Bihar Jeevika (Common Subjects) MBT Based on 27th November 1st shift

Q.1 The Simon Commission was sent to India in _____.

A. 1928
B. 1919
C. 1938
D. 1918

Answer: A

Sol: **The correct answer is (A) 1928**

Explanation:

- The **Simon Commission** was sent to India by the British Government in **1928**.
- It was officially known as the **Indian Statutory Commission**, headed by **Sir John Simon**.
- The main purpose of the Commission was to **review the working of the Government of India Act, 1919** and suggest constitutional reforms.

Why the Commission Was Opposed:

- All seven members of the Commission were **British** — **no Indian was included**, which deeply angered Indians.
- This led to nationwide protests with the slogan:
  "Simon Go Back!"
- During one of the protests in Lahore, **Lala Lajpat Rai** was severely injured in a lathi-charge and later died.

Information Booster:

- **Year of visit:** 1928
- **Members:** 7 (all British)
- **Chairman:** Sir John Simon
- The Commission led to the formation of the **Nehru Report (1928)** as a counterproposal by Indian leaders.
- Ultimately contributed to the passing of the **Government of India Act, 1935**, the most comprehensive Act before independence.

Q.2 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.3 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.4 **Who is the first Woman Nobel Prize Winner in literature?**

A. Grazia Deledda
B. Selma Lagerlof
C. Sigrid Undest
D. Gabriela Mistral

Answer: B

Sol: **The correct answer is (B) Selma Lagerlöf.**

Explanation:

Selma Lagerlöf, a Swedish author, was the first woman to be awarded the **Nobel Prize in Literature** in **1909**. She was recognized for her exceptional literary work, which includes her famous novel *The Wonderful Adventures of Nils*.

Information Booster:

- Selma Lagerlöf was a pioneer in Swedish literature, and her works often dealt with themes of nature, Swedish folklore, and human compassion.
- She was not only the first woman to win the Nobel Prize in Literature but also one of the first women to be elected to the Swedish Academy.

Additional Information:

- **(A) Grazia Deledda**: Grazia Deledda, an Italian writer, won the Nobel Prize in Literature in **1926** but was not the first woman laureate.
- **(C) Sigrid Undset**: Sigrid Undset, a Norwegian author, won the Nobel Prize in Literature in **1928**.
- **(D) Gabriela Mistral**: Gabriela Mistral, a Chilean poet, was awarded the Nobel Prize in Literature in **1945** but was not the first woman laureate.

Q.5 **The Jnanpith Award considers literature written in how many languages?**

A. Only 2
B. Less than 15
C. Less than 5
D. More than 20

Answer: D

Sol: **Correct Answer:** D

Explanation:

• The Jnanpith Award is given for outstanding contribution to literature written in **any of the 22 languages** listed in the **Eighth Schedule** of the Indian Constitution.
• It is the **highest literary award** in India, instituted in **1961** by the **Bharatiya Jnanpith Trust**.
• The award recognizes an author's overall contribution to literature, not a single work.

Information Booster:

• The first Jnanpith Award was conferred in **1965** to **G. Sankara Kurup** (Malayalam).
• The award includes a **cash prize of ₹11 lakh**, a **plaque**, and a **citation**.
• Authors from **Hindi** and **Kannada** languages have received the award the most times.
• Recent recipients include **Damodar Mauzo (Konkani, 2022)** and **Om Prakash Valmiki (Posthumous Recognition)**.
• Managed by **Bharatiya Jnanpith Trust**, founded by the **Sahu Jain family** (owners of The Times of India group).

Q.6 **Which woman scientist received the Padma Shri, 2022, in the field of Science and Engineering?**

A. Dr. Sanghamitra Bandyopadhyay
B. Dr. Lata Desai
C. Dr. Najma Akhtar
D. Dr. Madhuri Barthwal

Answer: A

Sol: The correct answer is (a) Dr. Sanghamitra Bandyopadhyay

Explanation:
• **Dr. Sanghamitra Bandyopadhyay** is an acclaimed Indian computer scientist and expert in machine intelligence.
• She was conferred with the **Padma Shri in 2022** for her notable contributions in the field of **Science and Engineering**, particularly in **computational biology, machine learning, and artificial intelligence**.
• Her work has had a significant impact on areas like algorithmic optimization and its application in **birth data analysis**, leading to the identification of potential markers for diseases.
• At the time of receiving the award, she was the **Director of the Indian Statistical Institute (ISI), Kolkata**, a position she was the first woman to hold.

Information Booster:
• Dr. Sanghamitra Bandyopadhyay's research interests also include evolutionary computation, pattern recognition, and bioinformatics.
• In addition to the Padma Shri, she has received several other prestigious awards, including the **Shanti Swarup Bhatnagar Prize** in Engineering Science and the **Infosys Prize** in the Engineering and Computer Science category.
• She is also a member of the **Science, Technology and Innovation Advisory Council** of the Prime Minister of India (PM-STIAC).

Additional Knowledge:
(b) Dr. Lata Desai: Dr. Lata Desai received the Padma Shri in 2022 in the field of **Medicine**. She is a social worker and doctor known for providing health services to rural and tribal communities in Gujarat through her work at **SEWA Rural**.
(c) Dr. Najma Akhtar: Prof. Najma Akhtar was awarded the Padma Shri in 2022 for her services in the field of **Literature and Education**. She is known as the **first female Vice-Chancellor of Jamia Millia Islamia** (JMI).
(d) Dr. Madhuri Barthwal: Dr. Madhuri Barthwal was awarded the Padma Shri in 2022 for her contributions to the field of **Art**. She is a folk singer from Uttarakhand who has worked to promote and preserve the folk music of the region.

Q.7 **Pradhan Mantri Gramin Awas Yojana was earlier known as-**

A. Indira Awas Yojana
B. Nehru Awas Yojana
C. Rajiv Awas Yojana
D. Rashtriya Awas Yojana

Answer: A

Sol: The correct answer is **(a) Indira Awas Yojana**

Explanation:

- The **Pradhan Mantri Gramin Awas Yojana (PMAY-G)** is a restructured version of the **Indira Awas Yojana (IAY)**.
- The IAY was launched in **1985** by the Government of India as part of the then-Prime Minister Rajiv Gandhi's vision to provide housing for the rural poor.

- The IAY was restructured and renamed as PMAY-G on **April 1, 2016**, to address previous deficiencies and provide permanent (pucca) houses to all homeless rural families and those living in dilapidated houses.

Information Booster:

- PMAY-G is a flagship social welfare program of the Central Government of India.
- It aims to provide financial assistance to eligible rural households for the construction of pucca houses.
- Beneficiaries are identified using the housing deprivation parameters of the **Socio-Economic Caste Census (SECC) 2011** data, and the list is validated by the **Gram Sabha**.
- The funding for PMAY-G is shared between the Central and State Governments.

Additional Knowledge:

Nehru Awas Yojana (Option b)

- There is no prominent central government housing scheme known as Nehru Awas Yojana. The option is incorrect.

Rajiv Awas Yojana (Option c)

- The Rajiv Awas Yojana was a central government scheme launched in 2011 to address the issue of urban slums. It aimed to make India "slum-free" and was later subsumed under the **Pradhan Mantri Awas Yojana - Urban (PMAY-U)**.

