and state governments.
• The 2025 report highlighted significant strides in poverty reduction (SDG 1), clean energy access (SDG 7), and digital infrastructure (SDG 9). It serves as a feedback mechanism for the government to realign its budgetary allocations for the remaining five years of the SDG timeline.
• MoSPI plays the role of the 'data custodian' for the SDGs in India, ensuring that the methodology for data collection meets international standards of accuracy and reliability.

Information Booster:
• MoSPI consists of two wings: the Statistics Wing (National Statistical Office - NSO) and the Programme Implementation Wing.
• The National Indicator Framework (NIF) was first developed in 2018 and is periodically refined to include new data sources like satellite imagery and big data.
• While MoSPI provides the data and the NIF report, NITI Aayog is responsible for the 'SDG India Index,' which ranks states based on their performance.

Additional Knowledge:
• **Ministry of Finance (Option B):** While it provides the funding for SDG-related schemes, it does not compile the statistical progress reports for the NIF.
• **Ministry of Environment (Option C):** It specifically tracks indicators for SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 15 (Life on Land), but the comprehensive report covers all 17 goals and is issued by MoSPI.
• **NITI Aayog (Option D):** Often confused with MoSPI, NITI Aayog is the policy think-tank that uses MoSPI's data to create competitive rankings among states but is not the primary publisher of the NIF Progress Report.

Q.14 **Which of the following outcomes identifies meiosis rather than mitosis?**

A. Two identical cells, same number
B. Many cells, same number
C. Four cells, half number
D. One larger cell, double number

Answer: C

Sol: The correct answer is **(C) Four cells, half number**

Explanation:
• Meiosis is a type of cell division that results in four daughter cells, each with half the number of chromosomes of the parent cell.
• This is also known as reduction division and is essential for sexual reproduction.

Information Booster:
• Mitosis produces two genetically identical daughter cells with the same number of chromosomes (diploid).

Additional Knowledge:
• Meiosis occurs in germ cells (gamete production), while mitosis occurs in somatic cells for growth and repair.

Q.15 **Which of the following reflects the structural adjustment in India's monetary policy after the 1991 economic reforms?**

A. Market-determined interest rates with reduced RBI intervention
B. Expansion of currency supply through deficit financing
C. Elimination of open market operations as a regulatory tool
D. Controlled lending rates for agriculture and MSMEs

Answer: A

Sol: The correct answer is **(A) Market-determined interest rates with reduced RBI intervention**

Explanation:
• Post-1991, the RBI shifted from direct control of interest rates to a more market-linked system where commercial banks have greater freedom to set rates.
• The focus shifted to using indirect instruments like Repo and Reverse Repo rates to control liquidity.

Information Booster:
• The 1991 reforms are often referred to as the LPG (Liberalization, Privatization, and Globalization) reforms.

Additional Knowledge:
• Deficit financing (Option B): This was actually curtailed under subsequent acts like the FRBM Act to maintain fiscal discipline.

Q.16 **In 2025, which city topped the National Air Quality Index released for major Indian cities?**

A. Mumbai
B. Shillong
C. Kolkata
D. Ranchi

Answer: B

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

Explanation:
• Shillong has consistently maintained 'Good' or 'Satisfactory' air quality levels compared to the industrial and metropolitan hubs in mainland India.
• In the 2025 rankings, it was recognized as the city with the cleanest air among the monitored major urban centers.

Information Booster:
• The National Air Quality Index (AQI) monitors eight pollutants: PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb.

Additional Knowledge:
• Mumbai/Kolkata (Options A/C): Typically face moderate to poor air quality due to high vehicular density and industrial activity.

Q.17 **Which constitutional amendment reduced the Parliament's approval period for National Emergency from two months to one month?**

A. 38th Amendment Act, 1975
B. 42nd Amendment Act, 1976
C. 52nd Amendment Act, 1985
D. 44th Amendment Act, 1978

Answer: D

Sol: The correct answer is **(D) 44th Amendment Act, 1978**

Explanation:
• The **44th Amendment Act** was enacted by the Janata Party government to undo many of the changes made by the 42nd Amendment and to prevent the misuse of Emergency powers.
• Originally, a proclamation of emergency had to be approved by both Houses of Parliament within **two months**. The 44th Amendment reduced this period to **one month**.
• It also changed the ground of 'internal disturbance' to 'armed rebellion'.
• Furthermore, it stipulated that the President can proclaim a National Emergency only on the written recommendation of the Cabinet.

Information Booster:
• **Article 352:** Deals with National Emergency on the grounds of war, external aggression, or armed rebellion.
• **Special Majority:** The 44th Amendment also introduced the requirement of a special majority (majority of the total membership and 2/3rd present and voting) for the approval and continuance of the emergency.
• **Right to Life:** It ensured that Articles 20 and 21 cannot be suspended even during a National Emergency.

Additional Knowledge:
• **38th Amendment (Option A):** Made the declaration of emergency non-justiciable (this was later reversed by the 44th).
• **42nd Amendment (Option B):** Known as the 'Mini-Constitution'; it extended the duration of emergency approval and limited the power of courts.
• **52nd Amendment (Option C):** Famous for introducing the 'Anti-Defection Law' in the Tenth Schedule of the Constitution.

Q.18 **On which date is World Book and Copyright Day celebrated around the world every year?**

A. 23 April
B. 15 August
C. 1 January
D. 23 March

Answer: A

Sol:

The correct answer is (a) 23 April
Explanation:
· World Book and Copyright Day is observed annually on the 23rd of April.
· This specific date holds deep, special significance in literary history because it is associated with the death anniversaries of some of the world's greatest writers.
· It symbolically honors the monumental contributions of authors who have shaped global thought and culture throughout history.
Information Booster:
· The legendary writers associated with this date include William Shakespeare (England), Miguel de Cervantes (Spain), and Inca Garcilaso de la Vega (Peru), who all passed away around this date in the year 1616.
· This unique historical coincidence makes April 23rd a natural and powerful choice for a worldwide celebration of literature.
Additional Knowledge:
· (Option b) 15 August: This is India's Independence Day, not World Book Day.

· (Option c) 1 January: This marks the beginning of the New Year on the Gregorian calendar.
· (Option d) 23 March: While some countries, like the UK and Ireland, celebrate a separate domestic World Book Day charity event in March, the official UN global date is April 23.

Q.19 **Which of the following forces is NOT covered under the proposed CAPF Bill 2026?**

A. Border Security Force (BSF)
B. Indo-Tibetan Border Police (ITBP)
C. Indian National Army (INA)
D. Central Industrial Security Force (CISF)

Answer: C

Sol:

The correct answer is (c) Indian National Army (INA)
Explanation:
· The **CAPF Bill 2026** focuses on the specific set of paramilitary forces known as Central Armed Police Forces.
· The forces explicitly covered under this administrative proposal include the **BSF, CRPF, CISF, ITBP, and SSB**.
· These organizations are tasked with diverse roles such as **border guarding** (BSF, ITBP, SSB), **internal security** (CRPF), and **industrial protection** (CISF).
· The **Indian National Army (INA)** was a historical military force formed by Indian nationalists during World War II and is not a modern-day paramilitary force under the Union government.
· The Bill aims to formalize how **IPS officers** are appointed to lead these specific modern organizations.
Information Booster:
· The **Sashastra Seema Bal (SSB)**, also covered by the Bill, is primarily responsible for guarding the borders with Nepal and Bhutan.
· The **Indo-Tibetan Border Police (ITBP)** is the primary force for the Sino-Indian border.
Additional Knowledge:
· **BSF (Option a)**: Primarily guards the borders with **Pakistan and Bangladesh**.
· **ITBP (Option b)**: Specialized in **high-altitude operations** along the Himalayan borders.
· **CISF (Option d)**: Provides security to **critical infrastructure** like airports, seaports, and nuclear power plants.

Q.20 **Which mountain pass was utilized by China to build a road into the Lower Shaksgam Valley, bringing construction within 50 km of Indira Col?**

A. Nathu La
B. Shipki La
C. Aghil Pass
D. Lipulekh Pass

Answer: C

Sol:

The correct answer is (c) Aghil Pass
Explanation:
· China reportedly completed a road across the **4,805-metre Aghil Pass** to enter the Lower Shaksgam Valley.
· This development brings Chinese construction teams and military patrols within **50 km of India-controlled Siachen** at Indira Col.
· The **Aghil range** remained under the control of the Mir of Hunza even after he surrendered other rights in 1936.
· The road is approximately **10 metres wide** and designed as an all-weather route34.
· This infrastructure provides China with a **strategic access point** from the north toward the world's highest battlefield.
Information Booster:
· The road development is part of China's intensified military infrastructure building since the **Doklam standoff**.
· Access via Aghil Pass directly pressures Indian positions along the **Line of Actual Control (LAC)**.
· India maintains that this entire region is part of **Jammu and Kashmir**, which is under illegal occupation.
Additional Knowledge:
· **Nathu La** (Option a): A pass in **Sikkim** that connects India with Tibet; it was a major site of the 1967 border clashes.
· **Shipki La** (Option b): A pass on the India-China border in **Himachal Pradesh**, through which the Sutlej River enters India.
· **Lipulekh Pass** (Option d): Located in **Uttarakhand**, it is a tri-junction between India, Nepal, and China, primarily used for the Kailash Mansarovar Yatra.

Q.21 **Which country was ranked highest for gender equality in the Global Gender Gap Report, 2025, released by the World Economic Forum in May 2025?**

A. Germany
B. Sweden
C. Iceland
D. Norway

Answer: C

Sol: The correct answer is **(C) Iceland**

Explanation:

• The World Economic Forum (WEF) released its Global Gender Gap Report 2025 in May 2025, and for the 16th consecutive year, Iceland was ranked as the most gender-equal country in the world. Iceland has successfully closed over 90% of its gender gap, a feat unmatched by any other nation.

• The Global Gender Gap Index measures scores on a 0 to 100 scale, evaluating countries across four key dimensions: Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment. Iceland's consistent top rank is due to its strong performance in all four areas, particularly in political representation and shared parental leave policies.

• The 2025 report noted that while global gender parity is slowly improving, it will still take over a century to reach full equality at the current rate of progress. Nordic countries continue to lead the rankings, with Norway, Finland, and Sweden often occupying the top spots alongside Iceland.

• Iceland's success is often attributed to a combination of robust legal frameworks, such as the Equal Pay Certification law, and a cultural shift that values gender equality as a fundamental human right and an economic necessity. The 2025 report serves as a benchmark for other countries, including India, to assess their progress in bridging the gender divide.

Information Booster:

• The Global Gender Gap Report was first published by the World Economic Forum in 2006.

• India's rank in this index has historically been low, particularly in 'Health and Survival' and 'Economic Participation', though it has seen some improvement in 'Political Empowerment' at the local government level.

Additional Knowledge:

• **Germany (Option A):** Germany has made significant strides and often ranks in the top 10, but it remains behind the Nordic countries in terms of closing the overall gap.

• **Sweden (Option B):** A perennial top performer, Sweden is known for its 'feminist foreign policy' and high female workforce participation, but it usually follows Iceland and Norway.

• **Norway (Option D):** Norway is typically ranked 2nd or 3rd, having closed a very high percentage of its gender gap, but it has yet to overtake Iceland's long-standing dominance.

Q.22 Which statutory body organised a two-day National Conference on 'Environment – 2025' at Vigyan Bhawan, New Delhi, in March 2025?

A. Central Pollution Control Board
B. Central Ground Water Authority
C. National Green Tribunal
D. National Biodiversity Authority

Answer: C

Sol:

The correct answer is (c) National Green Tribunal

Explanation:

· The **National Green Tribunal (NGT)** organised the conference on **Environment – 2025**.

