Q.1 In its October 2024 meeting, the RBI Monetary Policy Meeting kept the unchanged at 6.5%.

A. cash reserve ratio

B. bank rate

C. statutory liquidity ratio

D. repo rate

Answer: D

Sol: The Correct Answer is: **(d) repo rate**

Explanation:

In October 2024, the Reserve Bank of India's (RBI) Monetary Policy Committee (MPC) decided to maintain the **repo rate** at **6.5%**. The **repo rate** is the rate at which the RBI lends money to commercial banks, influencing overall interest rates in the economy. By keeping it unchanged, the RBI aimed to balance economic growth with inflation control.

Information Booster:

- **Cash Reserve Ratio** (CRR): The percentage of a bank's total deposits that must be maintained as reserves with the RBI.

- **Bank Rate:** The rate at which the central bank lends money to commercial banks without any security.

- **Statutory Liquidity Ratio (SLR):** The percentage of a bank's net demand and time liabilities that must be maintained in safe and liquid assets, such as government securities.

Additional Information:

As of March 27, 2025, the Reserve Bank of India's (RBI) key monetary policy rates are:

- **Cash Reserve Ratio (CRR)**: 4.0%

The CRR was reduced by 50 basis points to 4.0% in December 2024 to enhance liquidity in the banking system.

- **Statutory Liquidity Ratio (SLR)**: 18.0%

The SLR has remained steady at 18.0% since December 2021.

- **Bank Rate**: 6.75%

The Bank Rate has been maintained at 6.75% as of February 2025.

Q.2 What is the full form of OTP?

A. One Time Process

B. One Time Password

C. Online Transfer Protocol

D. Open Transaction Path

Answer: B

Sol: The correct answer is (b) One Time Password.

Explanation:

- **Point 1:** OTP stands for *One Time Password*, which is a unique numeric or alphanumeric code used only once for security verification.

- **Point 2:** It is commonly sent via SMS, email, or authenticator apps to confirm identity during online transactions or logins.

- **Point 3:** OTP enhances security by preventing unauthorized access even if someone knows the primary password.

Information Booster:

- OTPs are used in **Two-Factor Authentication (2FA)**.

- They usually expire within **30–60 seconds**.

- Popular platforms like banks, UPI apps, Gmail, etc., use OTP for secure access.

- OTP codes are typically **4–8 digits** long.

Additional Knowledge:

(a) One Time Process

- Incorrect; does not relate to cybersecurity or authentication.

(b) One Time Password

- Correct; used for user identity verification.

(c) Online Transfer Protocol

- Incorrect; no such protocol exists in networking terminology.

(d) Open Transaction Path

- Incorrect; not a recognized technical term.

Q.3 **Which fuel is used for nuclear energy in planets?**

A. Natural uranium
B. U238
C. U236
D. Related

Answer: A

Sol: The correct answer is option (a) **Natural uranium**.

Explanation

The primary fuel used for nuclear energy, both on Earth and in other planets (like those with active geological processes or potential for future space exploration), is **natural uranium**. **Natural uranium** contains mostly **U-238**, a stable isotope, with a very small amount of **U-235**, which is fissile and capable of sustaining a nuclear chain reaction.

In stars, including the Sun, nuclear energy is generated primarily through **nuclear fusion** (not fission) using hydrogen isotopes, but on planets, fission is more commonly associated with nuclear energy sources, and **natural uranium** is typically the material used in nuclear reactors.

Information Booster

- **Natural uranium** is found in the Earth's crust and consists mostly of **U-238** (around 99.3%), with only about **0.7%** being **U-235**.

- **U-235** is the isotope responsible for sustaining nuclear fission reactions in reactors, while **U-238** is often used in breeding reactors or can be converted into plutonium-239, which is also fissile.

- In **nuclear reactors**, **U-235** is enriched from natural uranium to increase the proportion of this fissile isotope, but natural uranium is still the primary starting material.

Additional Knowledge

Explaining the other options:

1. **U238**: **U-238** is the isotope that makes up most of natural uranium, but it is not itself directly used for energy production in the same way **U-235** is. U-238 is used in reactors that breed plutonium, but it is not the fuel in the same way U-235 is.