Rashtriya Awas Yojana (Option d)

- This is not the official name of any central government housing scheme. The option is incorrect.

Q.8 Under which of the following schemes, do the designated states procure, store and issue food grains under the Targeted Public Distribution System?

A. Centralised Procurement Scheme
B. Decentralised Procurement Scheme
C. Minimum Support Price
D. Price Stabilization Fund

Answer: B

Sol: The correct answer is (b) **Decentralised Procurement Scheme**.
Explanation:
. Under the **Decentralised Procurement Scheme (DCP)**, the designated State Governments or their agencies directly undertake the procurement, storage, and distribution of food grains.
. This is done for the **Targeted Public Distribution System (TPDS)** and other welfare schemes, based on allocations by the Central Government.
. The scheme was introduced in **1997-98** to enhance the efficiency of procurement and PDS, encourage local procurement, and reduce transportation costs.
. Any surplus food grains procured by the DCP states are handed over to the Food Corporation of India (FCI) for the central pool.
. Conversely, any deficit in food grains required by the state is met by the FCI.

Information Booster:
. The **Central Government** reimburses the expenditure incurred by the State Governments on procurement, storage, and distribution under the DCP scheme.
. DCP also allows for the procurement of food grains that are more suited to the local taste of the region.
. States adopt the DCP model based on their infrastructure and resources.

Additional Knowledge:
(a) **Centralised Procurement Scheme**: Under this system, procurement is carried out by the **Food Corporation of India (FCI)** or state agencies that then hand over the stocks to the FCI for storage and distribution.
. The FCI handles the subsequent issue of these stocks against central government allocations.

(c) **Minimum Support Price (MSP)**: This is a **guaranteed price** fixed by the government for certain crops.
. It is the price at which the government offers to buy crops from farmers to protect them against a sharp fall in prices.
. MSP is an element of the procurement process, not the procurement and distribution system itself.

(d) **Price Stabilization Fund (PSF)**: This fund is used to **intervene in the market to stabilise the prices of essential commodities**, especially agricultural and horticultural ones like pulses and onions.
. It is used to maintain a buffer stock and ensure availability at affordable prices, but it is a distinct mechanism from the TPDS procurement process.

Q.9 **Which of the following statements about the 'Jeevika Scheme' is true?**

A. Jeevika project is supported by IMF
B. Its aim is to empower rural poor
C. Jeevika project started in 2022
D. More than one of the above

Answer: B

Sol: **Correct Answer: (B) Its aim is to empower rural poor**
Explanation:
The Jeevika Scheme, implemented by the Bihar Rural Livelihoods Promotion Society (BRLPS), aims to empower rural poor women by promoting self-help groups (SHGs). The scheme helps in enhancing their economic status and improving their access to financial resources and opportunities.
Information Booster:
→ Jeevika helps rural women gain financial independence by forming self-help groups.
→ It provides women with access to micro-credit and savings programs.
→ The scheme focuses on improving livelihoods and promoting inclusive development in rural areas.
→ It supports activities such as animal husbandry, agriculture, and small-scale enterprises.
→ The scheme is aligned with the National Rural Livelihoods Mission (NRLM), which works to eliminate rural poverty.
→ Jeevika provides support in capacity building and entrepreneurship for women.
→ The scheme aims to enhance social inclusion and economic resilience.

Q.10 **Which organization was founded in 1945 to promote international peace and security?**

A. ASEAN
B. SAARC
C. United Nations
D. OPEC

Answer: C

Sol:
Correct Answer: (C) United Nations
Explanation:
→ The United Nations (UN) was founded in 1945 after the end of World War II, with the primary aim of promoting international peace and security.
→ The UN was established to prevent future conflicts, promote diplomacy, and provide a platform for dialogue among countries.
→ The UN Charter was signed by 51 countries in San Francisco on October 24, 1945, and today, the UN has 193 member states.
→ The United Nations Security Council is the most prominent body within the UN, responsible for maintaining peace and authorizing interventions in conflict zones.
Information Booster:
→ The UN was a successor to the League of Nations, which failed to prevent World War II.
→ The United Nations is made up of various specialized agencies such as the WHO (World Health Organization), UNESCO (United Nations Educational, Scientific and Cultural Organization), and UNICEF (United Nations Children's Fund).
→ UN Peacekeeping Missions have been deployed in many conflict zones around the world, including in countries like Sudan, Bosnia, and Rwanda.
Additional Information (Other Options):
Option (A) ASEAN: The Association of Southeast Asian Nations was founded in 1967 to promote political and economic cooperation among Southeast Asian countries.
Option (B): SAARC: The South Asian Association for Regional Cooperation was established in 1985 to promote regional cooperation among South Asian countries.
Option (D) OPEC: The Organization of the Petroleum Exporting Countries was founded in 1960 to manage the production and export of oil.

Q.11 **Which organization hosted and coordinated the first International Day of Light events worldwide, including at its headquarters?**

A. United Nations Development Programme (UNDP)
B. World Health Organization (WHO)
C. United Nations Educational, Scientific and Cultural Organization (UNESCO)
D. International Telecommunication Union (ITU)

Answer: C

Sol: The correct answer is option (c) **United Nations Educational, Scientific and Cultural Organization (UNESCO)**
Explanation
The **International Day of Light (IDL)** is coordinated and hosted by the **United Nations Educational, Scientific and Cultural Organization (UNESCO)**. The first celebration, held on **May 16, 2018**, featured major events at **UNESCO's Headquarters in Paris** as well as global celebrations in academic institutions, science centers, and cultural venues.

UNESCO played a central role in both initiating the International Year of Light (2015) and transitioning it into an annual observance with the establishment of IDL. The organization's mandate to foster international collaboration in science, education, and culture made it the ideal institution to lead a global campaign promoting light-based technologies and their impact on sustainable development, innovation, and inclusion.
The events included scientific discussions, exhibitions, outreach programs, and performances, emphasizing how light science contributes to critical sectors like energy, health, communication, and agriculture. UNESCO's leadership in this initiative reflects its broader mission to use science as a tool for peace and development.

Information Booster

· **UNESCO** coordinated the **International Day of Light (IDL)**.
· The first major IDL event was held at **UNESCO Headquarters in Paris**.
· UNESCO promotes global collaboration in **science, education, and culture**.
· IDL focuses on light's role in achieving the **UN Sustainable Development Goals (SDGs)**.
· Events included educational outreach, exhibitions, and interdisciplinary panels.
· UNESCO also led the **International Year of Light 2015**, the precursor to IDL.

Additional Knowledge

(a) United Nations Development Programme (UNDP) – While UNDP works on sustainable development and poverty reduction, it does not manage or organize the International Day of Light. Its efforts are more aligned with economic development and resilience programs.
(b) World Health Organization (WHO) – WHO is responsible for global health governance and pandemic response. Although light-based technologies (e.g., UV disinfection, laser surgery) are relevant in health, WHO is not the organizing body for IDL.
(c) United Nations Educational, Scientific and Cultural Organization (UNESCO) – This is the correct answer. UNESCO's role in promoting international scientific collaboration and educational outreach made it the natural coordinator for IDL. It worked with global partners including scientific societies, universities, NGOs, and the private sector to make the first IDL a success in 2018.
(d) International Telecommunication Union (ITU) – ITU is a specialized UN agency focusing on global ICT and telecom regulation. While light plays a role in optical fiber communication—a domain of ITU—it does not coordinate the IDL.