· The conference focused on **environmental protection, sustainability, and climate challenges**.

· It brought together judges, policymakers, and environmental experts.

Information Booster:

· NGT was established under the **NGT Act, 2010**.

· It ensures speedy disposal of environmental cases.

Additional Knowledge:

· NGT headquarters are located in **New Delhi**.

Q.23 Which of the following is NOT a report typically published by the World Trade Organization?

A. World Trade Report
B. Global Trade Outlook and Statistics
C. Global Financial Stability Report
D. Aid for Trade in Action

Answer: C

Sol:

The correct answer is (c) Global Financial Stability Report

Explanation:

· The **Global Financial Stability Report (GFSR)** is a semi-annual report published by the **International Monetary Fund (IMF)**, not the WTO. It focuses on global financial markets and systemic risks.

· The **World Trade Organization (WTO)** publishes several key documents to track global commerce and policy trends.

· The **World Trade Report** (Option a) is an annual publication that provides a deep dive into specific trends in global trade policy.

· The **Global Trade Outlook and Statistics** (Option b) provides quarterly and annual data on trade volume and projections.

· The **Aid for Trade in Action** (Option d) monitors how trade-related assistance helps developing countries build the capacity to trade.

Information Booster:

· The WTO succeeded the **General Agreement on Tariffs and Trade (GATT)**, which had regulated global trade since **1948**.

· While GATT focused mainly on **goods**, the WTO expanded its scope to include **services (GATS)** and **intellectual property (TRIPS)**.

Additional Knowledge:

· **IMF Reports**: Other famous reports by the IMF include the **World Economic Outlook**.

· **World Bank Reports**: The World Bank is known for the **World Development Report** and the (now discontinued) Ease of Doing Business index.

· **UNCTAD**: The United Nations Conference on Trade and Development publishes the **World Investment Report**.

Q.24 **According to the IMF's April 2025 World Economic Outlook, what is India's projected GDP growth rate for the year 2025?**

A. 6.5%
B. 5.9%
C. 6.2%
D. 6.0%

Answer: C

Sol: The correct answer is **(C) 6.2%**

Explanation:

• In its April 2025 World Economic Outlook, the IMF projected India's growth at 6.2% for 2025.

• This projection reflects a slight moderation compared to previous years due to global economic headwinds and domestic cooling.

Information Booster:

• The IMF (International Monetary Fund) publishes the World Economic Outlook (WEO) report twice a year.

Additional Knowledge:

• Option A (6.5%): Often cited as the target or earlier projection by various rating agencies for India's long-term steady growth.

Q.25 **Which of the following is the correct way to start entering a formula in an MS Excel cell?**

A. Start typing the formula directly (e.g.. A1+B1)
B. Press F2 first, then type the formula
C. Use parentheses to begin (e.g., (A1+B1))
D. Begin with an equals sign (e.g., =A1+B1)

Answer: D

Sol: The correct answer is **(D) Begin with an equals sign (e.g., =A1+B1)**

Explanation:

• In Microsoft Excel, the equals sign (=) is the 'trigger' that informs the application that the succeeding characters constitute a formula rather than plain text or a number.

• Once the equals sign is typed, Excel begins evaluating cell references (like A1) and functions (like SUM).

• Without the equals sign, typing 'A1+B1' would simply display that string as literal text in the cell.

Information Booster:

• **Alternative Symbols:** Excel also allows formulas to start with a plus (+) or minus (-) sign for legacy compatibility with Lotus 1-2-3, but it automatically converts them to start with an equals sign.

• **Formula Bar:** While typing in a cell, the content is simultaneously displayed and editable in the Formula Bar located above the worksheet grid.

Additional Knowledge:

• **Option A:** Typing directly without an equals sign results in a text string.

• **Option B:** F2 is used to 'Edit' an existing cell; it does not define the start of a formula.

• **Option C:** Parentheses are used within formulas to control the order of operations (BODMAS/PEMDAS), but the formula itself must still start with =.

Q.26 **Which pair of keys are used to enter the present data in the document of the windows version.**

A. Alt + Ctrl + d
B. Alt + Shift + d
C. Shift + d
D. Alt + d

Answer: B

Sol: The shortcut **Alt + Shift + D** is used in applications like **MS Word** to insert the **current date** into a document. It automatically places the **present date at the cursor position**.

Important Key Points:

1. **Alt + Shift + D inserts the current date.**
2. It is commonly used in **MS Word documents.**
3. The date is inserted at the **cursor position.**
4. It helps in **quick document formatting.**

Knowledge Booster :

1. (a) **Alt + Ctrl + d** – Used for **inserting endnotes in MS Word.**
2. (c) **Shift + d** – Not a valid shortcut for inserting date.
3. (d) **Alt + d** – No standard function for inserting date in documents.

Q.27 **Which of the following organizations released the report titled the State of World's Forests, 2025, in May 2025?**

A. UNEP
B. IUCN
C. WWF
D. FAO

Answer: D

Sol: The correct answer is **(D) FAO**

Explanation:

• The Food and Agriculture Organization (FAO) of the United Nations publishes the 'State of the World's Forests' (SOFO) report biennially.
• The 2025 report focuses on data-driven forest management and the role of innovation in forestry.

Information Booster:

• FAO is headquartered in Rome, Italy, and was established in 1945.

Additional Knowledge:

• UNEP (Option A): Focuses on environmental policy and sustainability.
• IUCN (Option B): Known for the Red List of Threatened Species.
• WWF (Option C): An NGO focused on wilderness preservation.

Q.28 **The Kalai-II Hydroelectric Project, recently approved by the Cabinet Committee on Economic Affairs, is being constructed on which river?**

A. Subansiri River
B. Lohit River
C. Siang River
D. Dibang River

Answer: B

Sol:

The correct answer is (b) **Lohit River**

Explanation:

· The **Kalai-II Hydroelectric Project** is a major power initiative located in the **Anjaw district** of **Arunachal Pradesh**.
· It is being constructed on the **Lohit River**, which is a significant **left-bank tributary** of the **Brahmaputra River**.
· The project is designed as a **run-of-river scheme with pondage**, meaning it utilizes the natural flow of the river while maintaining a small reservoir for regulated power generation.
· The **Cabinet Committee on Economic Affairs (CCEA)** approved a massive investment of approximately **₹14,105.83 crore** for this project in April 2026.
· The Lohit River originates in the **Zayal Chu range** in Tibet and flows through steep mountains before entering the Assam plains.

Information Booster:

· The project has a total **installed capacity of 1,200 MW**, consisting of six units of 190 MW each and one smaller unit of 60 MW.
· It is estimated to generate **4,852.95 million units** of electricity annually, significantly contributing to India's **renewable energy** goals.
· The execution is handled by a **joint venture** between **THDC India Limited** and the **Government of Arunachal Pradesh**.
· The Government of India provides budgetary support of **₹5.99 billion** for critical infrastructure like **roads and bridges** associated with the project.

Additional Knowledge:

· **Subansiri River** (Option a): Known as the "Gold River," it is the largest tributary of the Brahmaputra. The **Subansiri Lower HE Project (2000 MW)** is located here on the border of Arunachal and Assam.
· **Siang River** (Option c): This is the main stem of the Brahmaputra in Arunachal Pradesh. It is known as the **Yarlung Tsangpo** in Tibet before entering

India.
· **Dibang River** (Option d): A major tributary of the Brahmaputra; the **Dibang Multipurpose Project (2880 MW)** is a nearby landmark project aimed at flood control and power.

Q.29 **In the Mansabdari system introduced by Akbar, the term Mansab refers to which of the following?**

A. Spiritual leadership program
B. Rank or position of an official
C. Calendar for revenue collection
D. Standardized land revenue assessment

Answer: B

Sol:

The correct answer is **(b) Rank or position of an official**
Explanation:
· The **Mansabdari system** was a unique administrative system introduced by the Mughal Emperor **Akbar** to organize his civil and military officials.
· The term **Mansab** literally means a **rank or position**, indicating the status of a government official within the hierarchy.
· Every officer was assigned a mansab, which determined three things: their **rank** in the administration, their **salary**, and their **military responsibility**.
· The system was non-hereditary; mansabs were granted, promoted, or demoted by the Emperor based on merit and loyalty.
· This system allowed Akbar to centralize power and create a loyal bureaucracy that integrated various ethnic and religious groups.
Information Booster:
· A mansabdar's rank was divided into two numerical representations: **Zat** and **Sawar**.
· **Zat** indicated the personal status and salary of the official.
· **Sawar** specified the number of cavalrymen (sawars) the official was required to maintain for the state.
· Mansabdars received their salaries either in cash (**Naqd**) or through land revenue assignments known as **Jagirs**.
Additional Knowledge:
· **Spiritual leadership program (Option a):** This relates more closely to **Din-i-Ilahi**, the syncretic religion or ethical code propounded by Akbar in 1582.
· **Calendar for revenue collection (Option c):** This refers to the **Fasli calendar**, introduced by Akbar to synchronize the Islamic lunar calendar with the solar harvest seasons for better revenue timing.
· **Standardized land revenue assessment (Option d):** This describes the **Dahshala** or **Zabti system**, developed by Akbar's finance minister, **Raja Todar Mal**, to calculate revenue based on the average produce and prices of the last ten years.

Q.30 **The current geographic distribution of the Nilgiri Tahr is restricted to which mountain range?**

A. Eastern Ghats
B. Aravalli Range
C. Western Ghats
D. Satpura Range

Answer: C

Sol:

The correct answer is (c) Western Ghats
Explanation:
• The Nilgiri Tahr is found in a narrow 400 km stretch of the Western Ghats.
• Its range extends from the Nilgiris in the north to the Kanyakumari hills in the south.
• Historically, they spanned the entire range, but are now restricted to small, fragmented pockets due to habitat loss.
Information Booster:
• They specifically inhabit open montane grasslands at high altitudes between 1200 to 2600 meters.
• Significant populations are located in the Anamalai hills and the Nilgiris.
Additional Knowledge:
• Eastern Ghats (Option a): Do not host Nilgiri Tahr populations; the species is strictly restricted to the wetter, higher Western Ghats.

Q.31 **Which Article, added by the 97th Amendment Act, 2011, promotes the professional management of co-operative societies?**

A. Article 43B
B. Article 48A
C. Article 38
D. Article 43A

Answer: A

Sol:

The correct answer is **(a) Article 43B**

Explanation:

· **Article 43B** was inserted into the **Directive Principles of State Policy (Part IV)** by the **97th Constitutional Amendment Act, 2011**.

· This Article mandates that the State shall endeavor to promote voluntary formation, autonomous functioning, democratic control, and **professional management of co-operative societies**.

· The 97th Amendment aimed to revitalize these institutions by ensuring they are run transparently and efficiently to support rural and economic development.

· In addition to Article 43B, the amendment made the **right to form co-operative societies** a Fundamental Right under **Article 19(1)(c)**.

· It also added **Part IXB** to the Constitution, which contains detailed provisions regarding the incorporation, number of directors, and audit of co-operative societies.

Information Booster:

· The amendment was brought about to address the lack of professional expertise and excessive government interference that had historically weakened the co-operative sector.

· **Amul (GCMMF)** is often cited as a successful example of a professionally managed co-operative that transformed India's dairy industry.

· While Article 43B is a Directive Principle and not enforceable by courts, it serves as a guiding light for the government when drafting legislation related to co-operatives.

Additional Knowledge:

· **Article 43A (Option d):** Also added by an amendment (42nd, 1976), it focuses on the **participation of workers** in the management of industries.

· **Article 48A (Option b):** Added by the 42nd Amendment, it deals with the protection and improvement of the **environment** and safeguarding of forests and wildlife.

· **Article 38 (Option c):** A foundational Directive Principle that directs the State to secure a social order for the promotion of **welfare of the people** and to minimize inequalities in income and status.

