

Bihar Jeevika Block Project Manager (Common Subjects) Memory Based Paper 2025

Q.1 Shekhar Kapur received the Padma Bhushan in 2025 for his work in which field?

- A. Science
- B. Medicine
- C. Literature
- D. Art

Answer: D

Sol: The correct answer is: (D) Art

Explanation:

- **Shekhar Kapur**, the renowned Indian **film director, actor, and producer**, was awarded the **Padma Bhushan** in **2025** in the field of **Art**.
- He is internationally recognized for directing critically acclaimed films such as **“Bandit Queen”, “Elizabeth”, and “Elizabeth: The Golden Age”**.
- The award acknowledged his **outstanding contributions to cinema**, both in India and globally.

Information Booster:

- The **Padma Bhushan** is India’s **third-highest civilian award**, presented for **distinguished service of a high order** in various fields.
- Shekhar Kapur has received multiple international accolades, including **BAFTA** and **Golden Globe nominations**.
- In 2020, he was appointed **President of the Film and Television Institute of India (FTII)**.
- He has also served on juries for prestigious festivals like **Cannes and Venice Film Festival**.
- His work is known for its **blend of artistic storytelling and historical depth**.

Additional Knowledge:

- The **2025 Padma Awards** recognized several contributors in diverse fields, including **science, public affairs, literature, and art**.
- Other prominent recipients in the **Art category** included musicians, dancers, and filmmakers.
- Shekhar Kapur’s international success has helped place **Indian cinema on the global map**.
- His upcoming works continue to bridge **Hollywood and Indian cinematic narratives**, influencing a new generation of filmmakers.

Q.2 Which company received the 'Champion Company' award at the inaugural CII Awards for Excellence in Disability Inclusion in 2025?

- A. Amazon
- B. Zomato
- C. Wipro Limited
- D. Minda Corporation

Answer: C

Sol: The correct answer is (c) Wipro Limited

Explanation:

- Wipro Limited received the 'Champion Company' award at the inaugural CII Awards for Excellence in Disability Inclusion in May 2025.
- This award recognizes corporations demonstrating exceptional inclusion and empowerment of individuals with disabilities in the workplace.

- Wipro was lauded for its inclusive hiring practices, accessible infrastructure, assistive technologies, and employee sensitization programs.
- The awards were instituted by the Confederation of Indian Industry (CII) to acknowledge best practices in building inclusive and equitable workspaces.

Information Booster:

- These awards aim to encourage corporate India to adopt inclusive HR and infrastructure practices.
- The recognition is part of broader efforts to align with the Rights of Persons with Disabilities Act, 2016.

Additional Knowledge:

- (a) Amazon
- Has diversity and inclusion programs globally, including in India, but did not win this specific award in 2025.
- (b) Zomato
- Known for inclusion campaigns but was not the recipient of the 'Champion Company' award.
- (d) Minda Corporation
- Recognized for skilling and accessibility efforts, but not awarded the top honor in 2025.

Q.3 Which bank of India has been awarded the Digital Transformation Award 2025 for digital initiatives—Pravaah and Sarthi by Central Banking, London, United Kingdom?

- A. State Bank of India
- B. Bandhan Bank
- C. Reserve Bank of India
- D. Punjab National Bank

Answer: C

Sol: The correct answer is (c) Reserve Bank of India

Explanation:

- In March 2025, the Reserve Bank of India (RBI) received the Digital Transformation Award 2025 from Central Banking, London, for its digital initiatives—Sarthi and Pravaah.
- Sarthi, launched in January 2023, digitized RBI’s internal workflows such as document processing, file movement, and approvals.
- Pravaah, introduced in May 2024, facilitates real-time, paperless application processing for external stakeholders and integrates with Sarthi for seamless operations.
- Both platforms enhance operational efficiency, transparency, and governance in central banking operations.
- The initiatives were conceptualized and developed in-house by RBI’s IT team.

Information Booster:

- RBI’s digital transformation is aligned with India's broader push towards e-governance and digital public infrastructure.
- Central Banking London recognized RBI’s tech adoption as exemplary among central banks worldwide.

Additional Knowledge:

State Bank of India (Option a)

- India’s largest commercial bank with popular platforms like YONO.
- Focuses on retail banking innovation but did not win the 2025 digital transformation award.
- Known for financial outreach, not regulatory tech transformation.

Bandhan Bank (Option b)

- A newer private sector bank focused on financial inclusion and microcredit.
- Has adopted mobile and branchless banking but not associated with Sarthi or Pravaah.
- Not recognized by Central Banking in 2025.

Punjab National Bank (Option d)

- A leading public sector bank with efforts in digitization of services.
- Did not win any international award for digital transformation in 2025.
- Engaged in domestic upgrades but not pioneering central regulatory tools.

Q.4 When was the NAVYA initiative launched by the Government of India?

- A. January 2025
- B. March 2025
- C. June 2025
- D. September 2025

Answer: C

Sol: The correct answer is (c) June 2025

Explanation:

· NAVYA (Nurturing Aspirations through Vocational Training for Young Adolescent Girls) was launched on **June 24, 2025** in **Sonbhadra, Uttar Pradesh**.

Information Booster:

- Joint initiative of **MSDE & MWCD**.
- Covers 3,850 girls in 27 districts across 19 states.
- Special focus: **tribal & underserved regions**.
- Provides both **vocational & life skills training**.
- Part of **Viksit Bharat@2047 vision**.

Q.5 Under the restructured PM SVANidhi Scheme approved by the cabinet in August 2025, the enhanced maximum amount for the first and second tranche loans is ₹_____ and ₹_____ respectively. Fill in the Blanks.

- A. 10,000; 20,000
- B. 12,000; 22,000
- C. 15,000; 25,000
- D. 20,000; 30,000

Answer: C

Sol: The Cabinet-approved restructuring of PM SVANidhi Scheme has **increased the first tranche loan from ₹10,000 to ₹15,000** and the **second tranche loan from ₹20,000 to ₹25,000**.

These enhancements provide more working capital to street vendors for expanding their businesses and achieving financial stability.

The **third tranche remains unchanged at ₹50,000**, further supporting eligible vendors who repay previous loans.

Other features of the scheme:

- Interest subsidy of 7% per annum.
- No collateral and No co-borrower is required
- No processing fee and No prepayment charges are levied.
- To incentivize the adoption of digital transactions, a **cashback of up to ₹100 per month** is given to Street Vendors.
- **UPI-linked RUPAY Credit Card** will be introduced to provide immediate access of credit to the street vendors in order to meet any emergent business and personal requirements.

Q.6 Recently, the Ministry of Women and Child Development launched Rashtriya Poshan Maah from 17th September-16th October 2025. The Rashtriya Poshan Maah is being celebrated during the month of September every year under POSHAN Abhiyaan (PM's Overarching

Scheme for Holistic Nourishment), which was launched in ____.

- A. 2016
- B. 2017
- C. 2018
- D. 2019

Answer: C

Sol: The **POSHAN Abhiyaan** (Prime Minister’s Overarching Scheme for Holistic Nutrition) was launched by the Prime Minister on **8 March 2018** (International Women’s Day) from **Jhunjhunu, Rajasthan**, as a mission-mode national programme to accelerate improvements in nutritional outcomes for children (0–6 years), adolescent girls, pregnant women and lactating mothers. The programme has since evolved (including the Mission Poshan 2.0 / Saksham Anganwadi & Poshan 2.0 reforms announced in Budget 2021–22) to further integrate service delivery and strengthen the anganwadi ecosystem and outreach.