Q.12 **Which organization has announced the installation of QR Code Sign Boards across National Highways to improve commuter convenience and transparency?**

A. Indian Road Congress
B. National Highways Authority of India (NHAI)
C. Ministry of Road Transport and Highways
D. National Informatics Centre (NIC)

Answer: B

Sol: The correct answer is (b) **National Highways Authority of India (NHAI)**.
Explanation:
• NHAI has launched an initiative to install **QR code-based signboards** along National Highways to enhance transparency, road safety, and commuter convenience.
• These boards will provide **project-specific information** such as highway number, project length, maintenance details, and emergency contacts through a simple QR code scan.
• The project aligns with the government's goal of promoting **smart infrastructure** and **digital governance** under the "Ease of Commuting" initiative.

Information Booster:

• **NHAI** was established in **1988** under the **National Highways Authority of India Act**.
• It functions under the **Ministry of Road Transport and Highways (MoRTH)**.
• NHAI manages over **1.45 lakh km** of the National Highway network.
• The **1033 helpline** is India's national emergency number for highway-related assistance.
• Other digital initiatives by NHAI include **FASTag**, **One Nation, One FASTag**, and the **INAM-Pro+ platform**

Q.13 **Which indigenous technology is incorporated for spacecraft navigation in the SpaDeX mission in 2025?**

A. Magnetosphere scanning system
B. GNSS-based Relative Orbit Determination and Propagation (RODP) processor
C. AI-driven self-learning Orbit Relative Orbit Determination and Propagation (RODP) processor
D. Hybrid rocket propulsion

Answer: B

Sol:

The correct answer is (b) GNSS-based Relative Orbit Determination and Propagation (RODP) processor
Explanation:
• The SpaDeX (Space Docking Experiment) mission by ISRO in 2025 successfully demonstrated autonomous in-orbit docking technology.
• For high-precision spacecraft navigation during the rendezvous and docking phases, ISRO developed an indigenous GNSS-based Relative Orbit

Determination and Propagation (RODP) processor.
• The system uses Global Navigation Satellite System (GNSS) data to calculate the relative position and velocity between two spacecraft (Chaser and Target).
• This enabled safe, autonomous maneuvering and docking with centimeter-level accuracy.
• The RODP processor is a major leap in ISRO's capability toward future on-orbit servicing, refueling, and modular space station missions.

Information Booster:

• SpaDeX is a foundational step toward India's ambitions for long-duration human spaceflight and orbital infrastructure.
• Accurate relative navigation is vital for docking, collision avoidance, and precision formation flying.

Additional Knowledge:

Magnetosphere scanning system (Option a)
• Related to studying Earth's magnetic environment; not used for orbital navigation.
AI-driven self-learning RODP processor (Option c)
• No official confirmation exists of an AI-based self-learning system being integrated into SpaDeX in 2025.
Hybrid rocket propulsion (Option d)
• Pertains to launch vehicle propulsion, not orbital navigation, and is unrelated to docking systems.

Q.14 Which type of engine is the Indian Space Research Organisation working on for its future launch vehicles in 2025?

A. Hydrogen-Peroxide Engine
B. Hybrid-Solid Engine
C. Semicryogenic Engine
D. Electric Propulsion Engine

Answer: C

Sol: The correct answer is (c) Semicryogenic Engine

Explanation:

• In 2025, the Indian Space Research Organisation (ISRO) is actively developing a Semicryogenic Engine known as SE2000.

• This engine will replace the liquid core stage of the LVM3 and power the booster stages of the Next Generation Launch Vehicle (NGLV).

• The engine uses Liquid Oxygen (LOX) and Refined Kerosene (RP-1) as propellants, offering improved density impulse and cost-effectiveness.

• ISRO conducted multiple Power Head Test Article (PHTA) hot tests to validate ignition and performance in early 2025.

• The engine is expected to increase LVM3's payload capacity from 4 tonnes to 5 tonnes, enhancing India's space lift capability.

Information Booster:

• Semicryogenic engines combine the advantages of cryogenic and liquid engines.

• They are a key technology for heavy-lift and reusable launch systems, central to ISRO's future missions.

Additional Knowledge:

Hydrogen-Peroxide Engine (Option a)

• Not currently in ISRO's mainstream development focus.

• Used more in small or experimental propulsion systems, not heavy launch vehicles.

Hybrid-Solid Engine (Option b)

• Combines solid fuel and liquid oxidizer, used for small rockets or test platforms.

• Not being pursued for ISRO's primary launch vehicles.

Electric Propulsion Engine (Option d)

• Primarily used for spacecraft (satellites), not launch vehicles.

• ISRO is developing it for satellite station-keeping, not liftoff propulsion.

Q.15 **What is the name of the patented respiratory device developed by AIIMS Raipur to curb airborne infections in May 2025?**

A. AirGuard
B. RespiraSafe
C. HOAC Combo
D. OxyShield

Answer: C

Sol: The correct answer is (c) HOAC Combo

Explanation:

• The HOAC Combo is a patented respiratory device developed by AIIMS Raipur in May 2025.

• It is a non-invasive, non-electrical, multi-therapy respiratory system.

• The device is designed to minimize aerosol-based infection risk.

• It is useful during medical procedures such as nebulization, oxygen therapy, and sputum sampling.

• The innovation is especially relevant in preventing the spread of diseases like COVID-19 and tuberculosis.

Information Booster:

• The device was invented by Mr. Arokiaraj U, a Senior Nursing Officer at AIIMS Raipur.

• It was showcased at the India Innovation Summit in March 2025.

Additional Knowledge:

AirGuard (Option a)

• Not associated with AIIMS Raipur.

• Often refers to air filtration or ventilation products in industrial or HVAC contexts.

• No specific patent or innovation linked to infection control in this context.

RespiraSafe (Option b)

• Name used generically for various mask or air filtration products.

• No notable Indian patent or launch by AIIMS Raipur under this name.

OxyShield (Option d)

• Typically refers to oxygen masks or oxygen therapy support kits.

• Not the device patented by AIIMS Raipur in 2025.

• Could be confused with PPE brand names, but not relevant to the patented HOAC Combo.

Q.16 **The first ICC Men's T20 Cricket World Cup was won by _____.**

A. West Indies
B. India
C. England
D. Australia

Answer: B

Sol: The correct answer is **(b) India**

Explanation:

- The **first-ever ICC Men's T20 Cricket World Cup** was held in **2007 in South Africa**, and **India won the tournament** by defeating **Pakistan** in the final.
- The match was played at **Wanderers Stadium in Johannesburg** on **24 September 2007**, where **India won by 5 runs** under the captaincy of **Mahendra Singh Dhoni (MS Dhoni)**.