2. **U236**: **U-236** is typically produced in reactors from **U-235** and is not a naturally occurring isotope. It is not used directly as a fuel in planetary systems.

3. **Related**: This option is too vague to be applicable in this context.

Q.4 South Asian Football Federation Football Championship will be held in which city?

A. Chennai
B. Bengaluru
C. Bhubneswar
D. New Delhi

Answer: B

Sol: Ans. (B) Bengaluru

Sol.

The **South Asian Football Federation (SAFF) Championship 2023** was held in **Bengaluru, India** at the **Sree Kanteerava Stadium** from **June 21 to July 4, 2023**. The SAFF Championship is the premier football tournament for South Asian nations and is organized by the **South Asian Football Federation (SAFF)**.

Information Booster: SAFF Championship

- **Started** – The SAFF Championship was first held in **1993**.
- **Organized By** – **South Asian Football Federation (SAFF)**.
- **Last Tournament (2023)** – Hosted in **Bengaluru, India** from **June 21 to July 4, 2023**.
- **Upcoming Edition (2025)** – Scheduled to be held **from June 15 to July 25, 2025**, in a **home-and-away format** across participating nations.

Q.5 Who among the following cricketers has NEVER received the Rajiv Gandhi Khel Ratna Award?

A. Virat Kohli
B. Sachin Tendulkar
C. Shikhar Dhawan
D. MS Dhoni

Answer: C

Sol: The correct answer is: (C) Shikhar Dhawan

Explanation:
• **Shikhar Dhawan** has **never** received the **Rajiv Gandhi Khel Ratna Award** (now known as the **Major Dhyan Chand Khel Ratna Award**).
• **Sachin Tendulkar** received the Khel Ratna in **1997–98**, becoming the first Indian cricketer to win it.
• **MS Dhoni** received the award in **2007**, following India's ICC T20 World Cup victory.
• **Virat Kohli** received the Khel Ratna in **2018**, recognizing his outstanding performance and leadership.
• Therefore, among the listed players, **Shikhar Dhawan** is the only one who has **not** been awarded the Khel Ratna.

Information Booster:
• The **Khel Ratna** is India's **highest sporting honour**, awarded for "spectacular and most outstanding performance" over four years.
• Other cricketers who received the award: **Rohit Sharma (2020)**.
• Shikhar Dhawan has received other honours like the **Arjuna Award (2021)**.
• The Khel Ratna was renamed after **Major Dhyan Chand** in **2021**.
• Tendulkar remains the **youngest Indian** to receive the award at age 25.

Q.6 The Vyas Samman, started in 1991 is given for outstanding literary work in _____.

A. Rajasthani
B. Hindi
C. Sanskrit
D. Konkani

Answer: B

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

Explanation:

- **Vyas Samman** is a prestigious Indian literary award established in **1991** by the **K.K. Birla Foundation**.
- It is awarded **annually** for an **outstanding literary work written in Hindi** by an Indian citizen.
- The work must have been **published in the last 10 years** to be considered.

Purpose of the Award:

- To recognize excellence in **Hindi literature**—including novels, poetry, plays, essays, and other literary forms.
- To encourage writers contributing significantly to modern Hindi literature.

Information Booster:

- **First Vyas Samman:** Dr. Ramvilas Sharma (1991) for *"Bhartiya Sahitya ki Bhumika"*.
- **Award Components:**
    - Cash prize of **₹4 lakh** (earlier) → increased to **₹7.5 lakh** in recent years.
    - Citation and plaque.
- Other awards by **K.K. Birla Foundation:**
    - **Bihari Puraskar** – for Rajasthani/Hindi literature
    - **Shankar Puraskar** – for works on Indian philosophy, culture
    - **Saraswati Samman** – for any Indian language listed in the 8th Schedule of the Constitution

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Q.7 Which of the following sportsperson was awarded Padma Shri in 2017?

A. Geeta Phogat
B. Babita Kumari
C. Sakshi Malik
D. Deepika Kumari

Answer: C

Sol: The correct answer is **(C) Sakshi Malik**
Explanation:
- **Sakshi Malik**, the Indian wrestler who won **bronze at the 2016 Rio Olympics**, was awarded the **Padma Shri in 2017**.
- She became the **first Indian female wrestler** to win an Olympic medal in wrestling.
- The Padma Shri recognized her **exceptional contribution to Indian sports** and her role in inspiring young athletes.