About Poshan Maah

- Celebrated annually in the month of September since 2018 under POSHAN Abhiyaan to further intensify efforts to combat malnutrition and promote holistic well being across the nation.
- The **8th Rashtriya Poshan Maah 2025** will focus on the theme - **Right Nutrition, Healthy Life.**

Q.7 Hindustani Socialist Republican Association was established in 1928, in ____.

- A. Delhi
- B. Bengal
- C. Madras
- D. Punjab

Answer: A

Sol: Correct Answer: (A) Delhi
Explanation:
The **Hindustani Socialist Republican Association (HSRA)** was established in **1928 in Delhi**. It aimed to overthrow British rule through revolutionary activities and promote socialist ideals.
Information Booster:

- Founded by **Bhagat Singh, Sukhdev, and Chandrashekhar Azad.**
- Emerged from earlier **Hindustan Republican Association (HRA).**
- Focused on socialism and complete independence.
- Known for **Lahore Conspiracy Case** and **Saunders’ assassination.**
- Played a major role in inspiring revolutionary nationalism.

Additional Knowledge:

- Madras, Bengal, and Punjab were important revolutionary centers but not the founding place of HSRA.
- HRA was founded earlier in **1924 by Ram Prasad Bismil.**
- HSRA changed the revolutionary movement towards **socialist ideology.**

Q.8 Which of the following was a major event of the year 1919?

- A. Passing of the Rowlatt Act
- B. Formation of Swaraj Party
- C. Signing of Gandhi-Irwin Pact
- D. Launch of Non-Cooperation Movement

Answer: A

Sol: Correct Answer: (A) Passing of the Rowlatt Act
Explanation:
In **1919**, the British government passed the **Rowlatt Act**, which allowed detention without trial. This act led to widespread protests and ultimately resulted in the **Jallianwala Bagh massacre.**
Information Booster:

- Official name: **Anarchical and Revolutionary Crimes Act, 1919**
- Allowed arrest without a warrant and detention without trial
- Strongly opposed by Mahatma Gandhi
- Led to the **Jallianwala Bagh massacre (13 April 1919)**
- Marked the beginning of nationwide anti-British agitation

Additional Knowledge:

- **Swaraj Party** – Formed in **1923** by Motilal Nehru and C.R. Das
- **Gandhi-Irwin Pact** – Signed in **1931** during Civil Disobedience Movement

- **Non-Cooperation Movement** – Launched in **1920**

Q.9 Who among the following established the Swaraj Party?

- A. Jawaharlal Nehru
- B. Motilal Nehru
- C. Dr. Rajendra Prasad
- D. Subhas Chandra Bose

Answer: B

Sol: The correct answer is **(B) Motilal Nehru**

Explanation:

- The **Swaraj Party** was established in **1923** by **Motilal Nehru** and **Chittaranjan Das (C.R. Das)**.
- The party was formed after the **Non-Cooperation Movement (1920–22)** was suspended by Mahatma Gandhi following the Chauri Chaura incident.
- Many leaders wanted to enter the legislative councils to **obstruct British rule from within**, leading to the formation of the Swaraj Party.

Objectives of the Swaraj Party:

- To **enter legislative councils** and oppose unjust British laws.
- To pressure the colonial government for **greater self-governance (Swaraj)**.
- To use constitutional methods while staying aligned with the broader national movement.

Information Booster:

- **Full name:** Congress-Khilafat Swarajya Party
- **Founders:** C.R. Das (President), Motilal Nehru (Secretary)
- The party performed strongly in the elections of **1923**, especially in Bengal and Central Provinces.
- The Swaraj Party was a part of the **Indian National Congress**, not separate from it.
- The party later weakened due to the death of **C.R. Das in 1925**.

Q.10 The G20 is a global bloc composed by the governments and central bank governors from 19 countries and _____.

- A. Ireland
- B. Bora Bora
- C. European Union (EU)
- D. Kauai

Answer: C

Sol: The correct answer is **(c) European Union (EU)**

Explanation:

- The G20, or **Group of Twenty**, is an intergovernmental forum that was initially comprised of **19 countries and the European Union (EU)**.
- The EU participates in the G20 as a single entity, representing its member states collectively.
- The G20 members represent a significant portion of the global economy, accounting for about **85% of global GDP** and **75% of global trade**.

Information Booster:

- In **September 2023**, the **African Union (AU)** was officially granted permanent membership at the G20 Summit in India, making the group technically the G21.
- The G20 was founded in **1999** in response to the Asian financial crisis to discuss global economic and financial issues.
- The **G20 Presidency** rotates annually among the members, and the host country is responsible for bringing together the G20 agenda.

Additional Knowledge:

Ireland (Option a)

- Ireland is a member of the European Union, but it is not one of the 19 individual countries that are separate members of the G20.

Bora Bora (Option b)

- Bora Bora is an island in French Polynesia, which is an overseas collectivity of France. It is not an independent country and therefore not a member of the G20.

Kauai (Option d)

- Kauai is one of the main islands of Hawaii, which is a state of the United States. It is not an independent country and is not a member of the G20.

Q.11 GATT was established in ____.

- A. 1949
- B. 1948
- C. 1945
- D. 1946

Answer: B

Sol: Correct Answer: (b) 1948

Explanation:

- The **General Agreement on Tariffs and Trade (GATT)** was established in **1948** to promote international trade by reducing trade barriers such as tariffs and quotas.
- It served as the foundation for the **World Trade Organization (WTO)**, which replaced GATT in **1995**.

Information Booster:

- GATT came into effect on **1 January 1948** with **23 founding member countries**.
- The main objective was to ensure **free and fair international trade**.
- It operated through **“Rounds of Negotiations”**, including the **Uruguay Round (1986–1994)** which led to the formation of the WTO.
- The **headquarters** of GATT (and now WTO) is located in **Geneva, Switzerland**.
- GATT covered only **trade in goods**, whereas WTO also covers **services and intellectual property**.

Q.12 What does UNHCR stand for?

- A. United Nations Human Capital Research
- B. United Nations Humanity Committee for Refugees
- C. United Nations High Commissioner for Refugees
- D. United Nations Humanity Commission for Refugees

Answer: C

Sol: The correct answer is (c) **United Nations High Commissioner for Refugees**.

Explanation:

- The **UNHCR** stands for **United Nations High Commissioner for Refugees**.
- It is an agency of the **United Nations** with a mandate to protect and support refugees, forcibly displaced communities, and stateless people globally.
- The organization was established by the UN General Assembly in **1950**, following World War II, to assist the millions of Europeans who had been displaced from their homes.
- Its primary mission is to safeguard the rights and well-being of refugees and to find durable solutions for their displacement.
- The UNHCR has won the Nobel Peace Prize twice, in 1954 and 1981, in recognition of its humanitarian work.

Information Booster:

- The **1951 Refugee Convention** provides the chief legal framework for the work of the UNHCR.
- The agency's work has expanded over the decades to cover the needs of refugees around the world, particularly in developing countries.
- The UNHCR's headquarters are located in **Geneva, Switzerland**.

Additional Knowledge:

United Nations Human Capital Research (Option a)

- This option is incorrect. The UNHCR's mandate is focused on humanitarian aid and the protection of refugees, not human capital research.

United Nations Humanity Committee for Refugees (Option b)

- This is not the correct name of the organization. The word "Commissioner" refers to the official in charge of the office.