Information Booster:

Key Highlights of the 2007 ICC T20 World Cup Final:

- **an of the Match:Irfan Pathan** (3 wickets for 16 runs)
- **Man of the Series:Shahid Afridi** (Pakistan)

T20 World Cup 2024:

The **2024 ICC Men's T20 World Cup** was the ninth edition of the tournament, co-hosted by the **West Indies** and the **United States** from **June 1 to June 29, 2024**.

This marked the first major ICC event held in the USA, with matches played across six venues in the Caribbean and three in the United States.

Tournament Expansion and Format: The tournament expanded from 16 to **20 teams**, featuring **55 matches**. Teams were divided into four groups of five for the group stage.

Notable First-time Participants:

- **Canada** and **Uganda** qualified for their first men's T20 World Cup.
- The **United States** participated for the first time as co-hosts.

Champion:

- **Champions: India** clinched their second T20 World Cup title under the Captaincy of Rohit Sharma. They defeated **South Africa** by seven runs in the final.
- **Player of the Series :Jasprit Bumrah** (India)
- **Most Runs :Rahmanullah Gurbaz** (Afghanistan) with 281 runs
- **Most Wickets :Fazalhaq Farooqi** (Afghanistan) and **Arshdeep Singh** (India), each with 17 wickets

Additional Knowledge:

- **West Indies :** Won the **2012 and 2016** T20 World Cups.
- **England:** Won their **first T20 World Cup in 2010** and again won in 2022.
- **Australia:** Won their **first T20 World Cup in 2021**.

Q.17 **Javelin thrower Neeraj Chopra became the _____ Indian to win a medal at World Athletics Championships in July 2022.**

A. first
B. fourth
C. third
D. second

Answer: D

Sol: **Correct answer: D. second**

Explanation:

Neeraj Chopra became the **second** Indian to win a medal at the **World Athletics Championships** in July 2022, after winning the **silver** medal in the javelin throw event.

Information Booster:

- **Neeraj Chopra**:
  - **Event**: Javelin Throw
  - **Achievement**: **Silver Medal** at the **2022 World Athletics Championships** in Eugene, Oregon, USA
  - **First Indian to win an Olympic gold** in athletics at the **2020 Tokyo Olympics**
  - **Date of Birth**: **December 24, 1997**, in **Khandra, Haryana**
  - **Coach**: **Klaus Bartonietz**
  - **Significance**: Neeraj Chopra's win at the World Athletics Championships made him only the second Indian after **Anju Bobby George** to earn a medal at this prestigious event.
- **Previous Medalists at World Athletics Championships**:
  - **Anju Bobby George**: **Bronze medal** in the **long jump** at the **2003 World Athletics Championships**.

Q.18 15, 5, 4.5, 5.8, 7.9, ?

A. 9.6
B. 11.42
C. 12.23
D. 10.74

Answer: D

Sol: Given:

15, 5, 4.5, 5.8, 7.9, ?

Logic: Multiply by increasing decimals (0.2, 0.3, 0.4, 0.5, 0.6 ...) and then add increasing integers (+2, +3, +4, +5, +6 ...).

15 × 0.2 = 3 → 3 + 2 = 5

5 × 0.3 = 1.5 → 1.5 + 3 = 4.5

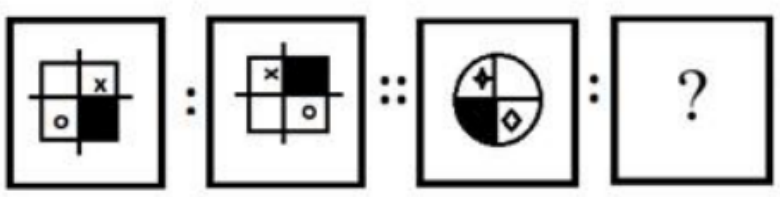
4.5 × 0.4 = 1.8 → 1.8 + 4 = 5.8

5.8 × 0.5 = 2.9 → 2.9 + 5 = 7.9

7.9 × 0.6 = 4.74 → 4.74 + 6 = **10.74**

Thus, correct option is (d).

Q.19 Select the option that is related to the third figure in the same way as the second figure is related to the first figure.



A. 

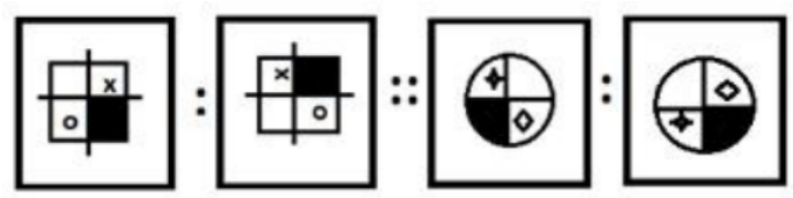
B. 

C. 

D. 

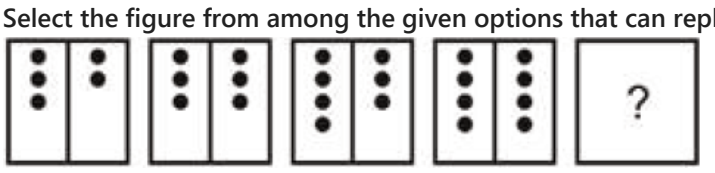
Answer: D

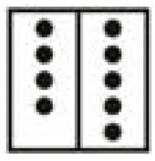
Sol: **Logic**: Inner shape is moving anti clock wise direction.

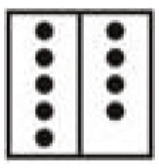


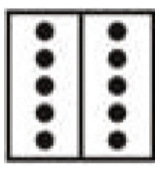
Thus, correct option is (d).

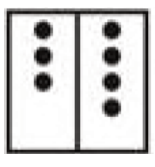
Q.20 Select the figure from among the given options that can replace the question mark (?) in the following series.



A. 

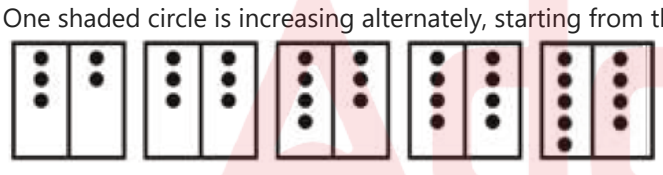
B. 

C. 

D. 

Answer: B

Sol: One shaded circle is increasing alternately, starting from the right part of the first box.



Thus, correct option is (b).

Q.21 If '+' means '÷' , '÷' means '-' , '-' means '×' and '×' means '+' , then what is the value of $80 + 20 \div 5 - 12 \times 92 = ?$

A. 22
B. 36
C. 28
D. 35

Answer: B

Sol: **Given**: 80 + 20 ÷ 5 - 12 × 92 = ?

Given Sign + ÷ - ×

New Sign ÷ - × +

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

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

New equation: 80 ÷ 20 - 5 × 12 + 92 = ?

4 - 5 × 12 + 92 = ?

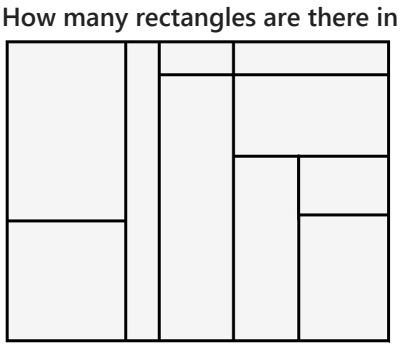
4 - 60 + 92 = ?