Q.32 **Why are the ceilings of places like concert halls and cinema halls usually made curved?**

A. To reduce the size of the building
B. To block the sound from reflecting
C. To make the hall look more attractive
D. To help sound reflect and reach all parts of the hall

Answer: D

Sol: The correct answer is **(D) To help sound reflect and reach all parts of the hall**

Explanation:

• Curved surfaces act as reflectors of sound.

• Ceilings are curved so that sound after reflection reaches all corners of the hall uniformly, ensuring better audibility for the entire audience.

Information Booster:

• This principle is based on the reflection of sound, similar to how light reflects off a mirror.

Additional Knowledge:

• To prevent excessive reverberation, walls and seats in cinema halls are often covered with sound-absorbing materials like compressed fiberboard or rough plaster.

Q.33 **Select the correct step to place a text box on a slide after selecting the Text Box tool.**

A. Press Ctrl + T.
B. Click and drag to draw the text box
C. Right-click and select Paste.
D. Double-click the slide.

Answer: B

Sol: The correct answer is **(B) Click and drag to draw the text box**

Explanation:

• In Microsoft PowerPoint, once the 'Text Box' tool is selected from the Insert tab or Home tab, the cursor changes to a crosshair.

• To place the box, you must click on the desired starting point and drag the mouse to define the width and height of the box.

• Upon releasing the mouse button, the box is created with a flashing cursor inside, ready for text entry.

Information Booster:

• **Single Click:** If you simply click once without dragging, PowerPoint creates a text box with a default size that expands as you type.

• **Shapes:** This 'click and drag' method is consistent across all shapes and drawing tools in the Microsoft Office Suite.

Additional Knowledge:

- **Option A:** Ctrl + T typically opens the Font dialog box or creates a hanging indent depending on the context in Word; it doesn't draw a text box.
- **Option C:** Right-click and Paste is used to insert content already stored in the clipboard, not to initialize a new drawing tool.
- **Option D:** Double-clicking might select an existing object or word, but it does not define the dimensions required for a new text box.

Q.34 **The Losar festival, quite popular in Arunachal Pradesh is mainly celebrated by the _____ tribe.**

A. Monpa
B. Angami
C. Hunas
D. Apatani

Answer: A

Sol: **Correct Answer**: **(A) Monpa**
Explanation:
The **Losar festival** is primarily celebrated by the **Monpa tribe** in **Arunachal Pradesh**. It is the **Tibetan New Year** and is marked by various cultural celebrations, prayers, and rituals. The Monpa people, who reside mainly in the **Tawang** and **West Kameng** districts of Arunachal Pradesh, celebrate Losar with great enthusiasm.
Information Booster:

- The **Monpa tribe** follows **Tibetan Buddhism**, and their Losar celebrations are similar to those in Tibet.
- The festival marks the beginning of the new year in the **Tibetan lunar calendar** and involves prayers for prosperity, peace, and a good harvest.
- Losar includes rituals such as **dancing, feasting**, and the **offering of prayers** at monasteries.

Additional Information:

- **B (Angami)**: The **Angami tribe** is predominantly found in **Nagaland**, not in Arunachal Pradesh, and has its own festivals like **Sekrenyi**.
- **C (Hunas)**: There is no significant tribe named **Hunas** in Arunachal Pradesh.
- **D (Apatani)**: The **Apatani tribe** of Arunachal Pradesh celebrates various festivals, but **Losar** is not one of their primary festivals.

Q.35 **The Barnawapara Wildlife Sanctuary is geographically bounded by which of the following river systems?**

A. Hasdeo River to the West and Arpa River to the East
B. Balamdehi River to the West and Jonk River to the Northeast
C. Indravati River to the South and Sabari River to the North
D. Rihand River to the West and Kanhar River to the East

Answer: B

Sol:
The correct answer is (b) Balamdehi River to the West and Jonk River to the Northeast
Explanation:
· The **Barnawapara Wildlife Sanctuary** relies on the **tributaries of the Mahanadi River** as its primary source of water.
· The **River Balamdehi** is a crucial hydrological feature that forms the **western boundary** of the protected area.
· The **Jonk River** serves as a natural border for the sanctuary on its **northeastern side**, providing a perennial water source for wildlife.
· The presence of these rivers facilitates a rich **riparian ecosystem**, supporting diverse flora like bamboo and teak along the banks.
· The interaction between these river boundaries and the forest terrain creates a **secluded habitat** that minimizes human-animal conflict at the core.
Information Booster:
· Both the Balamdehi and Jonk are significant tributaries of the **Mahanadi River**, which is the lifeline of the state of **Chhattisgarh**.
· The sanctuary is named after the **Bar and Nawapara** forest villages located deep within its heart.
Additional Knowledge:
· **Hasdeo and Arpa** (Option a): These are major rivers in Chhattisgarh, but the Hasdeo is primarily known for the **Bango Dam** in the Korba district.
· **Indravati and Sabari** (Option c): These rivers flow through the **Bastar region** (Southern Chhattisgarh); the Indravati is famous for the **Chitrakote Falls**.
· **Rihand and Kanhar** (Option d): These rivers are located in the **northernmost parts** of Chhattisgarh, near the border with Uttar Pradesh.

Q.36 **The removal of which of the following weeds from agricultural land will be beneficial for farmers?**

A. Parthenium
B. Soybean
C. Wheat
D. Sunflower

Answer: A

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

Explanation:
• Weeds are unwanted plants that grow in cultivated fields and compete with crops for nutrients, space, and sunlight.
• Parthenium (also known as Carrot Grass) is a major invasive weed that reduces crop yield and can cause health issues in humans and livestock.

Information Booster:
• Other common weeds include Xanthium (Gokhroo) and Cyperinus rotundus (Motha).
• Weeds are removed manually, mechanically, or using chemicals called weedicides.

Additional Knowledge:
• Options B, C, and D: These are primary agricultural crops, not weeds.

Q.37 **Where was the 2025 Hyundai Archery World Cup Grand Final held in October 2025?**

A. Japan
B. USA
C. China
D. Italy

Answer: C

Sol: The correct answer is **(C) China**

Explanation:
• The 2025 Hyundai Archery World Cup Grand Final took place in October 2025 in China, bringing together the world's top 32 archers based on their performances in the four stages of the World Cup.
• The Grand Final featured competitions in four categories: Recurve Men, Recurve Women, Compound Men, and Compound Women.
• China has become a frequent host for international archery events, offering high-standard facilities and a growing fan base for the sport.
• The 2025 season saw intense competition, particularly between traditional powerhouses like South Korea, India, and the USA.
• Indian archers, particularly in the compound category (like Jyothi Surekha Vennam and Aditi Swami), have been consistent performers in the lead-up to this Grand Final, securing multiple podium finishes in the preliminary stages.

Information Booster:
• The Archery World Cup is an annual event organized by World Archery (the international governing body).
• Recurve archery is the only discipline currently included in the Olympic Games, while compound archery is featured in the World Cup and Asian Games.
• South Korea has historically dominated recurve archery, winning almost every gold medal in recent Olympic cycles.
• The Archery World Cup Final usually hosts only the top 8 archers in each category, making it one of the most elite competitions in the sport.

Additional Knowledge:
• **Japan (Option A):** Japan hosted the 2020 Tokyo Olympics, but the 2025 World Cup final circuit was designated for China.
• **USA (Option B):** The USA is a major power in compound archery and often hosts World Cup stages (like Yankton), but was not the host for the 2025 Grand Final.
• **Italy (Option D):** Italy has a strong archery tradition and frequently hosts European championships, but the 2025 Hyundai Grand Final was awarded to a venue in China.

Q.38 **Which of the following continents does the Bab al-Mandeb Strait physically separate?**

A. Europe and Africa
B. Asia and Africa
C. Asia and Europe
D. Africa and Australia

Answer: B

Sol:

The correct answer is **(b) Asia and Africa**
Explanation:
· The Bab al-Mandeb Strait is a geographic boundary that separates the **African continent** from the **Asian continent**.
· The **Asian side** is represented by the southwestern tip of the **Arabian Peninsula (Yemen)**.
· The **African side** is represented by the **Horn of Africa (Djibouti and Eritrea)**.
· At its narrowest point, the distance between the two continents is only about **29 km (18 miles)**.
· This narrow proximity has made it a focal point for **international military bases**, particularly in Djibouti, to protect commercial shipping.
Information Booster:

· **Djibouti** hosts military bases for several countries, including the US, France, China, and Japan, specifically due to its location on this strait.
· The strait is a vital passage for the **maritime Silk Road** connecting China to Europe.
Additional Knowledge:
· **Europe and Africa (Option a):** Separated by the **Strait of Gibraltar**.
· **Asia and Europe (Option c):** Separated by the **Bosphorus and Dardanelles straits** in Turkey, as well as the Ural Mountains.
· **Africa and Australia (Option d):** These continents are separated by the vast expanse of the **Indian Ocean**.

Q.39 **The frequency of a sound wave is 25 Hz and its wavelength is 4 m. What is the time taken by the sound wave to travel a distance of 200 m?**

A. 5 s
B. 4 s
C. 1 s
D. 2 s

Answer: D

Sol: The correct Ans is (d) **2 s**
Explanation:

Step 1: Calculate the speed of the sound wave
The speed of a sound wave is calculated using the formula:
Speed (v) = Frequency (f) × Wavelength (λ)
Here,
Frequency (f) = 25 Hz
Wavelength (λ) = 4 m
So, Speed (v) = 25 × 4 = 100 m/s

Step 2: Calculate the time taken
The time taken (t) to travel a given distance is calculated as:
Time (t) = Distance (d) ÷ Speed (v)
Here,
Distance (d) = 200 m
Speed (v) = 100 m/s
So, Time (t) = 200 ÷ 100 = 2 seconds

Correct Answer: (d) **2 s**

Q.40 **Who led the Khasi resistance against British interference in the 1830s?**

A. Tirot Sing
B. Alluri Sitarama Raju
C. Sidhu Murmu
D. Rani Gaidinliu

Answer: A

Sol:
The correct answer is **(a) Tirot Sing**
Explanation:
· **U Tirot Sing Syiem**, the constitutional head of the Nongkhlaw region in the **Khasi Hills**, led a fierce rebellion against the British East India Company between **1829 and 1833**.
· The conflict was triggered when the British, under David Scott, attempted to construct a **strategic road** through the Khasi Hills to connect the Brahmaputra Valley (Assam) with the Surma Valley (Sylhet, Bangladesh).
· When the British violated their agreement and began taxing the local population, Tirot Sing organized a confederacy of Khasi chiefs and launched a **guerrilla war** using traditional weapons like bows, arrows, and swords against British firearms.
· Despite their bravery, the Khasi resistance was eventually suppressed due to the British military's superior technology. Tirot Sing was captured and deported to Dhaka, where he died in **1835**.
Information Booster:
· Tirot Sing is celebrated as a **national hero** in Meghalaya. Every year, July 17 is observed as "U Tirot Sing Day" in the state to commemorate his death anniversary.
· His last words, reportedly spoken while in captivity, were: "*Better to die as a free commoner than as a king in a golden cage,*" reflecting his unwavering spirit for independence.
Additional Knowledge:
· **Alluri Sitarama Raju (Option b):** He led the **Rampa Rebellion** (1922–1924) in the Andhra region against the British Forest Acts. He was famously known as "Manyam Veerudu" (Hero of the Jungles).
· **Sidhu Murmu (Option c):** Along with his brother Kanhu, he led the **Santhal Rebellion** (1855–1856) in present-day Jharkhand and West Bengal

against the oppression of the Zamindari system and British rule.
· **Rani Gaidinliu (Option d):** She was a spiritual and political leader from the Zeliangrong Naga tribe who led a revolt against British rule in the **1930s**. Jawaharlal Nehru famously gave her the title "Rani" (Queen).