- United Nations Humanity Commission for Refugees (Option d)**
- This is also an incorrect option. The word "Commissioner" is a part of the official name.

Q.13 In the SpaDeX Mission of ISRO, what is the word ‘D’ Stands for?

- A. Docking
- B. Decking
- C. Development
- D. Design

Answer: A

Sol: Sol. Space Docking Experiment Mission is the full form of ISRO’s SpaDeX Mission.
Correct Answer: Docking
Key Answer:
· ISRO Successfully Docks Satellites, Enters Elite Club
· **Satellites:** SDX01 (Chaser), SDX02 (Target)
· **Purpose:** Demonstrate autonomous docking technology

Q.14 What is the significance of ISRO's upcoming GSLV-F15 NVS-02 mission?

- A. First satellite launch by ISRO
- B. Launch of the 100th satellite by ISRO
- C. First mission to the Moon
- D. First reusable rocket launch

Answer: B

Sol: Correct Answer (b) Launch of the 100th satellite by ISRO
ISRO is set to achieve a significant milestone with the launch of its 100th satellite on January 29, 2025, from the Satish Dhawan Space Centre, Sriharikota. This mission involves the GSLV-F15 rocket, featuring India’s Indigenous Cryogenic Stage, which will place the NVS-02 satellite into a Geosynchronous Transfer Orbit (GTO).
Information Booster:
Facts About ISRO:
Establishment: Founded on August 15, 1969.
Founder: Dr. Vikram Sarabhai, regarded as the father of the Indian space program.
Headquarters: Bengaluru, Karnataka.
Primary Launch Site: Satish Dhawan Space Centre (SDSC), Sriharikota, Andhra Pradesh.
First Satellite: Aryabhata (launched in 1975).
First Indigenous Launch Vehicle: SLV-3, which successfully launched Rohini Satellite (RS-1) in 1980.
Notable Achievements:
Chandrayaan-1 (2008): India’s first lunar mission.
Mangalyaan (2013): India’s Mars Orbiter Mission (MOM), a cost-effective mission to Mars.
Chandrayaan-3 (2023): First successful soft landing on the lunar south pole.
Major Rockets:
PSLV (Polar Satellite Launch Vehicle): Known as ISRO’s workhorse, used for launching satellites into polar orbits.
GSLV (Geosynchronous Satellite Launch Vehicle): Designed for geostationary and interplanetary missions.
Gaganyaan: India’s first human spaceflight mission (upcoming).

Q.15 Which DRDO lab conducted a successful laser weapon test in April 2025?

- A. ADE (Aeronautical Development Establishment)
- B. CAIR (Centre for Artificial Intelligence & Robotics)
- C. CHESS (Centre for High Energy Systems and Sciences)
- D. NPOL (Naval Physical & Oceanographic Laboratory)

Answer: C

Sol: The correct answer is **(c) CHESS (Centre for High Energy Systems and Sciences)**
Explanation:

- In **April 2025**, the **Centre for High Energy Systems and Sciences (CHESS)**, a laboratory under the **Defence Research and Development Organisation (DRDO)**, successfully conducted a test of a **high-powered laser weapon system**.
- The system, known as the **Mk-II(A) Laser-Directed Energy Weapon (DEW)**, was tested at the **National Open Air Range (NOAR)** in **Kurnool**, Andhra Pradesh.
- During the demonstration, the Mk-II(A) DEW engaged and neutralized fixed-wing drones and drone swarms, causing structural damage and disabling surveillance sensors.
- This achievement positions India among a select group of nations possessing high-power laser DEW capabilities, including the United States, Russia, and China.

Information Booster:

- The **Mk-II(A) DEW system** operates by detecting targets using radar or its inbuilt **Electro-Optical (EO)** system and engaging them at the **speed of light**.
- The laser beam can cause structural failures by cutting through the target or deliver more impactful results by targeting warheads.
- Developed by CHESS in collaboration with other DRDO laboratories and Indian industries, the system is designed to counter aerial threats such as drones and missiles.
- The successful trial marks a significant advancement in India's directed energy weapon capabilities, aligning with the country's focus on developing indigenous defense technologies.

Additional Knowledge:

(a) ADE (Aeronautical Development Establishment)

- ADE is a DRDO laboratory specializing in aeronautical systems and has been involved in the development of various aircraft and related technologies.
- While ADE has contributed to defense technologies, it was not the laboratory responsible for the laser weapon test conducted in April 2025.

(b) CAIR (Centre for Artificial Intelligence & Robotics)

- CAIR focuses on research in artificial intelligence, robotics, and communication systems.
- Although CAIR plays a crucial role in defense R&D, it was not involved in the laser weapon test conducted by DRDO in April 2025.

(d) NPOL (Naval Physical & Oceanographic Laboratory)

- NPOL specializes in sonar systems and underwater acoustics, primarily supporting naval defense applications.
- NPOL was not the laboratory responsible for the laser weapon test conducted by DRDO in April 2025.

Q.16 . India has recently submitted its official bid to host which future edition of the Commonwealth Games, as confirmed by the Indian Olympic Association (IOA)?

- 2026 Commonwealth Games
- 2028 Commonwealth Games
- 2030 Commonwealth Games
- 2032 Commonwealth Games

Answer: C

Sol: The correct answer is: **(c) 2030 Commonwealth Games**

- Explanation:
 - The **Indian Olympic Association (IOA)** has officially approved India's bid to host the **2030 Commonwealth Games**.
 - The bid was cleared during a **Special General Meeting** in New Delhi and is to be formally submitted before the **31st August 2025 deadline**.
 - If selected, it would mark the **20th anniversary** of India's only previous hosting of the CWG in **New Delhi (2010)**.
- Information Booster:
 - The **2010 Commonwealth Games** held in **New Delhi** featured **6,081 athletes from 71 nations** and was India's largest multi-sport event ever.
 - India won **101 medals** in CWG 2010—its highest medal tally in the history of the Games (38 Gold, 27 Silver, 36 Bronze).
 - The **Commonwealth Games Federation (CGF)** oversees the selection of host nations based on infrastructure, funding, security, and legacy planning.
 - The **2030 CWG** bid is part of India's broader **sports diplomacy strategy**, including potential bids for **Youth Olympics and Olympic Games**.

- India is aiming to showcase **sustainable infrastructure, upgraded stadiums**, and strong government backing in its official bid.
- Additional Knowledge:
 - The **2026 Commonwealth Games**, originally awarded to Victoria, Australia, were **cancelled** in 2023 due to rising costs—causing the CGF to invite fresh bids for both **2026 and 2030** editions.
- Canada, South Africa, and Malaysia were initially seen as contenders for 2030, but India's late entry has reshaped the competition.
- **New Delhi** is the likely city proposed in the bid, given its existing infrastructure from 2010, including the **Jawaharlal Nehru Stadium** and **Indira Gandhi Indoor Arena**.
- India’s move aligns with the **“Viksit Bharat by 2047”** vision, integrating sports development with urban planning and international engagement.
- A successful bid would boost employment, tourism, and youth participation in sports, especially through government schemes like **Khelo India** and **Fit India Movement**.

Q.17 What was India’s final position in the medal standings at the FISU World University Games 2025 held in Germany?

- A. 15th
- B. 20th
- C. 7th
- D. 25th

Answer: B

Sol: The correct answer is (B) 20th.

Explanation:

- India secured the **20th position** at the **FISU World University Games 2025** in **Germany**, with a total of **12 medals**:
 - 2 Gold
 - 5 Silver
 - 5 Bronze
- Major contributions came from **archery, athletics, tennis, and badminton**.
- Despite being a step down from the **2023 performance (7th place)**, India showed strong consistency in global university sports.