96 - 60 = ?

? = **36**

Thus, correct option is (b).

Q.22 How many rectangles are there in the following pictures?



A. 24

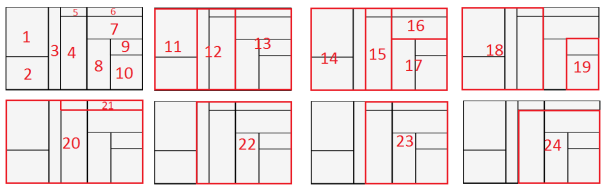
B. 21

C. 22

D. 20

Answer: A

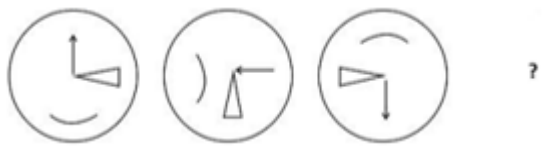
Sol: There are 24 rectangles are given below.

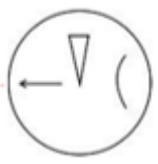


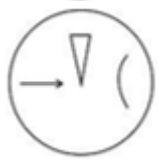
Thus, correct option is (a).

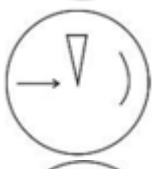
Note - square can be a rectangle but a rectangle cannot be a square.

Q.23 From the given figures, find which figure comes in the place of question marks which are in series?



A. 

B. 

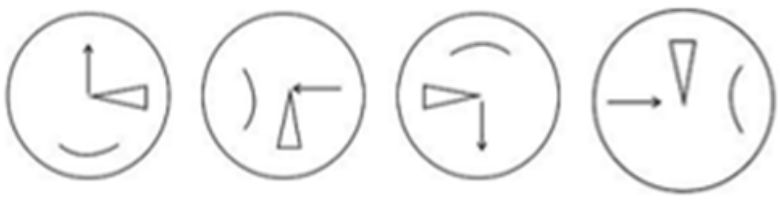
C. 

D. 

Answer: B

Sol: **Logic**: 1. Triangle is rotating clockwise direction.

2. Curved line and arrow are rotating clock wise direction and facing inward and outward alternately.



Thus, correct option is (b).

Q.24 **Three of the following four Indian classical music forms are alike in a certain way and one is different. Pick the odd one out.**

A. Hindustani
B. Carnatic
C. Ghazal
D. Dhrupad

Answer: C

Sol: **Correct Answer: (C) Ghazal**

Explanation:

Hindustani and Carnatic are the two main systems of Indian classical music, and **Dhrupad** is a core genre within Hindustani classical. **Ghazal** is primarily a poetic form rendered in a semi-classical/light music style, not a strict classical form.

Q.25 **Find the odd one out:**

A. 512
B. 343
C. 216
D. 289

Answer: D

Sol: **Given:**

512, 343, 216, 289

Logic: First three are perfect cubes

a) 512 = 8×8×8 (8^3)

b) 343 = 7×7×7 (7^3)

c) 216 = 6×6×6 (6^3)

d) 289 = 17×17 **(17^2)**

289 is a perfect square.

Thus, correct option is (d).

Q.26 **Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the one that is different.**

A. 64 : 216
B. 216 : 512
C. 125 : 343
D. 343 : 728

Answer: D

Sol: **Logic:** Both number are perfect cube. or $(1st)^3 = (2nd+2)^3$

A) 64 : 216

$64 = 4^3$, $216 = 6^3$

B) 216 : 512

$216 = 6^3$, $512 = 8^3$

C) 125 : 343

$125 = 5^3$, $343 = 7^3$

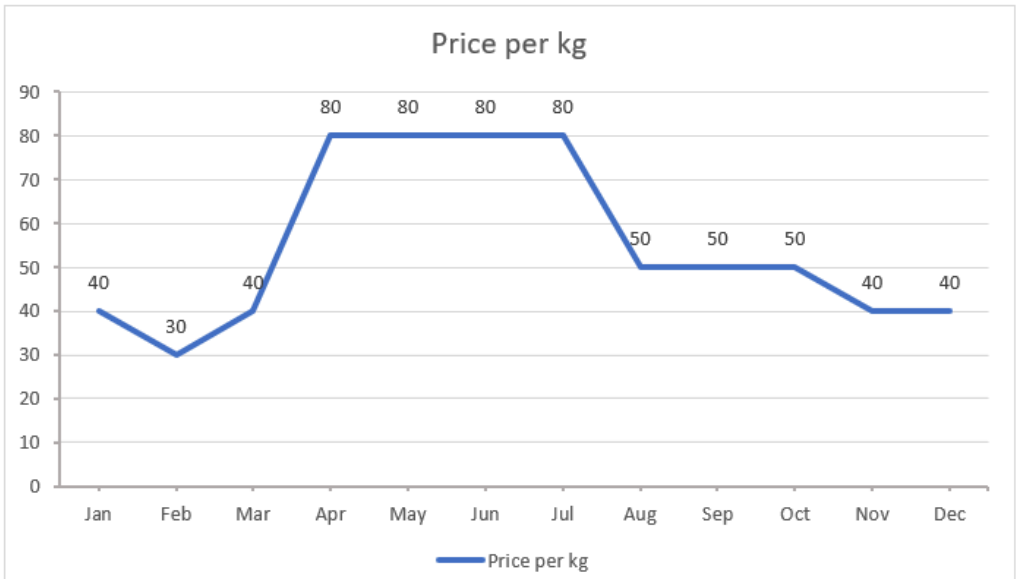
D) 343 : 728

$343 = 7^3$, 728 = Not a cube

→ 728 is between them, so not a cube

Different one: D) 343 : 728
Because only this pair **does not** contain two perfect cubes.
Thus, correct option is (d).

Q.27 **The following is the price of Cabbage over 12 months. what is the median price?**