Q.41 **In a right-angled triangle, if the hypotenuse is 10 units and one of its sides is 8 units then find the area of the triangle.**

A. 48 sq. units
B. 16 sq. units
C. 32 sq. units
D. 24 sq. units

Answer: D

Sol: **Given:**
Hypotenuse of the right-angled triangle = 10 units

One of the sides = 8 units

We need to find the area of the triangle.

Formula Used:

Area of the triangle = $\frac{1}{2} \times \text{base} \times \text{height}$

Pythagoras theorem;

$(\text{hypotenuse})^2 = (\text{perpendicular})^2 + (\text{height})^2$

Solution:

By the Pythagorean theorem:

$(10)^2 = (8)^2 + (\text{height})^2$

$100 - 64 = (\text{height})^2$

$(\text{height})^2 = 36$

Height = 6

Area of the triangle:

$= \frac{1}{2} \times 8 \times 6$

$= \frac{1}{2} \times 48$

$= 24\,\text{square units}$

Q.42 **P is any point inside the rectangle ABCD. If PA = 85 cm, PB = 65 cm and PC = 5 cm, then the length of PD (in cm) is equal to:**

A. 55
B. 58
C. 53
D. 51

Answer: A

Sol: **Given:**

P is a point inside the rectangle ABCD.

PA = 85 cm, PB = 65 cm, and PC = 5 cm.

Formula Used:

Theorem for a point inside a rectangle: $PA^2 + PC^2 = PB^2 + PD^2$

Solution:

According to the theorem, the sum of the squares of distances to opposite vertices is equal.

Substitute the given values into the formula:

$85^2 + 5^2 = 65^2 + PD^2$

$7225 + 25 = 4225 + PD^2$

$7250 = 4225 + PD^2$

$PD^2 = 7250 - 4225$

$PD^2 = 3025$

$PD = \sqrt{3025}$

$PD = 55cm$

Final Answer

So the correct answer is (a)

Q.43 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.44 **There are total 24 hats of blue and red colour. The average cost of blue colour hats is Rs. 65. The average cost of red colour hats is Rs. 35. The average cost of all the hats is Rs. 50. What is the number of red colour hats?**

A. 12

B. 16

C. 14

D. 13

Answer: A

Sol: **Given:**

Total number of hats = 24

Average cost of blue hats = Rs. 65

Average cost of red hats = Rs. 35

Average cost of all hats = Rs. 50

Solution:

By applying the rule of alligation to the average costs:

Quantity Ratio of Blue hats to Red hats = (50 - 35) : (65 - 50)

Ratio = 15 : 15

Ratio = 1 : 1

This implies that the number of blue hats and red hats are equal.

Total number of hats = 24

Number of red hats = $\frac{1}{2}$ × 24

Number of red hats = 12

Final Answer

So the correct answer is (a)

Q.45 **A and B working together can do a piece of work in 6 days. B alone can do the same work in 9 days. How long (in days) will A alone take to do double the work?**

A. 37

B. 18

C. 36

D. 39

Answer: C

Sol: **Given:**

Time taken by A and B together = 6 days

Time taken by B alone = 9 days

Formula Used:

Total Work = LCM of given times

Efficiency = $\frac{TotalWork}{Time}$

Solution:

Let the total work be the LCM of 6 and 9.

LCM(6, 9) = 18 units

Efficiency of (A + B) = $\frac{18}{6}$ = 3 units/day

Efficiency of B = $\frac{18}{9}$ = 2 units/day

Efficiency of A = Efficiency of (A + B) - Efficiency of B

Efficiency of A = 3 - 2 = 1 unit/day

Time taken by A alone to complete the original work = $\frac{18}{1}$ = 18 days

The time required for A to do double the work = 18 × 2 = 36 days

Final Answer

So the correct answer is (c)

Q.46 **The product of two consecutive positive multiples of 5 is 750. What is the smaller of the two numbers?**

A. 30

B. 20

C. 15

D. 25

Answer: D

Sol: **Given:**

The product of two consecutive positive multiples of 5 is 750.

Solution:

Let the smaller multiple of 5 be x. The next consecutive multiple of 5 will be x + 5.

According to the problem, their product is 750:

x × (x + 5) = 750

$x^2 + 5x - 750 = 0$

$x^2 + 30x - 25x - 750 = 0$

$x \times (x + 30) - 25 \times (x + 30) = 0$

$(x - 25) \times (x + 30) = 0$

This gives $x = 25$ or $x = -30$. Since we are looking for positive multiples, we discard -30.

$x = 25$

The smaller number is 25.

Final Answer

So the correct answer is (d)

Q.47 Which of the following numbers is divisible by 7?

A. 7357306
B. 7132951
C. 7660778
D. 6825907

Answer: B

Sol: **Given:**

Four numbers: 7357306, 7132951, 7660778, 6825907

Formula Used:

Basic division to check divisibility by 7.

Solution:

Let us check the options one by one for divisibility by 7.

Option (a): $\frac{7357306}{7}$ = 1051043.71 (Not perfectly divisible)

Option (b): $\frac{7132951}{7}$ = 1018993 (Perfectly divisible)

Option (c): $\frac{7660778}{7}$ = 1094396.85 (Not perfectly divisible)

Option (d): $\frac{6825907}{7}$ = 975129.57 (Not perfectly divisible)

Therefore, 7132951 is the only number divisible by 7.

Final Answer

So the correct answer is (b)

Q.48 If A : B = 1 : 3, B : C = 4 : 3 and C : D = 6 : 7, then A : B : C : D is:

A. 8 : 22 : 18 : 21
B. 6 : 24 : 18 : 21
C. 8 : 24 : 18 : 21
D. 8 : 24 : 16 : 21

Answer: C

Sol: **Given:**

A : B = 1 : 3

B : C = 4 : 3

C : D = 6 : 7

Solution:

First, make the ratio of B equal in both A : B and B : C.

Multiply A : B by 4 and B : C by 3:

A : B = 1 × 4 : 3 × 4 = 4 : 12

B : C = 4 × 3 : 3 × 3 = 12 : 9

So, A : B : C = 4 : 12 : 9

Now, make the ratio of C equal in A : B : C and C : D.

A : B : C = 4 : 12 : 9 (Multiply by 2)

C : D = 6 : 7 (Multiply by 3)

A : B : C = 8 : 24 : 18

C : D = 18 : 21

Combining them together, we get:

A : B : C : D = 8 : 24 : 18 : 21

Final Answer

So the correct answer is (c)

Q.49 The marked price of a wardrobe is ₹8,640, which is 35% above the cost price. It is sold at a discount of 20% on the marked price. Find the profit percentage.

A. 9%
B. 10%
C. 8%
D. 6%

Answer: C

Sol: **Given:**
Marked Price (MP) = ₹8640
MP is 35% above Cost Price (CP)
Discount = 20%
Formula Used:
Selling Price (SP) = MP × $(1 - \frac{Discount\%}{100})$
Profit % = $\frac{SP - CP}{CP} \times 100$
Solution:
Let the Cost Price (CP) be 100x.
Marked Price (MP) is 35% above CP.
MP = 100x + 35x = 135x
Discount is given as 20% on MP.
Selling Price (SP) = $135x \times (1 - \frac{20}{100})$
SP = $135x \times \frac{80}{100} = 108x$
Profit = SP - CP = 108x - 100x = 8x
Profit % = $\frac{8x}{100x} \times 100 = 8\%$
Final Answer
So the correct answer is (c)
No errors found in Question and Solution

Q.50 The price of oil is increased successively by 50% and then by 40%. What is the equivalent single percentage increase?

A. 90%
B. 75%
C. 100%
D. 110%

Answer: D

Sol: **Given:**
First percentage increase (x) = 50%
Second percentage increase (y) = 40%
Formula Used:
Equivalent single percentage change = $x + y + \frac{xy}{100}$
Solution:
Using the successive percentage change formula:
Equivalent Increase = 50 + 40 + $\frac{50 \times 40}{100}$
= 90 + $\frac{2000}{100}$
= 90 + 20 = 110%
Final Answer
So the correct answer is (d)

Q.51 What is the value of $\frac{5.4 \times (0.1 \times 0.1 \times 0.1 + 0.03 \times 0.03 \times 0.03)}{0.3 \times 0.3 \times 0.3 + 0.09 \times 0.09 \times 0.09}$?

A. 0.5
B. 0.2
C. 0.4
D. 0.6

Answer: B

Sol: **Given:**

Expression: $\frac{5.4 \times (0.1 \times 0.1 \times 0.1 + 0.03 \times 0.03 \times 0.03)}{0.3 \times 0.3 \times 0.3 + 0.09 \times 0.09 \times 0.09}$

Formula Used:

$a^3 = a \times a \times a$

$(ab)^3 = a^3 \times b^3$

Solution:

$$\frac{5.4 \times (0.1 \times 0.1 \times 0.1 + 0.03 \times 0.03 \times 0.03)}{0.3 \times 0.3 \times 0.3 + 0.09 \times 0.09 \times 0.09}$$

$$= \frac{5.4 \times (0.001 + 0.000027)}{0.027 + 0.000729}$$

$$= \frac{5.4 \times 0.001027}{0.027729}$$

$$= \frac{0.0055458}{0.027729}$$

$$= \frac{0.2}{1}$$

$$= 0.2$$

Final Answer

So the correct answer is (b)

Q.52 **Find the sum of the cubes of the first 12 odd natural numbers.**

A. 41328
B. 41358
C. 41364
D. 41378

Answer: A

Sol: **Given:**

The first 12 odd natural numbers are:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23

Formula Used:

The sum of the cubes of the first n odd natural numbers is given by:

$(\sum(2i-1)^3)$

Where (2i - 1) represents the i-th odd number.

Solution:

We will cube each odd number and then sum them up:

$1^3 + 3^3 + 5^3 + 7^3 + 9^3 + 11^3 + 13^3 + 15^3 + 17^3 + 19^3 + 21^3 + 23^3$

$1^3 = 1, 3^3 = 27, 5^3 = 125, 7^3 = 343$
$9^3 = 729, 11^3 = 1331, 13^3 = 2197, 15^3 = 3375$
$17^3 = 4913, 19^3 = 6859, 21^3 = 9261, 23^3 = 12167$

Now, summing these values:

1 + 27 + 125 + 343 + 729 + 1331 + 2197 + 3375 + 4913 + 6859 + 9261 + 12167 = 41,328

The sum of the cubes of the first 12 odd natural numbers is 41,328.

Q.53 **A 120-litre solution of salt and water contains 25% salt. If 30 litres of water are added, what is the new percentage of salt in the solution?**

A. 20%
B. 22%
C. 24%
D. 25%

Answer: A

Sol: **Given:**

Initial volume of solution = 120 litres

Initial percentage of salt = 25%

Volume of water added = 30 litres

Formula Used:

Percentage = (Part ÷ Total) × 100

Solution:

Find the volume of salt in the initial solution:

$\frac{25}{100} \times 120 = 30$

Calculate the new total volume of the solution after adding 30 litres of water:

120 + 30 = 150

Calculate the new percentage of salt in the mixture:

$\frac{30}{150} \times 100 = 20\%$

Final Answer

So the correct answer is (a)

Q.54 **Sanjay sells a book to Harshit, making an 11% profit. Harshit then sells the book to Anil for a 12% profit. If Anil paid Rs.12,432 for the book, what was the original price Sanjay paid for it?**

A. Rs. 10000
B. Rs. 11000
C. Rs. 12000
D. Rs. 10500

Answer: A

Sol: **Given:**

Sanjay's profit = 11%

Harshit's profit = 12%

Final price paid by Anil = Rs. 12432

Formula Used:

Final Price = Initial Price × $(1 + \frac{Profit_1}{100}) \times (1 + \frac{Profit_2}{100})$

Solution:

Let the original price paid by Sanjay be x.