Information Booster:

- **Gold medals** were won in **compound archery** by **Sahil Rajesh Jadhav** (individual) and in the **mixed team event**.
- **Parneet Kaur** won silver in archery, and the **archery men’s team** also earned a silver.
- **Athletics** brought India **five medals**, including a silver in men’s **triple jump** and women’s **5000m**.
- **Vaishnavi Adkar** won India’s **first tennis medal** (bronze) since **1979**.
- India also earned its **second-ever badminton medal** at the University Games (bronze in mixed team event).

Additional Information:

- **Top 3 countries** in the 2025 Games were:
 - **Japan** – 34 Gold
 - **China** – 30 Gold
 - **USA** – 28 Gold

- The **2027 edition** will be held in **Chungcheong Province, South Korea**.
- India’s best-ever performance came in **2023 (Chengdu, China)** with **26 medals (11 golds)** and **7th rank**.
- FISU (International University Sports Federation) organizes these biennial games to promote **youth and student athletics worldwide**.

Q.18 What should come in place of the question mark (?) in the given series?
5, 9, 17, 29, 45, ?

- A. 65
- B. 66
- C. 67
- D. 64

Answer: A

Sol: Given: 5, 9, 17, 29, 45, ?
Logic: Numbers are increasing multiple of 4.
5 + 4 = 9
9 + 8 = 17
17 + 12 = 29
29 + 16 = 45
45 + 20 = **65**
So, the missing term is **65**.
Thus, correct option is (a).

Q.19 Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.
KDWP, PIBU, UNGZ, ZSLE, ?

- A. ERTD
- B. EQJX
- C. EDRT
- D. EXQJ

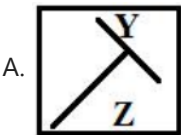
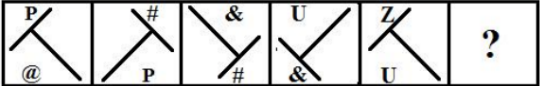
Answer: D

Sol: Given: KDWP, PIBU, UNGZ, ZSLE, ?

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 + 5 place.
K + 5 = P, P + 5 = U, U + 5 = Z, Z + 5 = **E**
D + 5 = I, I + 5 = N, N + 5 = S, S + 5 = **X**
W + 5 = B, B + 5 = G, G + 5 = L, L + 5 = **Q**
P + 5 = U, U + 5 = Z, Z + 5 = E, E + 5 = **J**
So, the missing term is **EXQJ**.
Thus, correct option is (d).

Q.20 Which figure will replace the question mark (?) in the following figure series?



- B.

Y

Z
- C.

Z

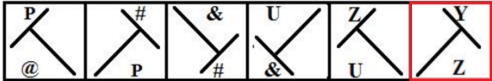
Y
- D.

Z

Y

Answer: A

Sol: Logic 1: T shape 90 degree clock wise rotate.
2: Upper letter / symbol moving lower positions and disappear in the next after new symbol/ letter takes place.



Thus, the correct option is: (a)

Q.21 Select the triad that follows the same pattern as the one followed by the two triads given below. Both triads follow the same pattern.
FM-HO-JL
HO-JQ-LN

- A. LS-NU-PR
- B. KS-NV-PQ
- C. KS-NU-PQ
- D. LS-NU-PS

Answer: A

Sol: Given:
FM-HO-JL
HO-JQ-LN

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 + 2 = 3rd letter and 3rd letter + 2 = 5th letter
2nd letter + 2 = 4th letter and 4th letter - 3 = 6th letter

For, FM-HO-JL
F + 2 = H, H + 2 = J
M + 2 = O, O - 3 = L

For, HO-JQ-LN
H + 2 = J, J + 2 = L
O + 2 = Q, Q - 3 = N

Now, we check each options.

Option (a): LS-NU-PR (Follow)

L + 2 = N, N + 2 = P
S + 2 = U, U - 3 = R

Option (b): KS-NV-PQ (Not Follow)

K + 2 ≠ N, N + 2 = P
S + 2 ≠ V, V - 3 ≠ Q

Option (c): KS-NU-PQ (Not Follow)

K + 2 ≠ N, N + 2 = P
S + 2 = U, U - 3 ≠ Q

Option (d): LS-NU-PS (Not Follow)

L + 2 = N, N + 2 = P
S + 2 = U, U - 3 ≠ S

Thus, correct option is (a).

Q.22 Select the pair that follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.
HDB–FBZ
IEC–GCA
A. VRP–SPM

- B. RNL–PLJ
C. VQN–SOM
D. VQN–TPN

Answer: B

Sol: Given:

HDB–FBZ

IEC–GCA

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 - 2 = 4th letter, 2nd letter - 2 = 5ht letter and 3rd letter - 2 = 6th letter

For, HDB–FBZ

H - 2 = F, D - 2 = B, B - 2 = Z

For, IEC–GCA

I - 2 = G, E - 2 = C, C - 2 = A

Now, we check each options.

Option (a): VRP–SPM (Not Follow)

V - 2 \neq S, R - 2 = P, P - 2 \neq M

Option (b): RNL–PLJ (Follow)

R - 2 = P, N - 2 = L, L - 2 = J

Option (c): VQN–SOM (Not Follow)

V - 2 \neq S, Q - 2 = O, N - 2 \neq M

Option (d): VQN–TPN (Not Follow)

V - 2 = T, Q - 2 \neq P, N - 2 \neq N

Thus, correct option is (b).

Q.23 If '#' means '÷', '\$' means '+', '@' means '-' and '&' means '×', then what will come in place of the question mark (?) in the following equation?
12 \$ 10 # 5 @ 2 & 6 # 3 = ?

- A. 10
B. 18
C. 1
D. 5

Answer: A

Sol: Given: 12 \$ 10 # 5 @ 2 & 6 # 3 = ?

Symbol # \$@&

Sign ÷+ - ×

Given equation is solve by **BODMAS** rule.

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

New equation: $12 + 10 \div 5 - 2 \times 6 \div 3 = ?$

$12 + 2 - 2 \times 2 = ?$

$12 + 2 - 4 = ?$

$14 - 4 = ?$

? = **10**

Thus, correct option is (a).

Q.24 Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which pair DOES NOT belong to that group?

(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster pair.)

- A. DK-LU
B. JQ-RA

- C. QX-YH
D. MR-CJ

Answer: D

Sol:

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 + 8 = 3rd letter and 2nd letter + 10 = 4th letter
Now, we check each options.

Option (a): DK-LU (Follow)

D + 8 = L, K + 10 = U

Option (b): JQ-RA (Follow)

J + 8 = R, Q + 10 = A

Option (c): QX-YH (Follow)

Q + 8 = Y, X + 10 = H

Option (d): MR-CJ (Not Follow)

M + 8 ≠ C, R + 10 ≠ J

Thus, correct option is (d).

Q.25 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster DOES NOT belong to that group?

(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- A. NVD
B. MVC
C. OWE
D. KSA

Answer: B

Sol:

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 + 8 = 2nd letter and 2nd letter + 8 = 3rd letter
Now, we check each options.

Option (a): NVD (Follow)

N + 8 = V, V + 8 = D

Option (b): MVC (Not Follow)

M + 8 ≠ V, V + 8 ≠ C

Option (c): OWE (Follow)

O + 8 = W, W + 8 = E

Option (d): KSA (Follow)

K + 8 = S, S + 8 = A

Thus, correct option is (b).