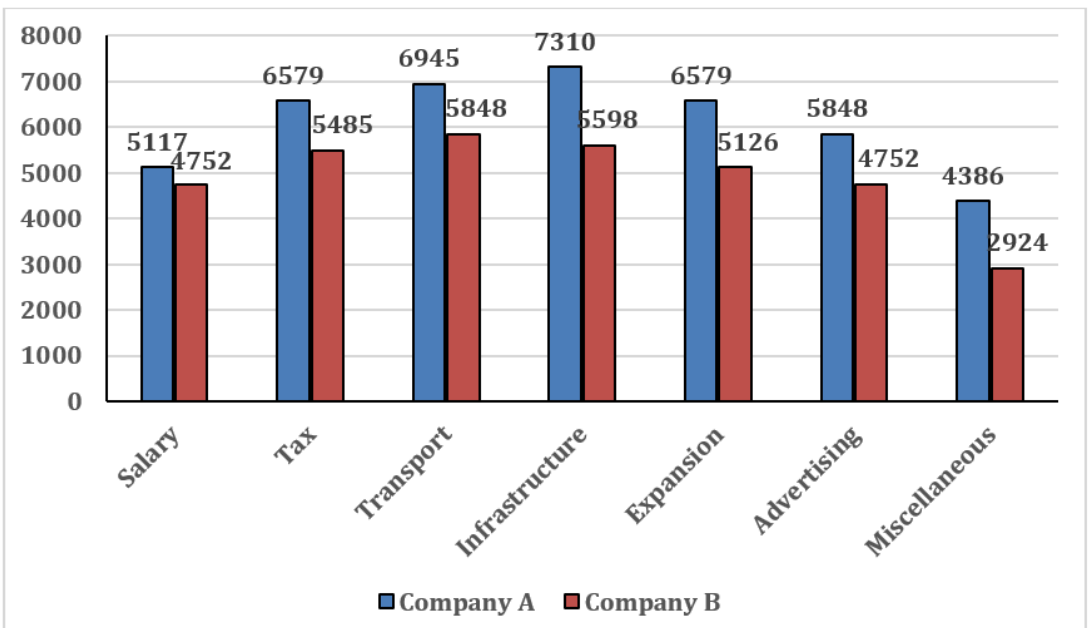


A. 55
B. 60
C. 50
D. 40

Answer: C

Sol: **Given:**
The price of cabbage per kg over the 12 months is as follows:
Jan: 40
Feb: 30
Mar: 50
Apr: 80
May: 80
Jun: 80
Jul: 50
Aug: 50
Sep: 50
Oct: 50
Nov: 40
Dec: 40
Formula Used:
Arrange the data in ascending order.
If the number of terms (months) is odd, the median is the middle value.
If the number of terms is even, the median is the average of the two middle values.
Solution:
Arranging the prices in ascending order:
30, 40, 40, 40, 40, 50, 50, 50, 50, 80, 80, 80
Now, since we have 12 months (an even number), the median will be the average of the 6th and 7th values in the ordered list.
The 6th and 7th values are 50 and 50.
Thus, the median price = $\frac{50+50}{2}$ = 50.

Q.28 **The expenditures (in thousands) of two companies (A and B) on various heads in a given year are provided in the following bar graph.**



The expenditure made by both companies together on salary was approximately what percentage of their expenses on Infrastructure(nearest to the integer)?

A. 57%
B. 95%
C. 29%
D. 76%

Answer: D

Sol: **Given:**

Salary (Company A) = 5117
Salary (Company B) = 4752
Infrastructure (Company A) = 7310
Infrastructure (Company B) = 5598

Formula Used:

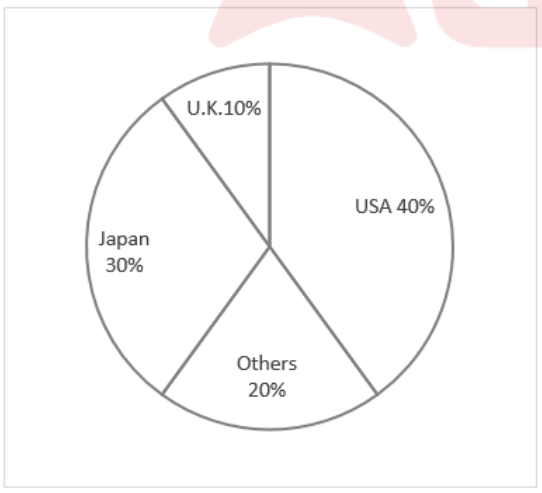
Percentage = (Total Salary ÷ Total Infrastructure) × 100

Solution:

Total Salary = 5117 + 4752 = 9869
Total Infrastructure = 7310 + 5598 = 12,908
Required Percentage = (9869 ÷ 12,908) × 100 = 76.47%
Nearest Integer Percentage = 76%

Q.29 The difference between tourist numbers from USA and Japan is –

Directions (Q.No. 115 - 116): Study the following pie chart carefully and answer the questions based on it. It consists of data on tourist arrival from different countries.
Total tourist traffic = 20 Lakhs



A. 2 Lakhs
B. 3 Lakhs
C. 4 Lakhs
D. 10 Lakhs

Answer: A

Sol: **Given:**

Total tourist traffic = 20 lakhs}
USA share = 40%
Japan share = 30%

Formula used:

$$\text{Difference} = \frac{\text{USA } \% - \text{Japan } \%}{100} \times \text{Total tourists}$$

Solution:

$$\text{Difference} = \frac{40-30}{100} \times 20$$
$$= \frac{10}{100} \times 20$$
$$= 2\text{lakhs}$$

Correct answer is (A) **2 Lakhs**

Q.30 If 40% of k is 10 less than 2400% of 10, then k is:

A. 535
B. 575
C. 615
D. 555

Answer: B

Sol: **Given:**

40% of k is 10 less than 2400% of 10

Solution:

40% of k = 2400% of 10 -10

$$\frac{40}{100} \times k = \frac{2400}{100} \times 10 - 10$$

0.4k = 240 -10

0.4 k = 230

k = $\frac{230}{0.4}$ = 575

Q.31 An amount of ₹905 is divided among three persons in the ratio of 9 : 10 : 16. The difference between the largest and the smallest shares (in ₹) in the distribution is:

A. 110
B. 181
C. 205
D. 274

Answer: B

Sol: **Given:**

An amount of ₹905 is divided among three persons in the ratio of 9:10:16.

Solution:

Total parts = 9 + 10 + 16 = 35

Share of each part = $\frac{₹905}{35}$ = ₹25.857

Largest share = 16 × ₹25.857 = ₹413.714

Smallest share = 9 × ₹25.857 = ₹232.714

Difference = ₹413.714 - ₹232.714 = ₹181

Thus, the difference between the largest and the smallest shares is ₹181.

Q.32 **The average of first 122 even numbers is**

A. 123.5
B. 124
C. 122.5
D. 123

Answer: D

Sol: **Given:**

First 122 even numbers: 2, 4, 6, ... up to 244.

Formula Used:

Average of first n natural numbers × 2 = (n + 1)

Solution:

Average of first 122 even numbers = 122 + 1 = 123

Q.33 **On an amount, the difference in interests is ₹225 at 10% per annum rate when the interest is compounded semi-annually and annually, respectively, in a year. The amount (in ₹) is:**

A. 90,000
B. 80,000
C. 1,00,000
D. 75,000

Answer: A

Sol: **Given:**

Difference in interest = ₹225

Rate of interest = 10% per annum

Time = 1 year

Compounded semi-annually and annually

Formula Used:

Compound Interest (CI) when compounded annually:

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

where:

A = Amount

P = Principal

r = Rate of interest

t = Time in years

Compound Interest (CI) when compounded semi-annually:

A = $P\left(1+\frac{r}{200}\right)^{2t}$

Solution:

Let the principal amount be P.

Amount when compounded annually:

$$A_{\text{annually}} = P\left(1+\frac{10}{100}\right)^{1} = P \times 1.1$$

Amount when compounded semi-annually:

$$A_{\text{semi-annually}} = P\left(1+\frac{10}{200}\right)^{2} = P \times (1.05)^2 = P \times 1.1025$$

The difference in interests:

Difference = $A_{\text{semi-annually}} - A_{\text{annually}} = P \times 1.1025 - P \times 1.1 = P \times (1.1025 - 1.1) = P \times 0.0025$

Given that the difference is ₹225:

P × 0.0025 = 225

P = $\frac{225}{0.0025}$ = 90,000

The principal amount is ₹90,000.