According to the successive profit formula:

$x \times \frac{111}{100} \times \frac{112}{100} = 12432$

$x = \frac{12432 \times 100 \times 100}{111 \times 112}$

$x = \frac{124320000}{12432}$

x = 10000

Final Answer

So the correct answer is (a)

Q.55 **In triangle XYZ, a line is drawn parallel to YZ intersecting XZ at A and XY at B. If XA = 2 cm, AZ = 6 cm, and XB = 3 cm, find BY.**

A. 7 cm
B. 19 cm
C. 9 cm
D. 6 cm

Answer: C

Sol: **Given**

Line AB is parallel to YZ

XA = 2 cm

AZ = 6 cm

XB = 3 cm

Formula Used

Basic Proportionality Theorem (Thales Theorem): $\frac{XA}{AZ} = \frac{XB}{BY}$

Solution

Since AB || YZ, the line divides the two sides of the triangle proportionally.

$$\frac{2}{6} = \frac{3}{BY}$$

$$\frac{1}{3} = \frac{3}{BY}$$

$$BY = 3 \times 3 = 9cm$$

Q.56 **Calculate the sum of the first 50 terms of the following AP: 375 + 345 + 315 + 285 + ...**

A. 18400
B. 18600
C. - 18000
D. 18200

Answer: C

Sol: **Given:**

The given Arithmetic Progression (AP): 375, 345, 315, 285, ...
First term (a) = 375
Common difference (d) = 345 − 375 = -30
Number of terms (n) = 50

Formula Used:

Sum of n terms of an AP: $S_n = \frac{n}{2} \times [2a + (n-1) \times d]$

Solution:

$$S_{50} = \frac{50}{2} \times [2 \times 375 + (50-1) \times (-30)]$$

$$= 25 \times [750 + 49 \times (-30)]$$

$$= 25 \times [750 - 1470]$$

$$= 25 \times (-720)$$

= −18000
Therefore, the sum of the first 50 terms is: −18000

Q.57 **The monthly incomes of two friends, Kiran and Mahesh, are in the ratio 5 : 8 respectively, and each of them saves ₹72,000 every month. If the ratio of their monthly expenditure is 2 : 4, find the monthly income of Kiran (in ₹).**

A. 1,81,000
B. 2,52,000
C. 1,80,000
D. 1,79,000

Answer: C

Sol: **Given:**

Ratio of monthly incomes of Kiran and Mahesh = 5 : 8
Savings of each person = ₹72,000
Ratio of their monthly expenditures = 2 : 4 = 1 : 2

Formula Used:

Income - Savings = Expenditure

Solution:

Let the monthly incomes of Kiran and Mahesh be 5x and 8x, respectively.
Since each saves ₹72,000, their expenditures will be:
Kiran's Expenditure = 5x - 72000

Mahesh's Expenditure = 8x - 72000

The ratio of their expenditures is 1 : 2.

$$\frac{5x - 72000}{8x - 72000} = \frac{1}{2}$$

2(5x - 72000) = 1(8x - 72000)

10x - 144000 = 8x - 72000

10x - 8x = 144000 - 72000

2x = 72000

x = 36000

Kiran's monthly income is 5x.

Income = 5 × 36000 = 180000

Final Answer

So the correct answer is (c)

Q.58 **Two alloys of gold and copper are mixed in the ratio 2:3. The first alloy has gold and copper in the ratio 4:1, and the second in the ratio 1:4. What is the ratio of gold to copper in the resulting mixture?**

A. 11:14
B. 13:12
C. 17:28
D. 19:26

Answer: A

Sol: **Given:**

Ratio in which the two alloys are mixed = 2 : 3

Ratio of gold to copper in the first alloy = 4 : 1

Ratio of gold to copper in the second alloy = 1 : 4

Formula Used:

Quantity of component = $\frac{Ratiopart}{Totalratioparts}$ × Total quantity

Solution:

Let the quantities of the two alloys taken be 20 units and 30 units respectively to match the 2:3 ratio and make calculations easier.

In the first alloy (20 units), the ratio of gold to copper is 4 : 1. The total parts are 5.

Gold in first alloy = $\frac{4}{5}$ × 20 = 16

Copper in first alloy = $\frac{1}{5}$ × 20 = 4

In the second alloy (30 units), the ratio of gold to copper is 1 : 4. The total parts are 5.

Gold in second alloy = $\frac{1}{5}$ × 30 = 6

Copper in second alloy = $\frac{4}{5}$ × 30 = 24

Calculate the total gold in the final mixture:

16 + 6 = 22

Calculate the total copper in the final mixture:

4 + 24 = 28

The ratio of gold to copper in the final mixture is 22 : 28 = 11 : 14

Final Answer

So the correct answer is (a)

Q.59 **A person sold an article at a loss of 10%. Had he sold it for ₹150 more, he would have gained 20%. What is the cost price?**

A. ₹400
B. ₹500
C. ₹600
D. ₹450

Answer: B

Sol: **Given:**

Difference between +20% (gain) and -10% (loss) is ₹150.

Formula Used:

Percentage Difference = Value Difference.

Solution:

Total gap = 20 - (-10) = 30%.

30% of CP = 150.

CP = $\frac{150}{30} \times 100$

CP = 5 × 100 = 500.

Final Answer

So the correct answer is (b)

Q.60 **The average age of 14 persons is 13 years. If the age of 15th persons is added, then the average remains same. What is the age (in years) of the 15th person?**

A. 9
B. 11
C. 13
D. 16

Answer: C

Sol: **Given:**

Average age of 14 persons = 13 years

Average remains the same when the 15th person is added.

Formula Used:

Total age = Average × Number of persons

Solution:

Calculate the total age of the 14 persons:

14 × 13 = 182

When the 15th person is added, the new total number of persons is 15. The average age remains 13 years.

Calculate the total age of the 15 persons:

15 × 13 = 195

Calculate the age of the 15th person by subtracting the total age of 14 persons from the total age of 15 persons:

195 - 182 = 13

Final Answer

So the correct answer is (c)

Q.61 **A water pipe supplies water at a constant rate. In 4.5 minutes, it fills $2\frac{1}{4}$ liters. At this rate, how much time will it take to fill 5.625 liters?**

A. 10 minutes
B. 11.25 minutes
C. 12 minutes
D. 12.5 minutes

Answer: B

Sol: **Given**

Time taken to fill 2.25 liters = 4.5 minutes

Required volume = 5.625 liters

Formula Used

Time Required = Rate × Volume

Solution

Find the time taken to fill 1 liter:

Rate = $\frac{4.5}{2.25}$ = 2 minutes per liter

Calculate the time for 5.625 liters:

Time = 5.625 × 2 = 11.25 minutes

Final Answer

So the correct answer is (b)

Q.62 **The average weight of 25 students of a school is 57 kg. If the weight of the teacher is included, the average weight increases by 0.8 kg. Find the weight of teacher.**

A. 75.8 kg
B. 76.8 kg
C. 78.8 kg
D. 77.8 kg

Answer: D

Sol: **Given:**

The average weight of 25 students = 57 kg.

When the teacher's weight is included, the average weight increases by 0.8 kg.

Solution:

Total weight of students = 57 × 25 = 1425 kg

The total weight of the 26 persons (including the teacher) = (57 + 0.8) × 26 = 57.8 × 26 = 1502.8 kg

Weight of teacher = 1502.8 1425 = 77.8 kg

The weight of the teacher is 77.8 kg.

Q.63 **From the top of a lighthouse 100 m high, the angle of depression of a boat is 30°. Find the distance of the boat from the base of the lighthouse.**

A. 78 m

B. 173.2 m

C. 254 m

D. 189 m

Answer: B

Sol: **Given**

Height of the lighthouse = 100 m

Angle of depression = 30°

Formula Used

$\tan(\theta) = \frac{Opposite}{Adjacent}$

Solution

The angle of elevation from the boat to the top of the lighthouse is equal to the angle of depression, which is 30°.

Let the distance from the base be d.

$\tan(30^\circ) = \frac{100}{d}$

$\frac{1}{\sqrt{3}} = \frac{100}{d}$

$d = 100\sqrt{3}$

Substituting $\sqrt{3} \approx 1.732$:

d =$100 \times 1.732 = 173.2m$

Final Answer

So the correct answer is (b)

Q.64 **Chetan travels from City A to City B. If Chetan drives his car at 3/5 th of his normal speed, then he reaches City B 52 minutes late. Find the time (in minutes) that Chetan would have taken to travel from City A to City B if he drove at his normal speed.**

A. 82

B. 69

C. 78

D. 83

Answer: C

Sol: **Given:**

New speed = $\frac{3}{5}$ of normal speed

Time late = 52 minutes

Formula Used:

Speed $\propto \frac{1}{Time}$(when distance is constant)

Solution:

Let the normal speed be S and normal time be T.

New speed = $\frac{3}{5}S$

Since speed and time are inversely proportional for a constant distance, the new time taken will be $\frac{5}{3}$ of the normal time.

New time = $\frac{5}{3}T$

Chetan is late by 52 minutes.

New time - Normal time = 52

_

$$\frac{5}{3}T - T = 52$$
$$\frac{2}{3}T = 52$$
$$T = \frac{52 \times 3}{2}$$

T = 26 × 3 = 78 minutes

Final Answer

So the correct answer is (c)

Q.65 The area of a triangle is 61.5 m^2. If one of its sides is 12.3 m, find the length of the perpendicular dropped on that side from the opposite vertex.

A. 11 m
B. 11.5 m
C. 10 m
D. 10.5 m

Answer: C

Sol: **Given:**

Area of the triangle = 61.5 m^2

Base (one of its sides) = 12.3 m

Formula Used:

Area of a triangle = $\frac{1}{2}$ × Base × Height

Solution:

Let the length of the perpendicular (height) be h.

Substitute the given values into the formula:

61.5 = $\frac{1}{2}$ × 12.3 × h

123 = 12.3 × h

h = $\frac{123}{12.3}$

h = 10 m

Final Answer

So the correct answer is (c)

Q.66 If $2x - \frac{1}{2x} = \frac{10}{3}$ and x > 1, then find the value of $x^2 + \frac{1}{16x^2}$

A. 125/18
B. 59/18
C. 118/9
D. 35/9

Answer: B

Sol: **Given:**

$$2x - \frac{1}{2x} = \frac{10}{3}$$

x > 1

Formula Used:

$(a-b)^2 = a^2 + b^2 - 2ab$

Solution:

Square both sides of the given equation.

$$\left(2x - \frac{1}{2x}\right)^2 = \left(\frac{10}{3}\right)^2$$

Apply the algebraic identity.

$$4x^2 + \frac{1}{4x^2} - 2 \times 2x \times \frac{1}{2x} = \frac{100}{9}$$

$$4x^2 + \frac{1}{4x^2} - 2 = \frac{100}{9}$$

$$4x^2 + \frac{1}{4x^2} = \frac{100}{9} + 2$$

$$4x^2 + \frac{1}{4x^2} = \frac{118}{9}$$

$$\frac{4x^2}{4} + \frac{1}{16x^2} = \frac{118}{9 \times 4}$$

$$x^2 + \frac{1}{16x^2} = \frac{118}{36}$$

$$x^2 + \frac{1}{16x^2} = \frac{59}{18}$$

Final Answer

So the correct answer is (b)

Q.67 The compound interest on Rs. 1,60,000 for 2 years at 10% per annum when compounded semi-annually is:

A. Rs. 34,400
B. Rs. 34,481
C. Rs. 30,000
D. Rs. 34,480

Answer: B

Sol: Given:

Principal P = 1,60,000

Rate of interest r = 10% per annum

Time t = 2 years

Interest is compounded semi-annually.