Q.26 Three of the following four words are alike in a certain way and one is different. Select the odd one.

- A. Carton
B. Kit
C. Sack
D. Drawer

Answer: D

Sol: Let's check all options:

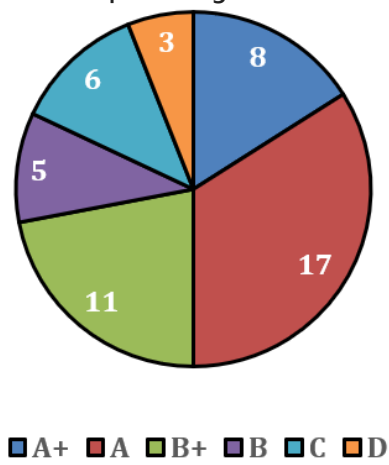
Logic:

Carton, Kit, Sack → All are independent, portable containers that you can carry around.

Drawer → It is a fixed part of furniture (table, cupboard, etc.), not a standalone container.

Thus, the odd one out is Drawer (D).

Q.27 The following pie chart represents number of students who scored different grades in mathematics exam. Calculate the percentage of students who scored B grade.

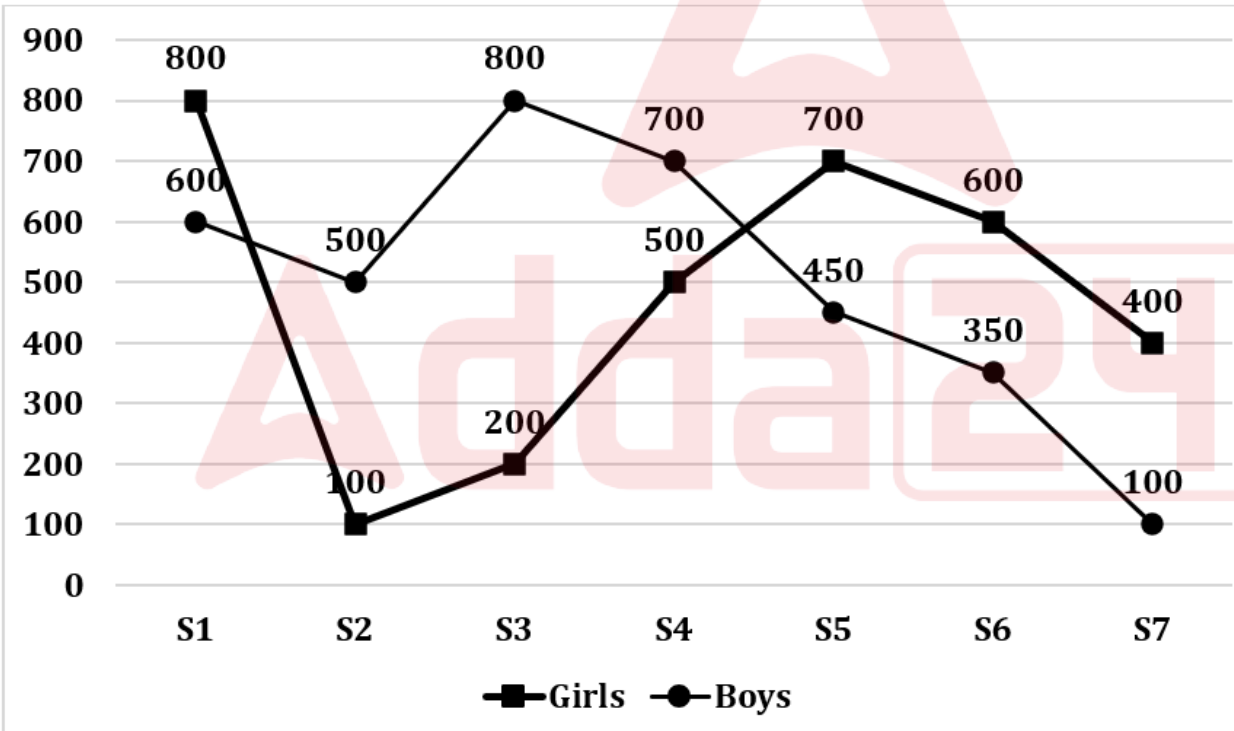


- A. 6%
- B. 12%
- C. 8%
- D. 10%

Answer: D

Sol: Solution:
Total number of students = 11 + 5 + 6 + 3 + 8 + 17 = 50
No. of students who got B grade = 5
Percentage = $\left(\frac{\text{No. of students who got B grade}}{\text{Total no. of students}}\right) \times 100 = \left(\frac{5}{50}\right) \times 100 = 10\%$

Q.28 The line chart given below shows the number of boys and girls in 7 different schools in a year.



Which of the following statement is correct?
I. The ratio of number of boys in school S2 to the number of girls in schools S2 is 5: 1.
II. The average of number of boys in schools S4, S5 and S6 is 500.
III. The difference between total number of boys and total number of girls in all 7 schools is 200

- A. II and III
- B. I and II
- C. I and III
- D. I, II and III

Answer: D

Sol: Given:
Given Data from the Line Chart:

S1: Boys = 600, Girls = 800

S2: Boys = 500, Girls = 100

S3: Boys = 800, Girls = 200

S4: Boys = 700, Girls = 500

S5: Boys = 450, Girls = 700

S6: Boys = 350, Girls = 600

S7: Boys = 100, Girls = 400

Solution:

Statement I: The ratio of the number of boys in school S2 to the number of girls in school S2 is 5:1

Boys in S2 = 500

Girls in S2 = 100

The ratio is 500:100, which simplifies to 5:1.

Conclusion: Statement I is correct.

Statement II: The average number of boys in schools S4, S5, and S6 is 500

Boys in S4 = 700

Boys in S5 = 450

Boys in S6 = 350

$$\text{Average} = \frac{700 + 450 + 350}{3} = \frac{1500}{3} = 500$$

Conclusion: Statement II is correct because the average is 500.

Statement III: The difference between the total number of boys and total number of girls in all 7 schools is 200

$$\text{Total boys} = 600 + 500 + 800 + 700 + 450 + 350 + 100 = 3500$$

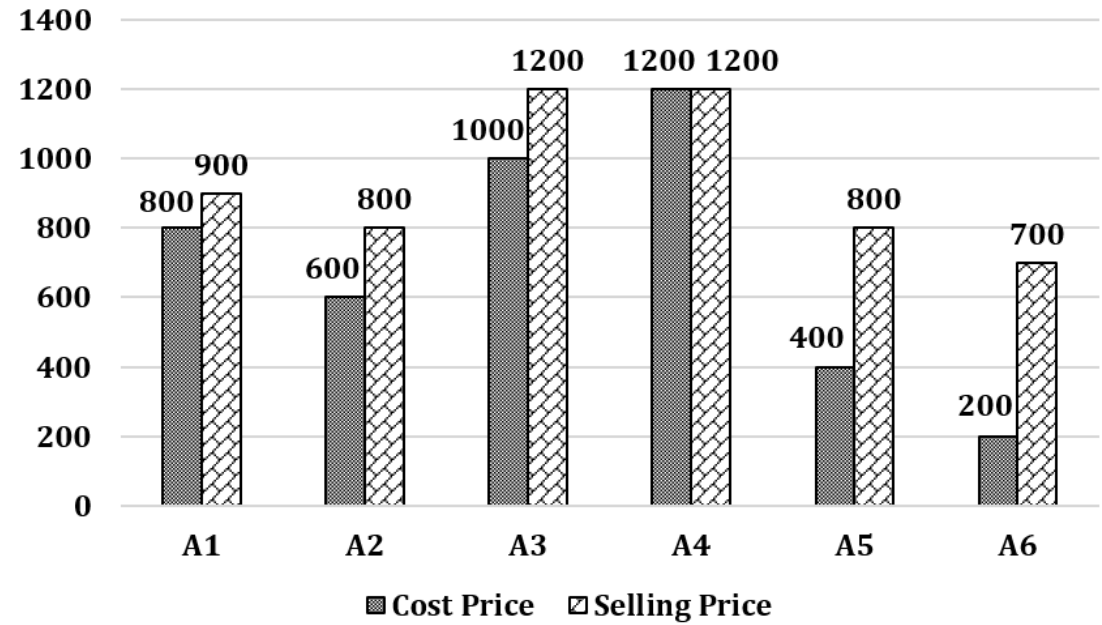
$$\text{Total girls} = 800 + 100 + 200 + 500 + 700 + 600 + 400 = 3300$$