Q.34 **he difference (in ₹) between C.I. and S.I. on a certain sum at 12 % per annum compounded annually for 2 years is ₹360. Find the sum (in ₹).**

A. 25,060
B. 23,560
C. 23,650
D. 25,000

Answer: D

Sol: **Given:**

Rate of interest = 12% per annum

Time = 2 years

Difference between Compound Interest (C.I.) and Simple Interest (S.I.) = ₹360

Formula Used:

The difference between C.I. and S.I. is given by:

C.I. - S.I. = $\frac{P \times R^2}{100^2}$

Solution:

The difference between C.I. and S.I. is ₹360. Therefore,

$$\frac{P \times 12^2}{100^2} = 360$$

$$\frac{P \times 144}{10000} = 360$$

$$P \times 144 = 360 \times 10000$$

$$P = \frac{360 \times 10000}{144}$$

$P = 25000$

The sum (Principal) is ₹25,000.

Q.35 **The marked price of a watch is ₹6,420, available at a discount of 17%. Find the amount paid by the customer when he purchased the watch.**

A. ₹5,425.25
B. ₹5,328.60
C. ₹5,248.85
D. ₹5,368.78

Answer: B

Sol: **Given:**

Marked price of the watch = ₹6,420

Discount = 17%

Formula Used:

Amount paid = Marked price × (1 – Discount %)

Solution:

Amount paid = 6420 × (1 – 0.17)
Amount paid = 6420 × 0.83 = ₹5,328.60

Q.36 **Three partners invested in a business in the ratio 5:9:1. They invested their capitals for 1 months, 9 months and 6 months, respectively. What was the ratio of their profits?**

A. 3:81:6
B. 6:81:6
C. 5:81:6
D. 7:81:6

Answer: C

Sol: **Given:**

Capital ratio = 5 : 9 : 1

Time = 1 month, 9 months, 6 months

Formula Used:

Profit ∝ Capital × Time

Solution:

Profit ratio = (5 × 1) : (9 × 9) : (1 × 6)
= 5 : 81 : 6

Q.37 **How many seconds will a boy take to run one complete round around a square field of side 53 metres, if he runs at a speed of 8 km/h?**

A. 102
B. 101
C. 95.4
D. 88

Answer: C

Sol: **Given:**

Side of the square field = 53 meters

Speed of the boy = 8 km/h

Formula Used:

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

Solution:

Perimeter of the square field:

Perimeter = 4 × 53 = 212 meter

Convert speed from km/h to m/s:

Speed in m/s = $8 \times \frac{5}{18} = \frac{40}{18} \approx 2.22\,\text{m/s}$

Time taken to run one round:

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{212}{2.22} \approx 95.4\,\text{seconds}$$

Q.38 **A train of length z meters crosses a pole in 15 seconds and a bridge of length (z+150) meters in 35 seconds. Find the value of (2z+50).**

A. 750
B. 1000
C. 850
D. 800
E. 950

Answer: E

Sol: **Given:**
Length of the train = z meters
Time taken to cross a pole = 15 seconds
Time taken to cross a bridge of length z+150 meters = 35 seconds
Formula to use:
Speed = Distance / Time
Basic Explanation:
Speed of the train = z/15
Speed of train when crossing the bridge = $\frac{2z+150}{35}$
$\frac{z}{15} = \frac{2z+150}{35}$
z × 35 = (2z+150) × 15
35z = 15(2z + 150)
35z = 30z + 2250
z = 450
Required value = 2z + 50 = 2(450) +50 = 950

Q.39 **Compare the following two addresses.**
Address 1: Ms. Neha Verma, Flat No. 204, Tower B, Green Acres, Pune 411045
Address 2: Mrs. Neha Verma, Flat No. 204, Tower B, Green Acres Society, Pune - 411045
Are these likely to be the same?

A. No, city codes do not match
B. Yes, all major details match
C. No, the flat numbers are different
D. No, the name tower are different

Answer: B

Sol: **Correct Answer:** (b) Yes, all major details match
Explanation:
Name: "Ms." vs "Mrs." is just a title difference; the person's name Neha Verma is the same.
Flat/Building: Flat No. 204, Tower B matches exactly.
Residence Name: "Green Acres" vs "Green Acres Society" — commonly the same housing complex (adding "Society" is typical).
City & PIN: Pune, 411045 matches.
Additional Information:
(a) Wrong — city and PIN do match.
(c) Wrong — flat numbers are the same (204).
(d) Wrong —tower name is same

Q.40 **Choose the options that are similar to the address format.**
I. 84B, Cedar Lene, Seattle, WA 98101
II. Cedar Lane, Seattle, WA 98101, 84B
III. Seattle, WA 98101, Cedar Lana, 84B
IV. 84B, Seattle, WA 98101, Cedar Lane
A. Only I and II
B. Only II and III
C. Only II and IV
D. Only III and IV

Answer: C

Sol: **Given**:
I. 84B, Cedar Lene, Seattle, WA 98101
II. Cedar Lane, Seattle, WA 98101, 84B
III. Seattle, WA 98101, Cedar Lana, 84B
IV. 84B, Seattle, WA 98101, Cedar Lane

Logic:
The correct address format typically follows: house number → street name → city → state → postal code.
II places the house number at the end, but it follows the general format: street → city → state → postal code → house number.
IV maintains the order as: house number → city → state → postal code → street name, which is a valid format.
I has a misspelling of the street name ("Cedar Lene" instead of "Cedar Lane"), making it incorrect.
III has a misspelling of both the city ("Seattle" is correct, but "Lana" is incorrect) and the street name, making it incorrect.

Final Answer: (C) Only II and IV
Final Correct Option: (C)

Q.41 **Which of the folloiwng is not an application software package?**

A. Red hat linux
B. MS Office
C. Adobe PageMaker
D. Open office

Answer: A

Sol: The correct answer is **Red Hat Linux**. **Red Hat Linux** is an operating system, not an application software package. It serves as a foundation for running applications and managing hardware resources.

Important Key Points:

- **Red Hat Linux** is a **Linux-based operating system**, providing an environment for executing software applications.
- Unlike **application software**, it handles **system-level tasks**, managing memory, processes, and security.
- Used widely in **enterprise environments**, especially for **servers and networking**.

Knowledge Booster:

- **MS Office** is an **application software suite** containing programs like Word, Excel, and PowerPoint.

- **Adobe PageMaker** is a **desktop publishing software** for designing print layouts.
- **OpenOffice** is an **open-source productivity suite** similar to MS Office, featuring applications like Writer and Calc.

Q.42 Most projectors now use _____ cable or VGA cable from the computer as their input source.