Formula Used:

Compound Interest formula:

A = $P\left(1 + \frac{r}{100n}\right)^{nt}$

where:

A = Amount after t years

P = Principal

r = Annual interest rate

t = Time in years

n = Number of times interest is compounded per year (here, n = 2 for semi-annual compounding).

Compound Interest CI = A - P

Solution:

$$A = 1,60,000\left(1 + \frac{10}{100 \times 2}\right)^{2\times2}$$

$$A = 1,60,000\left(1 + \frac{10}{200}\right)^{4}$$

$$A = 1,60,000\,(1 + 0.05)^4$$

$$A = 1,60,000 \times 1.05^4$$

$$A = 1,60,000 \times 1.21550625 \approx 1,94,481$$

CI = A - P = 1,94,481 - 1,60,000 = 34,481

The compound interest is 34,481.

Q.68 Simplify $\frac{1.25^2 - 0.75^2}{2.25^2 - 1.25^2} \times \frac{7}{2}$

A. 0.25
B. 2
C. 1
D. 0.5

Answer: C

Sol: **Given:**

Expression: $\frac{1.25^2 - 0.75^2}{2.25^2 - 1.25^2} \times \frac{7}{2}$

Formula Used:

$a^2 - b^2 = (a - b)(a + b)$

Solution:

First, simplify the numerator using the algebraic identity:

$1.25^2 - 0.75^2 = (1.25 - 0.75)(1.25 + 0.75)$

= 0.5 × 2.0 = 1

Next, simplify the denominator using the same identity:

$2.25^2 - 1.25^2 = (2.25 - 1.25)(2.25 + 1.25)$

= 1.0 × 3.5 = 3.5 = $\frac{7}{2}$

Now, substitute these values back into the original expression:

$\frac{1}{\frac{7}{2}} \times \frac{7}{2}$

$= \frac{2}{7} \times \frac{7}{2}$ = 1

Final Answer

So the correct answer is (c)

Q.69 **The ratio of the present ages of A to B is 7:3. The ratio of A's age 4 years ago to B's age 4 years hence is 2:1. The difference between A's age 4 years hence and B 's age 4 years ago is:**

A. 88 years
B. 56 years
C. 46 years
D. 36 years

Answer: B

Sol: **Given:**

Present age ratio A : B = 7 : 3

4 years ago to 4 years hence ratio:

$$\frac{A-4}{B+4} = \frac{2}{1}$$

Solution:

Let A = 7x, B = 3x

Then,

$$\frac{7x-4}{3x+4} = \frac{2}{1}$$

$$=> \quad 7x - 4 = 2(3x + 4)$$

$7x - 4 = 6x + 8$

$=>\quad x = 12$

A's age = 7x = 84 year,

B's age = 3x = 36 year
Difference = (84 + 4) - (36 - 4) = **56 year**

Q.70 If $7^5 \times 7\sqrt{7} \div 7^{\frac{-5}{2}} = 7^{2x+3}$ then the value of x is :

A. 3
B. 0
C. 0.5
D. 2

Answer: A

Sol: **Given:**
Equation: $7^5 \times 7\sqrt{7} \div 7^{\frac{-5}{2}} = 7^{2x+3}$
Formula Used:
$a^m \times a^n = a^{m+n}$
$\frac{a^m}{a^n} = a^{m-n}$
$\sqrt{a} = a^{\frac{1}{2}}$

Solution:
First, express all terms with base 7 in the form of exponents.

Since the bases are identical, we can equate the powers:
9 = 2x + 3
2x = 9 - 3
2x = 6
x = 3
Final Answer
So the correct answer is (a)
No errors found in Question and Solution

Q.71 In a certain code language, 'HEIGHT' is coded as '103' and 'ALLOW' is coded as '70'. How will 'FAME' be coded in that code language?

A. 75
B. 83
C. 81
D. 79

Answer: C

Sol: **Given**: In a certain code language, 'HEIGHT' is coded as '103' and 'ALLOW' is coded as '70'.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Sum of opposite place value of letter - 2 = Number
For, HEIGHT = 103
H → Opposite letter → S = 19
E → Opposite letter → V = 22
I → Opposite letter → R = 18
G → Opposite letter → T = 20
H → Opposite letter → S = 19
T → Opposite letter → G = 7
Sum: 19 + 22 + 18 + 20 + 19 + 7 = 105, 105 - 2 = 103
For, ALLOW = 70
A → Opposite letter → Z = 26
L → Opposite letter → O = 15

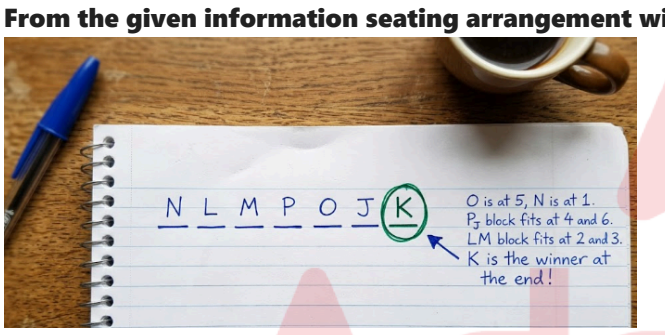
L → Opposite letter → O = 15
O → Opposite letter → L = 12
W → Opposite letter → D = 4
Sum: 26 + 15 + 15 + 12 + 4 = 72, 72 - 2 = 70
Similarly,
FAME = ?
F → Opposite letter → U = 21
A → Opposite letter → Z = 26
M → Opposite letter → N = 14
E → Opposite letter → V = 22
Sum: 21 + 26 + 14 + 22 = 83, 83 - 2 = 81
So, FAME is coded as **81**.
Thus, correct option is (c).

Q.72 **Seven people, J, K, L, M, N, O and P are sitting in a straight row, facing north. Only two people sit to the right of O. Only three people sit between N and O. P sits second to the left of J. P is not an immediate neighbour of N. L sits to the immediate left of M. Who sits at the extreme right end of the line?**

A. J
B. M
C. K
D. P

Answer: C

Sol: **Given:**
Seven people, J, K, L, M, N, O and P are sitting in a straight row, facing north.
Only two people sit to the right of O.
Only three people sit between N and O.
P sits second to the left of J.
P is not an immediate neighbour of N.
L sits to the immediate left of M.
From the given information seating arrangement will be:



So, **K** sits at the extreme right end.
Thus, the correct option is: **(c)**

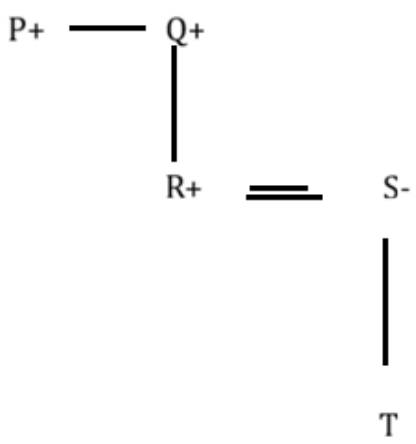
Q.73 **In a certain code language, E + F means 'E is the brother of F',**
E – F means 'E is the father of F',
E x F means 'E is the husband of F' and
E ÷ F means 'E is the mother of F'.
How is P related to T if 'P + Q – R x S ÷ T'?

A. Father's Father's Brother
B. Father's Brother
C. Father
D. Brother

Answer: A

Sol: In a certain code language, E + F means 'E is the brother of F',
E – F means 'E is the father of F',
E x F means 'E is the husband of F' and
E ÷ F means 'E is the mother of F'.
How is P related to T if 'P + Q – R x S ÷ T'?

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



P is T's Father's Father's brother

Q.74 **CLAM is related to GQWH in a certain way based on the English alphabetical order. In the same way, KVSC is related to OAOX. To which of the following is SFKS related, following the same logic?**

A. UKFN
B. VLHO
C. WKGN
D. XLGM

Answer: C

Sol: **Given**: CLAM is related to GQWH and KVSC is related to OAOX with same logic.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: 1st letter + 4, 2nd letter + 5, 3rd letter - 4 and 4th letter - 5 place.
For, CLAM = GQWH
C + 4 = G, L + 5 = Q, A - 4 = W, M - 5 = H
For, KVSC = OAOX
K + 4 = O, V + 5 = A, S - 4 = O, C - 5 = X
Similarly,
SFKS = ?
S + 4 = W, F + 5 = K, K - 4 = G, S - 5 = N
So, SFKS is related to **WKGN**.
Thus, correct option is (c).

Q.75 **In certain code PINK is written as 200, How will be GREEN written in that code?**

A. 200
B. 150
C. 245
D. 175

Answer: C

Sol: **Given**: In certain code PINK is written as 200.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

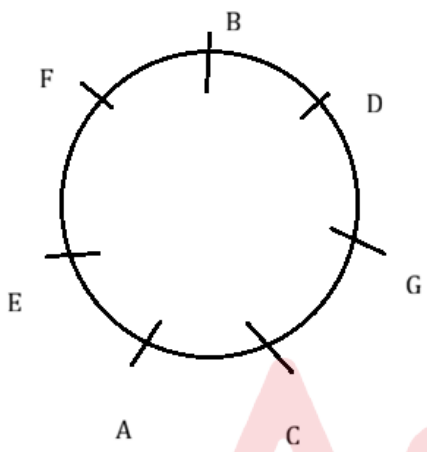
Logic: Sum of place value of letters × Number of letters in the word = Number
For, PINK - 200
16 + 9 + 14 + 11 = 50, 50 × 4 = 200
Similarly,
GREEN - ?
7 + 18 + 5 + 5 + 14 = 49, 49 × 5 = 245
So, GREEN is written as **245**.
Thus, correct option is (c).

Q.76 **A, B, C, D, E, F and G sit around a circular table, facing the centre. F sits third to the left of C. G sits second to the left of B. C is an immediate neighbour of both A and G. D sits to the immediate right of G. How many people sit between B and C when counted from the right of C?**

A. 3
B. 1
C. 4
D. 2

Answer: D

Sol: A, B, C, D, E, F and G sit around a circular table, facing the centre.
F sits third to the left of C.
G sits second to the left of B.
C is an immediate neighbour of both A and G.
D sits to the immediate right of G.



Two people sit between B and C when counted from the right of C.

Q.77 **Seven boxes, A, B, C, D, E, F and G, are kept one over the other but not necessarily in the same order. Only two boxes are kept between D and B. Only E is kept above G. No box is kept below B. A is kept at some place below C but at some place above F. How many boxes are kept between B and G?**

A. 2
B. 1
C. 3
D. 4

Answer: D

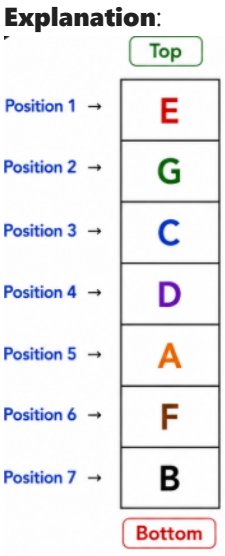
Sol: **Information Given:**
Boxes: A, B, C, D, E, F, G

Conditions:
• Only 2 boxes between D and B
• Only E is above G
• No box below B
• A is below C but above F

Logic:

Arrange boxes from top to bottom using fixed-position clues.

Explanation:



Final Answer:
4 boxes are kept between B and G.