Information Booster:
- **Sport:** Wrestling (freestyle, 58 kg category).
- **Birthplace:** Rohtak, Haryana.
- **Major Achievement:** Bronze medal in **2016 Rio Olympics**.
- **Other Awards:** Arjuna Award (2015).
- Sakshi's medal was **India's first wrestling Olympic medal for a female athlete**.

Additional Knowledge:
- **Geeta Phogat** – Padma Shri awarded in **2016**; Commonwealth Games gold medalist.
- **Babita Kumari** – Padma Shri awarded in **2015**; Asian Wrestling Champion.
- **Deepika Kumari** – Archer; Padma Shri awarded in **2016**.
- Sakshi Malik's success boosted **women's wrestling popularity in India**, especially in Haryana.

Q.8 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.9 In which year was the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) launched by the Government of India?

A. 2009

B. 2011

C. 2013

D. 2015

Answer: B

Sol: The correct answer is (b) 2011

Explanation:

- The Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) was **launched in June 2011** by the Ministry of Rural Development.
- It was launched by **restructuring the Swarnajayanti Grameen Swarozgar Yojana (SGSY)**.
- The mission design was informed by successful state-led community projects in **Andhra Pradesh, Telangana, Bihar, Kerala, and Tamil Nadu**.
- It marked a shift from individual beneficiary schemes to **community-driven livelihood promotion**.

Information Booster:

- DAY-NRLM focuses on **universal social mobilization**, financial inclusion, and livelihood enhancement.
- In 2015, the scheme was renamed as **Deendayal Antyodaya Yojana - NRLM** as a tribute to Pandit Deendayal Upadhyay.

Q.10 Which government programme in India aims at eradicating poverty through employment generation in rural areas?

A. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
B. National Rural Health Mission (NRHM)
C. National Food Security Act (NFSA)
D. Pradhan Mantri Awas Yojana (PMAY)

Answer: A

Sol: The correct answer is **(A) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**
Sol. The **MGNREGA** (Mahatma Gandhi National Rural Employment Guarantee Act) is a significant initiative by the Government of India aimed at **eradicating poverty** through **employment generation**. It guarantees **100 days of wage employment** to rural households annually, supporting projects like **water conservation**, **road construction**, and **afforestation**. The programme empowers rural communities by improving infrastructure and providing stable income opportunities.

Information Booster

- **MGNREGA** guarantees **100 days of employment** per rural household every year.
- Focuses on sustainable **infrastructure development** in rural areas, such as roads and water management.
- Promotes **community participation** through the involvement of local **Gram Panchayats** in planning and implementation.
- Ensures fair **minimum wages** for rural workers, enhancing their economic security.
- Helps in **reducing migration** by offering employment within local communities.
- Provides a pathway to **improve rural livelihoods** and raise living standards.

Additional Information

- **NRHM (National Rural Health Mission) (b):** Focuses on improving **healthcare access** in rural areas.
- **NFSA (National Food Security Act) (c):** Ensures **food security** by providing subsidized food to eligible families.
- **PMAY (Pradhan Mantri Awas Yojana) (d):** Aims to provide **affordable housing** to rural and urban poor families.

Q.11 Against which Act did Gandhiji decide to fight and start a Satyagraha?

A. Regulating Act (1773)

B. Vernacular Press Act (1878)

C. Government of India Act (1858)

D. Rowlatt Act (1919)

Answer: D

Sol: **Correct Answer:** D Rowlatt Act (1919)
Explanation:

- Mahatma Gandhi decided to fight against the **Rowlatt Act of 1919** and initiated a Satyagraha in protest.
- The Rowlatt Act, also known as the **Anarchical and Revolutionary Crimes Act of 1919**, was passed by the British government to curb revolutionary activities and suppress dissent in India.
- The act allowed the government to detain individuals without trial, restrict press freedom, and conduct searches without warrants, violating basic civil liberties. Gandhi strongly opposed this act, viewing it as an unjust and oppressive law.
- In response, Gandhi organized the **Rowlatt Satyagraha** in March 1919, which marked a significant milestone in India's struggle for independence.
- However, the movement witnessed tragic events like the **Jallianwala Bagh Massacre** on April 13, 1919, where hundreds of unarmed civilians were killed by British troops under General Dyer's orders.