A. HDMI
B. Ethernet
C. PS/2
D. Audio

Answer: A

Sol: Most modern projectors use either **HDMI (High-Definition Multimedia Interface)** or **VGA (Video Graphics Array)** cables as input sources from computers. HDMI is more commonly used now because it carries both high-quality video and audio signals over a single cable.
Important Key Points:

1. HDMI supports **digital video and audio** in a single connection, making setup simpler and cleaner.
2. VGA is an older **analog** standard that only transmits video.
3. HDMI has largely replaced VGA in newer projectors, laptops, and desktops.

Knowledge Booster:

- **Ethernet** cables are used for network connections, not video display.
- **PS/2** cables were once used for connecting keyboards and mice—not video output.
- **Audio** cables carry sound only, not visual signals, and cannot be used for video projection.

Q.43 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.44 An error is computing is called:

A. Chip
B. Bug
C. hacking
D. None of the options

Answer: B

Sol: An **error in computing** is called a **bug**. It refers to a flaw or mistake in a program's **code or logic** that causes it to behave unexpectedly or incorrectly. Bugs can occur due to human error during the **software development process**.
Important Key Points:

1. A **bug** is a **programming error** that affects how software runs.
2. Bugs can cause **incorrect results**, **crashes**, or **unexpected behavior**.
3. Bugs are usually identified and fixed through a process called **debugging**.

Knowledge Booster:

• **Chip** – Refers to a **hardware component**, not a software error.

• **Hacking** – The act of **unauthorized access** to computer systems, not related to program errors.

Q.45 **Where do deleted files go by default in Windows OS?**

A. They are permanently erased
B. The Cloud
C. The Recycle Bin
D. The Downloads folder

Answer: C

Sol: **The correct answer is: (C) The Recycle Bin**
Explanation:

- In Windows OS, when a file is deleted using the **Delete** key or right-click > delete, it is **not permanently removed** but moved to the **Recycle Bin**.
- The Recycle Bin temporarily holds deleted files, allowing users to restore them if needed, until it is emptied manually or automatically.

Information Booster:

- Files deleted using **Shift + Delete** bypass the Recycle Bin and are permanently erased.
- The Recycle Bin has a **storage limit** based on the drive's size.
- Recycle Bin retains **original file paths**, making restoration easy.
- It is possible to **customize settings** of the Recycle Bin per drive.
- Some system folders or files may not go to Recycle Bin if deleted.

Q.46 **Identify the default extension of a document created using Microsoft Word?**

A. .txt
B. .docx
C. .mwd
D. .mwrd

Answer: B

Sol: The default extension of a document created using Microsoft Word is **.docx**. This format was introduced in Microsoft Word 2007 and is used for saving text, formatting, images, and other elements in a Word document in a compressed XML-based file.
Important Key Points:
1. .docx (Word Document): It is the default file format for saving documents in Microsoft Word versions 2007 and later.
2. Advantages of .docx: It provides better file compression, reduces file size, and improves data recovery and compatibility.
3. Earlier Format: The older version of Word used .doc as the default extension before the introduction of .docx.
Knowledge Booster:

- **.txt:** A plain text file format that contains unformatted text, typically created using Notepad, not Word.
- **.mwd:** Not a recognized Microsoft Word file extension; may refer to other specific software.
- **.mwrd:** Not an actual or standard file format associated with any major word processing application.

Q.47 **What is the shortcut to add a new slide in MS-PowerPoint?**

A. Ctrl+N
B. Ctrl+M
C. Ctrl+S
D. Ctrl+L

Answer: B

Sol: **Ctrl+M** is the keyboard shortcut in MS-PowerPoint to add a new slide to the presentation. This shortcut is commonly used to quickly insert slides during the creation of a presentation.

Important Key Points:

1. **Efficient Workflow**: Using Ctrl+M helps streamline the slide creation process.
2. **Shortcut Familiarity**: PowerPoint has various shortcuts that improve efficiency in managing slides and presentations.
3. **Consistency**: Shortcut keys are consistent across different versions of PowerPoint.

Knowledge Booster:

· **Ctrl+N**: Creates a new PowerPoint file.
· **Ctrl+S**: Saves the current file.
· **Ctrl+L**: Aligns text left in PowerPoint.

Q.48 **Which of the following is an area where the outgoing messages or messages that are in the process of sending or which failed to send are stored?**

A. Outbox
B. Inbox
C. Trash
D. Sentmail

Answer: A

Sol: In email systems, the **Outbox** is the folder where outgoing messages are stored before they are sent. This includes emails that are in the process of being sent or those that failed to send. If there is an issue with the internet connection or server, emails may remain in the Outbox until the issue is resolved and they can be successfully sent. Once the email is successfully sent, it moves to the **Sent Mail** folder.
The Outbox acts as a temporary holding area for emails that are waiting to be transmitted.

Important Key Points:

1. **Outbox**: Stores outgoing emails that are either in the process of being sent or failed to send.
2. Once emails are successfully sent, they are transferred to the **Sent Mail** folder for record-keeping.
3. The **Outbox** allows users to track messages that are pending transmission.

Knowledge Booster:

· **Inbox**: The **Inbox** is where received emails are stored, not outgoing messages.
· **Trash**: The **Trash** folder holds deleted emails, not messages that are pending or failed to send.
· **Sent Mail**: The **Sent Mail** folder contains emails that have already been sent, not messages that are still in the process of being sent.

Q.49 **Which of the following is an advantage of computer networks?**

A. Resource sharing
B. Improving reliability and availability
C. Enhancing performance
D. all of the above

Answer: D

Sol: A **computer network** connects multiple computing devices, allowing them to communicate and share data. It brings several significant advantages:

- **Resource Sharing**: Networks allow multiple users to **share hardware (e.g., printers)** and **software resources**, which reduces costs.
- **Improving Reliability and Availability**: Redundancy in networks (like having multiple servers or failover systems) ensures that services remain **available even if one system fails**.
- **Enhancing Performance**: Tasks can be **distributed across multiple machines**, increasing overall **efficiency and throughput**, especially in **distributed computing systems**.

Thus, all options listed are valid advantages of using computer networks.

Important Key Points:

1. **Computer networks** enable **centralized data storage**, **remote access**, and **communication** across devices.
2. **Fault tolerance** and **load balancing** improve system **reliability** and **performance**.
3. **Efficiency and scalability** are key benefits in both personal and enterprise environments.

Knowledge Booster:

- **Types of networks**: LAN, WAN, MAN, PAN.
- **Network services**: File sharing, email, cloud computing, remote desktop.
- **Protocols used**: TCP/IP, FTP, HTTP, SMTP for managing communication and resources.

Q.50 A hard disk is divided into tracks which are further sub-divided into -

A. Clusters
B. Sectors
C. Vectors
D. Heads

Answer: B

Sol: The correct answer is **Sectors**. A **hard disk** is divided into **tracks**, which are further subdivided into **sectors**, the smallest unit of data storage on a disk.

Important Key Points:

1. **Tracks** are circular paths where data is stored on a hard disk.
2. Each track is divided into **sectors**, typically **512 bytes** or **4KB** in size.
3. Sectors are the fundamental unit for **reading and writing** data in a disk.

Knowledge Booster:

- **Clusters** are groups of sectors used by the file system for storage allocation.
- **Vectors** are not related to disk storage; they refer to mathematical entities.
- **Heads** are components in hard drives that read/write data onto platters but do not divide storage.