Final Correct Option:
D

Q.78 **In a certain code language, 'COLD' is coded as 'EQNF' and 'WARM' is coded as 'YCTO'. How will 'HEAT' be coded?**

A. JGCV
B. JFCV
C. KGDV
D. JHDV

Answer: A

Sol: **Given**: In a certain code language, 'COLD' is coded as 'EQNF' and 'WARM' is coded as 'YCTO'.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letters are increasing + 2 place.
For, COLD - EQNF
C + 2 = E, O + 2 = Q, L + 2 = N, D + 2 = F
For, WARM - YCTO
W + 2 = Y, A + 2 = C, R + 2 = T, M + 2 = O
Similarly,
HEAT - ?
H + 2 = J, E + 2 = G, A + 2 = C, T + 2 = V
So, HEAT is coded as **JGCV**.
Thus, correct option is (a).

Q.79 **Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only.**
(Left) K C © C V € @ € # U © & Y £ © I $ N W # & Q (Right)

How many such symbols are there each of which is immediately preceded by a letter and also immediately followed by a symbol?4244

A. 5
B. 6
C. 4
D. 3

Answer: C

Sol: **1. Information Given:**
Series:
K C © C V € @ € # U © & Y £ © I $ N W # & Q

We need to find symbols that:
are immediately preceded by a letter
and immediately followed by a symbol.

2. **Formula Used:**
Condition:
Letter ← Required Symbol → Symbol

3. **Explanation**:

Final Answer:
Total such symbols = 4

Final Correct Option: (C)

Q.80 **In a row of girls, Anita is 12th from the left and Reena is 9th from the right. If there are 6 girls between them, what is the total number of girls?**

A. 26
B. 27
C. 28
D. 29

Answer: B

Sol: **Given**:
Anita = 12th from left
Reena = 9th from right
Girls between them = 6
Formula used:
Total = Left position + Right position + Girls between.
Total girls = 12 + 9 + 6
= **27**
So, **27** is the total number of girls.
Thus, correct option is (b).

Q.81 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
STQ 54, NOL 61, IJG 68, DEB 75, ?

A. YZW 82
B. YAV 82
C. YDJ 81
D. YYV 81

Answer: A

Sol: **Information Given:**
Series:
STQ 54 → NOL 61 → IJG 68 → DEB 75 → ?

Logic:
Each letter decreases by 5 positions; number increases by 7.

Explanation:
S → N → I → D → Y = −5
T → O → J → E → Z = −5
Q → L → G → B → W = −5

54 → 61 → 68 → 75 → 82 = +7

So, next term = YZW 82

Final Answer:
YZW 82

Final Correct Option:
(A)

Q.82 **Each of the digits in the number 12568436 is arranged in ascending order from left to right. What will be the sum of the digits that are third from the left and third from the right in the new number thus formed?**

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

Answer: A

Sol: **Information Given:**
Number: 12568436
Logic:
Arrange digits in ascending order
Digits: 1,2,5,6,8,4,3,6
Ascending order → 1,2,3,4,5,6,6,8
3rd from left = 3
3rd from right = 6
Sum = 3 + 6 = 9
Final Answer:
9
Final Correct Option:
(A)

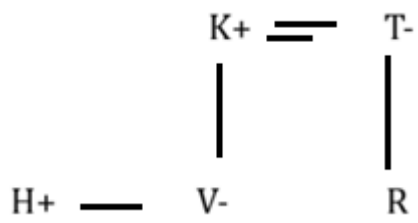
Q.83 **In a certain code language,**
A + B means 'A is the mother of B'
A - B means 'A is the brother of B'
A × B means 'A is the husband of B'
A ÷ B means 'A is the daughter of B'
Based on the above, how is H related to R if 'H - V ÷ K × T + R'?

A. Sister's son
B. Brother
C. Father's brother
D. Mother's brother

Answer: B

Sol: In a certain code language,
A + B means 'A is the mother of B'
A - B means 'A is the brother of B'
A × B means 'A is the husband of B'
A ÷ B means 'A is the daughter of B'
Based on the above, how is H related to R if 'H - V ÷ K × T + R'?

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



H is R's Brother.

Q.84 If '+' means '÷', '-' means '×', '×' means '+' and '÷' means '-', then find the value of:
16 - 24 + 6 × 8 = ?

A. 70
B. 68
C. 72
D. 64

Answer: C

Sol: **Given**: 16 - 24 + 6 × 8 = ?
Using **BODMAS** rule.

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

Given Sign+ - × ÷

New Sign ÷ × + -

New equation: 16 × 24 ÷ 6 + 8 = ?
16 × 4 + 8 = ?
64 + 8 = ?
? = **72**
Thus, correct option is (c).

Q.85 Refer to the following number, symbol series and answer the question. Counting to be done from left to right only. All numbers are single digit numbers only.
(Left) £ 9 2 9 £ # 4 9 8 2 9 © © 7 @ 6 8 € 7 € € # (Right)

How many such numbers are there each of which is immediately preceded by a number and also immediately followed by a number?

A. 4
B. 6
C. 5
D. 3

Answer: A

Sol: **1. Information Given:**
Series:
£ 9 2 9 £ # 4 9 8 2 9 © © 7 @ 6 8 € 7 € € #

We need to find numbers that:
are immediately preceded by a number
and immediately followed by a number.
2. **Formula Used:**
Condition:
Number ← Required Number → Number

That means the selected number must have numbers on both sides.

3. **Explanation**:

Final Answer:
Total such numbers = 4

Final Correct Option: (A)

Q.86 **Six people, A, B, C, D, E and F, are sitting in a row, facing north. Only two people sit to the left of A. Only one person sits between B and C. F sits to the immediate left of A. B sits to the immediate right of E. C sits third to the right of D. Who sits at the extreme left end of the line?**

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

Answer: A

Sol: **Given:**
Six people, A, B, C, D, E and F, are sitting in a row, facing north.
Only two people sit to the left of A.
Only one person sits between B and C.
F sits to the immediate left of A.
B sits to the immediate right of E.
C sits third to the right of D.
From the given information seating arrangement will be:

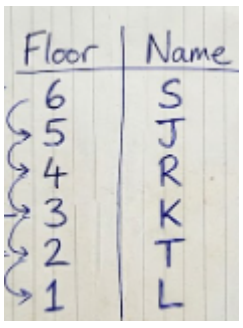
So, **D** sits at the extreme left end of the line.
Thus, the correct option is: (a)

Q.87 **J, K, L, R, S and T live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is numbered 2 and so on till the topmost floor is numbered 6. Only two people live between J and T. Only two people live between S and K. Only one person lives between L and K. L lives on floor number 1. J lives above K. How many people live between R and S?**

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

Answer: D

Sol: **Given**:
Six floors (1 to 6), with 1 at the bottom and 6 at the top.
L lives on floor number 1.
Only one person lives between L and K (So, K must be on floor 3).
Only two people live between S and K.
J lives above K.
Only two people live between J and T.
From the given information seating arrangement will be:
Floor Number Person



Floor	Name
6	S
5	J
4	R
3	K
2	T
1	L

Final Answer Statement:
One person lives between R and S.
Thus, the correct option is (C).

Q.88 **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 :: ?**
#: KUC :: VFN : %

A. # = DNV % = CMU
B. # = DNV % = CMP
C. # = DUV % = CMU
D. # = DNV % = CNU

Answer: A

Sol: **Information Given:**
: KUC :: VFN : %

Options:
A) # = DNV, % = CMU
B) # = DNV, % = CMP
C) # = DUV, % = CMU
D) # = DNV, % = CNU

Logic: Pattern = +7, +7, +7 ✔

Explanation:
Logic: Check position-wise letter changes.

Check Option A:
DNV → KUC
D → K = +7
N → U = +7
V → C = +7 (forward cyclic shift)

Now apply same on VFN:
V → C = +7
F → M = +7
N → U = +7

Result = CMU ✔
So, Option A follows the same pattern perfectly.

Final Answer:
= DNV and % = CMU

Final Correct Option:
A

Q.89 **What will come in place of the question mark (?) in the following equation if '+' and '–' are interchanged and '×' and '÷' are interchanged?**
70 – 45 × 5 – 40 ÷ 4 + 48 = ?

A. 211
B. 153
C. 191
D. 172

Answer: C

Sol: Information Given:

70 – 45 × 5 – 40 ÷ 4 + 48

Rule:

'+' ↔ '–'

'×' ↔ '÷'

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

New expression:

70 + 45 ÷ 5 + 40 × 4 – 48

Now solve:

70 + 45 ÷ 5 + 40 × 4 – 48

= 70 + 9 + 160 – 48

= 79 + 160 – 48

= 239 – 48

= 191

Final Answer:

191

Final Correct Option:

(c) 191

Q.90 What will come in place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

8 ÷ 2 + 15 ×5 - 8 = ? + 5

A. 28

B. 24

C. 22

D. 26

Answer: D

Sol: **Information Given:**

Expression: 8 ÷ 2 + 15 × 5 – 8 = ? + 5

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

Interchange: + ↔ – and × ↔ ÷

8 ÷ 2 + 15 ×5 - 8 = ? + 5

After interchange:

8 ×2 - 15 ÷ 5 + 8 = ? - 5

8 ×2 - 3 + 8 = ? - 5

16 - 3 + 8 = ? - 5

24 - 3 = ? - 5

21 = ? - 5

? = 26 - 5

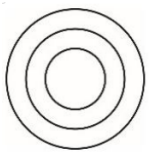
? = 21

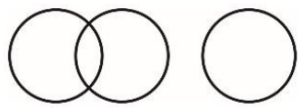
So, **21 = 21**

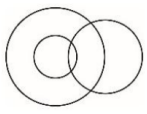
Thus, the correct option is: (d)

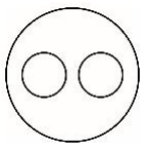
Q.91 Venn diagram that bets represents the given set of classes:

CROCKERY, CUPS, PLATES

A. 

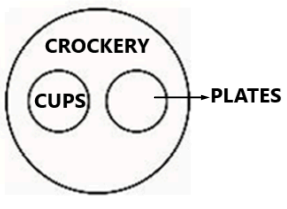
B. 

C. 

D. 

Answer: D

Sol: **Given**: CROCKERY, CUPS, PLATES



All **cups** and **plates** are **crockery**.
Thus, correct option is (d).

Q.92 In this question, a group of numbers and symbols is coded using the codes given below, and then it is further coded according to the conditions that follow. You have to select the correct combination of codes according to the conditions. If any condition is not fully satisfied, then the codes given in the table will be used directly for the respective number/symbol.

Symbol/Number	**+**	**5**	**4**	**%**	**3**	**#**	**7**	**$**	**&**	**9**	**@**	**2**	**1**	**6**
Code	O	P	T	W	S	F	H	A	Q	Z	B	N	X	M

Conditions:
(i) If the first element is an even number and the last element is an odd number, then the codes of these two elements (first and last) should be interchanged.
(ii) If the first element is an odd number and the last element is a symbol, then both the first and last elements should be coded as '©'.
(iii) If both the first and third elements are symbols, then the third element should be coded as the code of the first element.
Find the code for the following group:
34#9@

A. @TFZB
B. ©TFZ©
C. BTFZS
D. STFZB

Answer: B

Sol: **Given:**

Symbol/Number	+	5	4	%	3	#	7	$	&	9	@	2	1	6
Code	O	P	T	W	S	F	H	A	Q	Z	B	N	X	M

Conditions:

(i) If the first element is an even number and the last element is an odd number, then the codes of these two elements (first and last) should be interchanged. → **Not satisfied**

(ii) If the first element is an odd number and the last element is a symbol, then both the first and last elements should be coded as '©'. → **Condition satisfied** →

First and last elements = ©

(iii) If both the first and third elements are symbols, then the third element should be coded as the code of the first element. → **Not satisfied**

So,

Step-by-step:

First = 3 (odd), Last = @ (symbol) => both become ©

Remaining elements direct coding: 4→T, #→F, 9→Z

Final code: **34#9@ → © T F Z ©**

Final Answer:

© T F Z ©

Final Correct Option:

(B)

Q.93 **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 conclusions logically follow(s) from the statements.**

Statements:
All sand is stone.
All sand is cement.
Some cements are mud.