Additional Knowledge:

- **(Regulating Act, 1773):** This act marked the beginning of British parliamentary control over the East India Company and aimed to regulate its affairs.
- **(Vernacular Press Act, 1878):** This act aimed to curb the freedom of the Indian press, particularly vernacular publications critical of the British government.
- **(Government of India Act, 1858):** This act transferred power from the East India Company to the British Crown after the Revolt of 1857.

Q.12 Which of the following Acts laid the foundation for the federal system of India?

A. Government of India Act, 1934
B. Government of India Act, 1935
C. Government of India Act, 1919
D. Government of India Act, 1923

Answer: B

Sol: **The correct answer is (b) Government of India Act, 1935**

Explanation:
● The **Government of India Act, 1935** laid the foundation for a **federal system in India** by providing for **provincial autonomy** and a **central government with distributed powers**.
● It introduced **dyarchy at the center**, **federal legislature**, and **division of subjects into federal, provincial, and concurrent lists**.
● Although full federation was not implemented (as princely states did not join), it significantly influenced **India's Constitution of 1950**.

Information Booster:
● **Government of India Act, 1919** introduced **dyarchy at provincial level** but not a full federal system.
● **Government of India Act, 1935** was the **largest and most detailed constitutional reform** under British rule.
● It provided **bicameral legislature at the center**.
● Influenced the **federal structure, division of powers, and parliamentary system** in independent India.
● It served as a **model for the Constitution of India** after 1947.

Q.13 Which of the following Land Revenue Systems was introduced by Thomas Munro in 1820?

A. Zamindari
B. Mahalwari
C. Ryotwari
D. Zabti

Answer: C

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

Explanation:

- The **Ryotwari System** was introduced by **Thomas Munro** in **Madras Presidency in 1820**.
- Under this system, the **revenue was collected directly from the farmers (ryots)** by the British government.
- Each cultivator was recognized as the owner of the land, subject to payment of land revenue.

Why Other Options Are Incorrect:

- **Zamindari System**: Introduced by **Lord Cornwallis** in 1793 under the Permanent Settlement in Bengal; revenue collected through Zamindars.
- **Mahalwari System**: Introduced by **Lord Holt Mackenzie** and later modified by **Lord William Bentinck**; revenue collected from the **village community (mahals)**.
- **Zabti System**: Associated with **Akbar's land revenue reforms** and implemented by **Raja Todar Mal**, not the British.

Information Booster:

- The Ryotwari system aimed to eliminate middlemen like Zamindars.
- It was used in **Madras, Bombay, and parts of Assam**.
- Revenue demand was often **high**, causing hardship to farmers.

Q.14 Which is an advanced weather satellite of India configured with improved imaging system and atmospheric sounder?

A. RS-D1
B. GSAT-7A
C. INSAT -3D

D. SROSS-2

Answer: C

Sol: The correct answer is **(c) INSAT -3D**
· INSAT-3D is an advanced meteorological satellite launched by India that is equipped with an improved imaging system and atmospheric sounder.
· It provides vital information for weather forecasting, disaster management, and agricultural planning by monitoring various atmospheric parameters and providing high-resolution images of the Earth's surface.
Information booster:
INSAT-3D was launched on July 26, 2013, and serves as a significant tool for meteorologists and researchers, enhancing the capabilities of India's weather observation systems.
The satellite has four payloads:
· 6 channel multi-spectral Imager
· 19 channel sounder
· Data Relay Transponder (DRT)
· Satellite Aided Search and Rescue (SAS&R)
The sounder has not been operational since September 2020
Other Options:
· **RS-D1:** This is a remote sensing satellite, not specifically designed for weather observation.
· **GSAT-7A:** This is a communication satellite meant for military applications, focusing on communication and reconnaissance rather than weather observation.
· **SROSS-2:** This satellite was part of the Stretched Rohini Satellite Series, primarily for experimental purposes, and is not known for advanced weather observation capabilities.

Q.15 What is the motto of the United Nations Organisation (UNO)?