$$\text{The difference} = 3500 - 3300 = 200.$$

Conclusion: Statement III is correct because the difference is 200.

Final Answer: Statement I, Statement II and Statement III are correct.

Q.29 The bar graph given below shows the cost price and selling price of 6 articles.



Profit = Selling price - Cost price
P1 = The average value of profit of all 6 articles.
P2 = The difference between total cost price and total selling price of all 6 articles.
What is the value of (P2/P1)?

- A. 3
- B. 6
- C. 4
- D. 2

Answer: B

Sol: Solution:

Profit = SP – CP

900 - 800 = 100

600 - 400 = 200

1200 - 1000 = 200

800 - 600 = 200

1200 - 1200 = 0

1000 - 700 = 300

Total profit = (100) + (200) + (200) + (200) + 0 + (300)

= 1000

Total profit = 1000

$P1 = \frac{1000}{6} = \frac{500}{3}$

Total CP = 900 + 600 + 1200 + 800 + 1200 + 1000

= 5700

Total SP = 800 + 400 + 1000 + 600 + 1200 + 700

= 4700

P2 = Total CP – Total SP = 5700 – 4700 = 1000

$P1 = \frac{500}{3}$

P2 = 1000

$$\frac{P_2}{P_1} = \frac{1000}{\left(\frac{500}{3}\right)} = 1000 \times \left(\frac{3}{500}\right) = 6$$

Q.30 The current population of a town is 14,680. It increases by 25% and 70% in two successive years but decreases by 20% in the third year. What is the population of the town at the end of the third year?

- A. 24,956
- B. 24,960
- C. 24,953
- D. 24,958

Answer: A

Sol: Given:

Present population = 14,680

1st year increase = 25%

2nd year increase = 70%

3rd year decrease = 20%

Find population at end of 3rd year.

Formula Used:

Population after change = Initial \times (1 \pm rate%)

Solution:

$$\text{Changed Population} = 14680 \times \left(1 + \frac{25}{100}\right) \times \left(1 + \frac{70}{100}\right) \times \left(1 - \frac{20}{100}\right)$$

$$= 14680 \times \frac{125}{100} \times \frac{170}{100} \times \frac{80}{100}$$

$$= 14680 \times \frac{5}{4} \times \frac{17}{10} \times \frac{4}{5}$$

$$= 1468 \times 17$$

$$= 24956$$

Q.31 If a, b and c are positive numbers such that $(a^2 + b^2) : (b^2 + c^2) : (c^2 + a^2) = 34 : 61 : 45$, then $a : b : c = ?$

- A. 6 : 3 : 5
- B. 5 : 3 : 6
- C. 3 : 5 : 6
- D. 3 : 6 : 5

Answer: C

Sol: Given :

$$(a^2 + b^2) : (b^2 + c^2) : (c^2 + a^2) = 34 : 61 : 45$$

Solution :

From

$a^2 + b^2 = 34$

$b^2 + c^2 = 61$

$c^2 + a^2 = 45$

Add (1) and (3):
 $(a^2 + b^2) + (c^2 + a^2) = 34 + 45 = 79$
 $2a^2 + (b^2 + c^2) = 79$

But from (2), $(b^2 + c^2 = 61)$, so:
 $2a^2 + 61 = 79 \implies 2a^2 = 18 \implies a^2 = 9 \implies a = 3$

From (1):
 $9 + b^2 = 34 \implies b^2 = 25 \implies b = 5$

From (3):
 $c^2 + 9 = 45 \implies c^2 = 36 \implies c = 6$

So,
 $a : b : c = 3 : 5 : 6$

Q.32 The average of first 155 even numbers is

- A. 156
- B. 155.5
- C. 157
- D. 156.5

Answer: A

Sol: Given:

We need the average of the first 155 even numbers.

Even numbers sequence: 2, 4, 6, ..., 2n.

Formula Used:

Sum of first n even numbers = n(n + 1)

Average = $\frac{n(n + 1)}{n} = n + 1$

Solution:

Here, n = 155

Average = 155 + 1 = 156

Q.33 A sum, when invested at 10% simple interest per annum, amounts to ₹3120 after 3 years. What is the simple interest (in ₹) on the same sum at the same rate of interest in 1 year?

- A. 480
- B. 120
- C. 960
- D. 240

Answer: D

Sol: Given:

Amount after 3 years at 10% SI = ₹3120

Time = 3 years

Rate = 10%

Need: Simple Interest for 1 year on the same principal.

Formula Used:

Amount = P + SI

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

Solution:

Let P be the principal.

$$3120 = P + \frac{P \times 3 \times 10}{100}$$

$$3120 = P + \frac{30P}{100}$$

$$3120 = \frac{13P}{10}$$

$$P = ₹2400$$

SI for 1 year at 10%:

$$= \frac{2400 \times 10 \times 1}{100} = ₹240$$

- Q.34** An amount of ₹50,000 is invested at an annual interest rate of 4%, compounded half yearly. What will be the total amount after 2 years (round up to two decimal places)?
- A. ₹52,121.61
 - B. ₹55,000
 - C. ₹54,121.61
 - D. ₹53,120

Answer: C

Sol: Given:

Principal , P = ₹50,000

Annual interest rate (R = 4%)

Compounded half-yearly

Time = 2 years

Need: Total amount to 2 decimal places

Formula Used:

$$A = P \left(1 + \frac{R/2}{100} \right)^{2T}$$

Solution:

Half-yearly rate = $\frac{4}{2} = 2\%$

Number of compounding periods = $2 \times 2 = 4$

$A = 50000 \left(1 + \frac{2}{100}\right)^4$

$= 50000(1.02)^4$

$= 50000 \times 1.08243216 = ₹54,121.61(\text{approx})$

- Q.35** An article marked at ₹560 is sold at 20% discount. If there is a profit of 40%, then what is the cost price (in ₹) of the article?
- A. 320
 - B. 400
 - C. 350
 - D. 280

Answer: A

Sol: Given:

Marked Price (MP) = ₹560

Discount = 20%

Profit = 40%

Formula Used:

Selling Price (SP) = Marked Price (MP) $\times \left(1 - \frac{\text{Discount}\%}{100}\right)$

Selling Price (SP) = Cost Price (CP) $\times \left(1 + \frac{\text{Profit}\%}{100}\right)$

Solution:

Let Cost Price = CP

Selling Price (SP):