Conclusions:
(I) Some muds are sand.
(II) Some cements are stone.

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

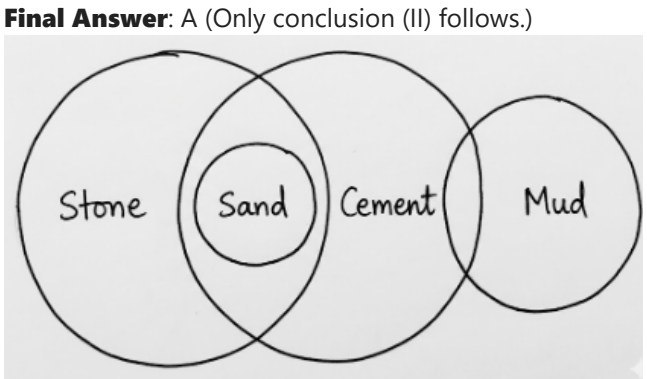
Answer: A

Sol: **Analysis**:
All sand is stone: Sand is entirely inside Stone.
All sand is cement: Sand is also entirely inside Cement.
Some cements are mud: Cement and Mud circles overlap.

Conclusion I (Some muds are sand): Does not follow. Mud and Cement overlap, but Mud does not necessarily touch the Sand inside Cement.

Conclusion II (Some cements are stone): Follows. Since all Sand is Stone and all Sand is Cement, the Sand portion creates a definite intersection between Cement and Stone.

Final Answer: A (Only conclusion (II) follows.)



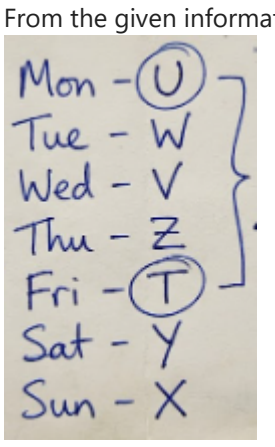
Q.94 **Each of T, U, V, W, X, Y and Z has an engagement on a different day of a week starting from Monday and ending on Sunday of the same week. V has engagement on the third day of the week. Only one person has engagement after Y. Only three people have engagement between V and X. Only one person has engagement between W and Z. T has engagement immediately after Z. How many people have engagement between U and T?**

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

Answer: B

Sol: **Given**: Seven people (T, U, V, W, X, Y, and Z) have engagements from Monday to Sunday.
V has an engagement on the third day of the week (Wednesday).
Only one person has an engagement after Y (Y is on Saturday).
Only three people have engagements between V and X (X is on Sunday).
Only one person has an engagement between W and Z.
T has an engagement immediately after Z.
U occupies the remaining slot (Monday).

From the given information seating arrangement will be.



Three people (W, V, and Z) have engagements between U and T
Thus, correct option is (B).

Q.95 **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 liquid is water.
All water is juice.
Some juices are syrup.

Conclusions:
(I) All liquid is juice.
(II) Some syrups are liquid.

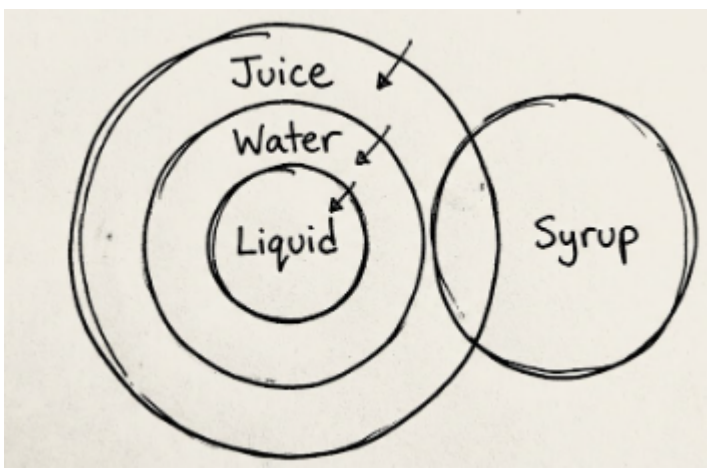
A. Only conclusion (II) follows.
B. Both conclusions (I) and (II) follow.
C. Only conclusion (I) follows.
D. Neither conclusion (I) nor (II) follows.

Answer: C

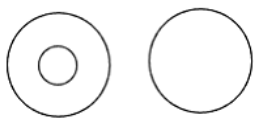
Sol: **Analysis**: All Liquid is inside Water, and all Water is inside Juice. This makes Liquid a subset of Juice. Syrup only overlaps with Juice; it has no defined relationship with Water or Liquid.

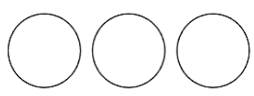
Conclusion I: Since Liquid is entirely within Water and Water is entirely within Juice, Liquid is naturally entirely within Juice. (Follows)
Conclusion II: There is no definite intersection between Syrup and Liquid in the basic diagram. (Does not follow)

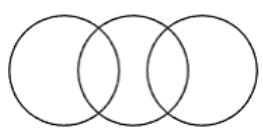
Final Answer: C (Only conclusion I follows)



Q.96 Select the venn diagram that best illustrates the relationship between the following classes.
Rabbits, Ants, Lions

A. 

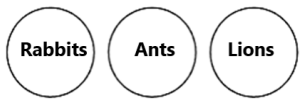
B. 

C. 

D. 

Answer: B

Sol: **Given**: Rabbits, Ants, Lions



All three are completely different types of animals.
Thus, correct option is (b).

Q.97 What should come in place of the question mark (?) in the given series?
91 78 65 52 39 ?

A. 28
B. 30
C. 26
D. 24

Answer: C

Sol: **Information Given:**
Series: 91, 78, 65, 52, 39, ?
Logic: −13 each step
91 → 78 = −13
78 → 65 = −13
65 → 52 = −13
52 → 39 = −13
Next:
39 − 13 = 26
Final Answer:
26
Final Correct Option:
C

Q.98 In a row of 52 students facing North, Roshan is 6th from the left end. If Disha is 29th to the right of Roshan, what is Disha's position from the right end of the row?

A. 16th
B. 18th
C. 17th
D. 15th

Answer: B

Sol: **Information Given:**
Total students = 52
Roshan = 6th from left
Disha = 29th to the right of Roshan

Explanation:

Logic: Move right from Roshan, then use total.

Step-by-step:

Disha from left = 6 + 29 = 35th

From right = 52 − 35 + 1 = 18th

Short Trick:

Right position = Total − Left position + 1

Final Answer:

18th

Final Correct Option:

B

Q.99 **Each of the digits in the number 52697148 is arranged in descending order from left to right. What will be the product of the digits which are third from the left and second from the right in the number thus formed?**

A. 14
B. 12
C. 16
D. 28

Answer: A

Sol: **Information Given:**

Number: 52697148

Arrange digits in descending order

Logic:

Find 3rd from left and 2nd from right → multiply

Explanation:

Logic: Sort → pick positions

Digits: 9, 8, 7, 6, 5, 4, 2, 1

3rd from left = 7

2nd from right = 2

Product = 7 × 2 = 14

Final Answer:

14

Final Correct Option:

A

Q.100 **Find the missing number:**
7, 22, 67, ?, 607, 1822

A. 242
B. 286
C. 218
D. 202

Answer: D

Sol: **Given**: 7, 22, 67, ?, 607, 1822

Logic: Numbers are multiply by 3 and + 1.

7 × 3 + 1 = 22

22 × 3 + 1 = 67

67 × 3 + 1 = 202

202 × 3 + 1 = 607

607 × 3 + 1 = 1822

So, the missing term is **202**.

Thus, correct option is (d).

Test Prime By Adda247

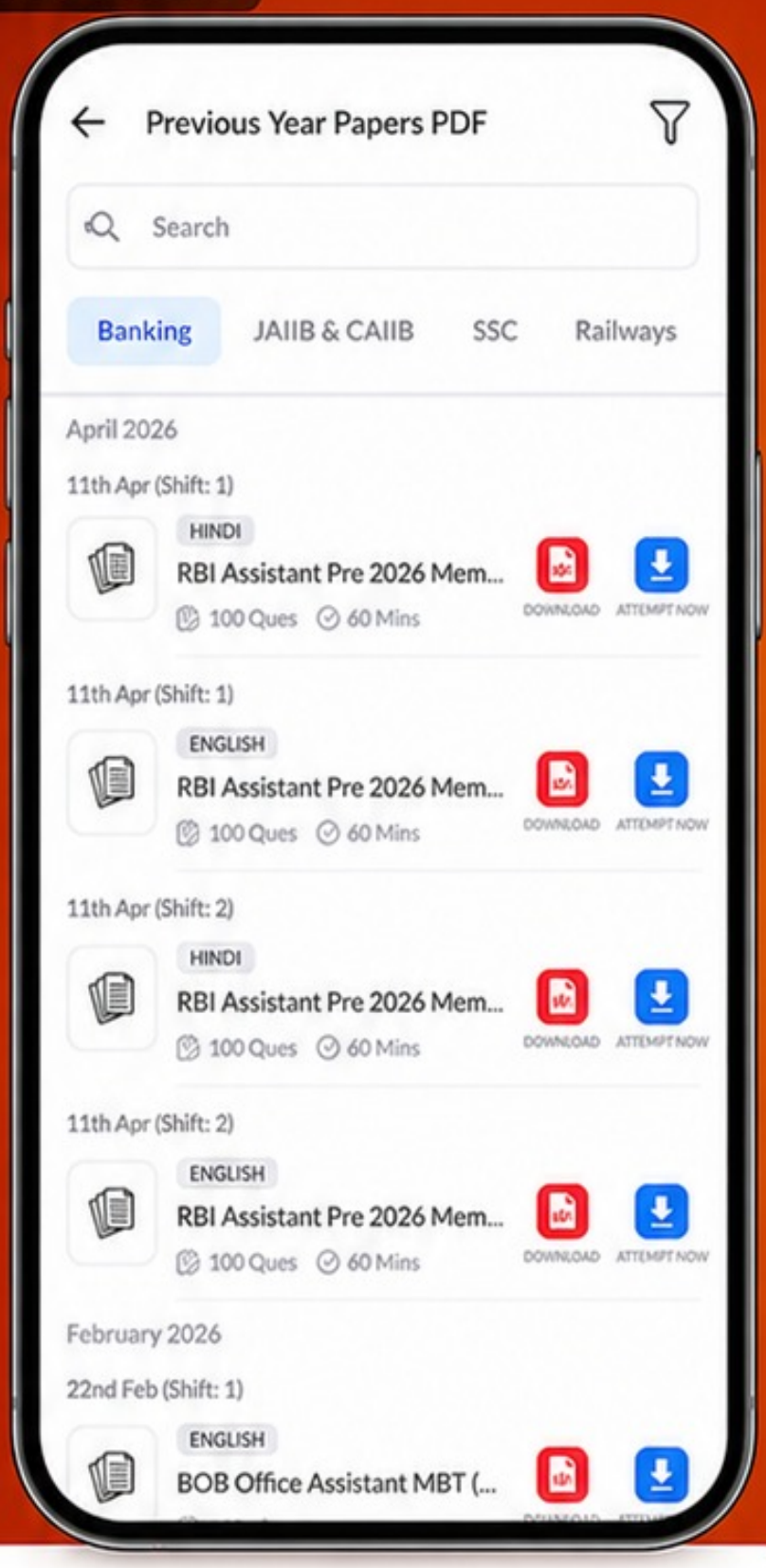
Previous Year Papers PDF

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