$SP = MP \times \left(1 - \frac{20}{100}\right)$
 $SP = 560 \times 0.80 = 448$

$SP = CP \times \left(1 + \frac{40}{100}\right)$

$448 = 1.4 \text{ CP}$
 $CP = \frac{448}{1.4} = 320$

- Q.36** A sum of ₹23,808 is divided between A, B, C and D such that the ratio of the shares of A and B is 8 : 9, that of B and C is 3 : 5, and that of C and D is 1 : 2. What is the share of B?
- A. ₹3,456
 - B. ₹3,264
 - C. ₹3,072
 - D. ₹3,546

Answer: A

Sol: Given:

A:B = 8:9, B:C = 3:5, C:D = 1:2
Total amount = ₹23,808

Solution:

Equalize ratios

From (A : B = 8 : 9), let
A=8k, B=9k

From (B:C=3:5), write
B = 3m, C = 5m

Equate B:
9k = 3m

m = 3k

Thus,
C = 5m = 5(3k) =15k

From C : D = 1 : 2 , write
C = 1n,D = 2n

Equate C:
1n = 15k

n = 15k

Thus,
D = 2n = 30k
Sum all shares

$$A = 8k, B = 9k, C = 15k, D = 30k$$

Total:
8k + 9k + 15k + 30k = 62k

Given:
62k = 23808
 $k = \frac{23808}{62} = 384$
B's share

$$B = 9k = 9 \times 384 = 3456$$

- Q.37** In a 1547 m race, Arjun reaches in 78 seconds, while Karan reaches the finish point in 91 seconds. By how much distance does Arjun beat Karan?
- A. 221 m
B. 231 m
C. 245 m
D. 220 m

Answer: A

Sol: Given:

In a 1547 m race, Arjun reaches in 78 seconds, while Karan reaches the finish point in 91 seconds

Formula Used:

Speed = Distance/Time

Solution:

Speed of Karan = $\frac{1547}{91}$ = 17m/s
Arjun completed the race in 78 secs, but Karan is still running for next 13 secs then,
According to the question,
Distance travelled by Karan in next 13 seconds = 17 m/s × 13 s = 221m
∴ Arjun beat Karan by 221 m.

- Q.38** If 100 : y :: y : 36, find the positive value of y.
- A. 60
 - B. 58
 - C. 69
 - D. 52

Answer: A

Sol: Given:
Proportion:
100 : y :: y : 36

Need the positive value of y.

Concept Used:

Property of proportions:

$$\frac{a}{b} = \frac{c}{d} \Rightarrow ad = bc$$

Solution:

$$100 : y :: y : 36$$

$$\frac{100}{y} = \frac{y}{36}$$

$$100 \times 36 = y \times y$$

$$y^2 = 3600$$

$$y = \sqrt{3600} = 60$$

- Q.39** Choose the options that are similar to the address format.
- I. 98, Maple Avenue, New York, NY 10001
 - II. Maple Avenue, New York, NY 10001, 98
 - III. 89, New York, NY 10001, Maple Avenue
 - IV. New York, YN 10001, Maple Avenue, 98
- A. Only I and II
 - B. Only II and III
 - C. Only I and IV
 - D. Only III and IV

Answer: A

Sol: Given:
I. 98, Maple Avenue, New York, NY 10001
II. Maple Avenue, New York, NY 10001, 98
III. 89, New York, NY 10001, Maple Avenue
IV. New York, NY 10001, Maple Avenue, 98

Logic:
The correct address format typically follows: house number → street name → city → state → postal code.
In options I and II, the house number, street name, city, state, and postal code are in the correct order or easily recognizable despite minor rearrangement.

Facts & Explanation (Operation-wise):

- I. "98, Maple Avenue, New York, NY 10001" - Correct format: house number → street → city → state → postal code.
- II. "Maple Avenue, New York, NY 10001, 98" - While the house number is placed last, the address components are in a recognizable sequence.

Final Answer: (A) Only I and II

Final Correct Option: (A)

Q.40 Choose the options that are similar to the address format.

- I. 321, Birch Avenue, San Francisco, CA 94101
- II. Birich Avenue, San Francisco, CA 94101, 321
- III. San Francisco, CA 94101, Birch Avenue, 321
- IV. 321, Sen Francisco, CA 94101, Birch Avenue

- A. Only I and II
- B. Only II and III
- C. Only I and III
- D. Only III and IV

Answer: C

Sol: Given:

- I. 321, Birch Avenue, San Francisco, CA 94101
- II. Birich Avenue, San Francisco, CA 94101, 321
- III. San Francisco, CA 94101, Birch Avenue, 321
- IV. 321, Sen Francisco, CA 94101, Birch Avenue

Logic:

The correct address format typically follows: house number → street name → city → state → postal code.

I is in the correct format: house number → street → city → state → postal code.

III is a valid format despite rearranging the components: city → state → postal code → street → house number.

II has a misspelling of the street name ("Birich Avenue" instead of "Birch Avenue"), making it incorrect.

IV has a misspelling of the city name ("Sen Francisco" instead of "San Francisco"), making it incorrect.

Facts & Explanation:

- I. "321, Birch Avenue, San Francisco, CA 94101" - Correct format: house number → street → city → state → postal code.
- III. "San Francisco, CA 94101, Birch Avenue, 321" - While the sequence is altered, it remains recognizable: city → state → postal code → street → house number.

Final Answer: (C) Only I and III

Final Correct Option: (C)

Q.41 Which type of network is created when we connect two smartphones to transfer photos through Bluetooth?

- A. WAN
- B. PAN
- C. LAN
- D. MAN

Answer: B

Sol: When **Bluetooth** is used between **two devices**, it forms a **Personal Area Network (PAN)**. This network covers a **very short range**.

Important Key Points:

- 1. **PAN** operates in **short range** (typically within 10 meters).
- 2. Used between **phones, earbuds, laptops, smartwatches**.
- 3. **Bluetooth** is the most common PAN technology.
- 4. PAN is **device-to-device communication**.

Knowledge Booster:

- 1. **LAN** covers **buildings or offices**.
- 2. **MAN** covers a **city**.
- 3. **WAN** covers **countries or continents**.

Q.42 The term gigabyte refers to

- A. 1024 bytes
- B. 1024 kilobytes
- C. 1024 megabytes
- D. None of the above

Answer: C

- Sol:** A **gigabyte (GB)** refers to 1024 **megabytes (MB)**, which is the standard unit of data storage in computing.
- Important Key Points:**
1. **Gigabyte (GB):** A gigabyte is a measurement used to quantify digital storage, and it consists of 1024 megabytes.
 2. **Data Size Units:** The hierarchy of storage units goes from bytes to kilobytes (KB), megabytes (MB), gigabytes (GB), and so on, with each unit being 1024 times the previous one.
 3. **Common Usage:** A gigabyte is commonly used to measure file sizes, storage capacity, and data transfer limits in digital systems.

- Q.43** SPAM in a system (e-mail) is
- A. A message distributed indiscriminately
 - B. A search engine
 - C. An activity of the user
 - D. A command initiated by the sender

Answer: A

- Sol:** **SPAM** refers to **unwanted** or **unsolicited messages** sent to a large number of **users** without their **permission**. These messages are usually delivered to promote **products, services**, or to **mislead users**, and they are sent **indiscriminately** without regard for the interests of the recipients.
- Important Key Points:**
1. **SPAM** means **bulk unwanted emails**.
 2. It mainly aims for **advertising** or **fraudulent intentions**.
 3. The **receiver** does not request or authorize these messages.
 4. **Anti spam filters** help prevent such unwanted emails.
- Knowledge Booster:**
- **Option b** is incorrect because a **search engine** is used to find information on the internet.
 - **Option c** is incorrect because **SPAM** is not performed by the email **user**.
 - **Option d** is incorrect because **SPAM** is not a **command** but **unsolicited bulk messaging**.

- Q.44** Google, Bing and Yahoo are examples of ____.
- A. Search Engines
 - B. Mobile Applications
 - C. Software
 - D. Firewalls

Answer: A

- Sol:** **Google, Bing**, and **Yahoo** are examples of **search engines**, which help users find information on the internet by indexing websites and returning results based on keywords. When a user enters a query, these platforms use their databases and algorithms to display the most relevant pages from the web.
- Important Key Points:**
1. A **search engine** is a software system designed to **search information** on the World Wide Web.
 2. It typically consists of three components: a **crawler**, an **indexer**, and a **query processor**.
 3. Search engines rank and display results using various algorithms based on relevance, popularity, and content quality.

- Knowledge Booster:**
- Mobile applications are software programs designed for smartphones or tablets; search engines may have apps but are not themselves mobile apps.
 - Software is a broader term that includes search engines, but the question asks for a specific type, making "software" an incomplete answer.
 - Firewalls are network security systems that monitor and control incoming and outgoing network traffic—they are unrelated to searching content on the web.

- Q.45** Which of the following is the keyboard shortcut to save an MS Excel workbook?
- A. Ctrl + K
 - B. Alt + S
 - C. Ctrl + S

D. Tab + S

Answer: C

- Sol:** The correct answer is (c) Ctrl + S.
- **Ctrl + S** is the standard keyboard shortcut used across most Microsoft applications, including MS Excel, to save the current workbook.
 - This shortcut allows users to quickly save their work without needing to navigate through the menu options.
 - Pressing **Ctrl + S** will either save an existing workbook or prompt to save the file if it hasn't been saved before.

Information Booster:

- **Ctrl + S** works not only in MS Excel but also in other programs like MS Word, MS PowerPoint, and more.
- **Alt + S** and **Ctrl + K** are not shortcuts for saving in Excel; they are used for different functions like inserting links and accessing menu options.
- **Tab + S** is not a valid shortcut in Excel.

Additional Information:

- Option A : **Ctrl + K** is used to insert hyperlinks.
- Option : **Alt + S** does not perform the save function in Excel.
- Option D : **Tab + S** is not a recognized shortcut in MS Excel.

Q.46 A computer is an electronic device that accepts data as an _____ device.

- A. Processing
- B. Input + Output
- C. Output
- D. Input

Answer: D

Sol: A **computer** is defined as an **electronic device** that:

- **Accepts data** (as **input**),
- **Processes it**, and
- **Generates output** based on the processing.

So, when it accepts data, it acts as an **input device** — receiving instructions or data from the user or another system for further processing.

Important Key Points:

1. The **input stage** is the **first step** in the data processing cycle of a computer.
2. Devices like **keyboard, mouse, scanner** are examples of **input tools**.
3. The computer **does not output data** unless it has first **accepted and processed input**.
4. The **input → process → output** model is fundamental to computer operation.
5. Input stage includes **data acquisition, command reception**, and **signal interpretation**.

Knowledge Booster:

- **(a) Processing:** Happens **after input**, not during data acceptance.
- **(b) Input + Output:** Represents overall functionality, not the **specific role while accepting data**.
- **(c) Output:** Refers to the final result after data processing — not the data acceptance phase.

Q.47 Which of the following is not an example of an Operating System?

- A. Linux
- B. macOS
- C. Android
- D. Microsoft Office

Answer: D

Sol: An **Operating System (OS)** is software that manages computer hardware and software resources and provides services for application programs. Microsoft Office is **not** an operating system—it is a **productivity software suite** that runs **on** an operating system such as Windows or macOS. In contrast, Linux, macOS, and Android are all well-known operating systems.

Important Key Points:

- 1. Operating Systems control hardware functions, memory, file management, and user interaction.
- 2. Linux is an open-source OS used in servers, desktops, and embedded systems.
- 3. macOS is Apple's desktop operating system.
- 4. Android is an OS primarily for mobile and tablet devices, based on the Linux kernel.

Knowledge Booster:

- Microsoft Office includes applications like Word, Excel, and PowerPoint, which require an operating system to function.
- Linux, macOS, and Android each provide a platform for running other software, which is the core function of an operating system.

Q.48 Which of the following is an example of cybercrime?

- A. Hacking into someone's Social media account
- B. Writing code for a new application
- C. Hosting an online Seminar
- D. Downloading apps From verified stores

Answer: A

Sol: Hacking into someone's social media account is a cybercrime because it involves unauthorized access to another person's private digital space without their consent. It is illegal and punishable under cyber laws.

Important Key Points:

- 1. **Hacking** means gaining unauthorized access to someone's digital account or system.
- 2. **Legal Action** can be taken under Section 66 of the IT Act in India.
- 3. **Cybercrime Example:** Social media hacking is a common form of identity theft or misuse of personal information.

Knowledge Booster:

- **Writing code for a new application** – This is a legal and creative activity done by developers; it's not a crime.
- **Hosting an online seminar** – This is a professional or educational activity using digital platforms, and it promotes knowledge sharing.
- **Downloading apps from verified stores** – This is a safe and recommended practice for mobile users; not related to any cybercrime.

Q.49 How many 'function keys' are typically present on a standard computer keyboard?

- A. 10
- B. 11
- C. 12
- D. 13

Answer: C

Sol: The correct answer is **12**. A standard computer keyboard typically includes **12 function keys**, labeled **F1 to F12**, positioned at the top of the keyboard.

Important Key Points:

- 1. **Function keys (F1–F12)** provide shortcuts for system commands and software functions.
- 2. Used for tasks like **refreshing pages (F5)**, **opening help menus (F1)**, and **controlling media playback**.

3. Some keyboards allow customization of function keys for specific **macros and commands**.

Knowledge Booster:

- **10 function keys** was a feature in older computer models but is not standard today.
- **11 function keys** are uncommon, as function key ranges are usually in multiples of 12.
- **13 function keys** do not exist on a typical keyboard; the standard remains at **F1 to F12**.

Q.50 MS-Word is an example of ____.

- A. An Input device
- B. Application software
- C. A processing device
- D. An Operating System

Answer: B

Sol: Microsoft Word (MS-Word) is categorized as application software. Application software includes programs specifically designed to perform tasks for users, and MS-Word specializes in word processing—allowing users to create, edit, format, and manage textual documents effectively.

Important Key Points:

1. **Application software** consists of programs tailored for specific user tasks, and MS-Word precisely serves as a word processor.
2. MS-Word facilitates creating text-based documents, providing tools for formatting, editing, and publishing.
3. Application software contrasts with system software (such as operating systems), which manages hardware and system resources.
4. Other examples of application software include spreadsheets (MS-Excel), databases (MS-Access), and presentation software (MS-PowerPoint).
5. Application software directly enhances productivity and addresses specific needs of users.

Knowledge Booster:

- **Input devices** (keyboard, mouse) feed data into a computer, unlike software, which processes or manages data.
- **Processing devices** (CPU) execute operations and instructions physically within the hardware, distinct from software applications.
- **Operating Systems** (Windows, Linux, MacOS) manage system resources, provide user interfaces, and allow applications like MS-Word to operate but are themselves not considered application software.