A. Peace for All
B. It's Your World
C. One World, One Future
D. Unity for Humanity

Answer: B

Sol: The correct answer is (b) It's Your World

Explanation:

• The official motto/slogan of the United Nations is "It's Your World."

• It highlights the UN's vision of collective responsibility and global cooperation.

• The motto reflects the idea that the UN belongs to all nations and people and works for peace, security, and development.

• It is used in official UN communication to promote inclusiveness and global participation.

Information Booster:

• UNO was founded on 24 October 1945 after World War II.

• Headquarters: New York City, USA.

Additional Knowledge:

Option (a): Peace for All

• Not an official UN motto, though peace is its core objective.

Option (c): One World, One Future

• Popular phrase but not adopted officially by the UN.

Option (d): Unity for Humanity

• Not associated with UNO's official branding or documents.

Q.16 In 2021, who among the following became the first Indian female athlete to win two Olympic medals?

A. MC Mary Kom
B. Saikhom Mirabai Chanu
C. PV Sindhu
D. Saina Nehwal

Answer: C

Sol: The correct answer is (c) PV Sindhu.
• PV Sindhu became the **first Indian woman to win two Olympic medals**.
• Won **Silver (2016 Rio)** and **Bronze (2021 Tokyo)**.
• She is India's most decorated badminton player.
• Known for consistent performance across global tournaments.
Information Booster:
• First Indian Olympic medalist (female): **Karnam Malleswari (2000)**.
• India's first Olympic gold (individual): **Abhinav Bindra (2008)**.
• Sindhu won **World Championship Gold (2019)**.
• Trains under **Pullela Gopichand & Park Tae-sang (Tokyo cycle)**.
• Awarded **Padma Bhushan (2020)**.
Additional Knowledge:
• Mirabai Chanu won **Silver at Tokyo 2021** in weightlifting (49 kg).
• Saina Nehwal won **Bronze at London 2012**.
• Mary Kom won **Bronze at London 2012**.
• Sindhu also won **5 World Championship medals** before 2019.
• Continues to represent India on the **BWF World Tour**.

Q.17 INS Aridhaman is built by which organization?

A. Naval Dockyard Mumbai
B. Shipbuilding Centre, Visakhapatnam, with BARC and DRDO support
C. Garden Reach Shipbuilders and Engineers
D. Hindustan Shipyard Limited

Answer: B

Sol: Ans. (B)
INS Aridhaman is being built by the Shipbuilding Centre located in Visakhapatnam, with support from the Bhabha Atomic Research Centre (BARC) and Defence Research and Development Organisation (DRDO). The construction of INS Aridhaman is part of India's Advanced Technology Vessel (ATV) project, which focuses on developing nuclear-powered submarines to enhance India's maritime defense capabilities and nuclear deterrence.
Information Booster
· INS Aridhaman is being built at the Shipbuilding Centre, Visakhapatnam.
· BARC and DRDO are providing critical support for its development.
· The submarine is part of the Advanced Technology Vessel (ATV) project.
· The Shipbuilding Centre in Visakhapatnam is a key facility for India's naval shipbuilding and submarine construction.
Additional Knowledge
· Shipbuilding Centre, Visakhapatnam: This facility is a key part of India's efforts to build and maintain advanced naval platforms, including nuclear-powered submarines. The construction of INS Aridhaman at this site represents a major leap forward in India's naval capabilities.
· BARC (Bhabha Atomic Research Centre): BARC plays a vital role in supporting the nuclear propulsion technology used in INS Aridhaman. They provide the expertise in nuclear reactors, which are crucial for powering these submarines.
· DRDO (Defence Research and Development Organisation): DRDO contributes by developing advanced defense technologies, including ballistic missiles for nuclear submarines, ensuring that INS Aridhaman will have the required nuclear deterrent capabilities.
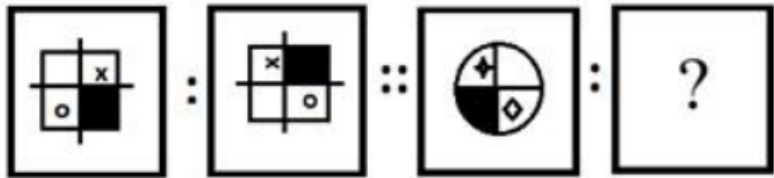
Q.18 15, 5, 4.5, 5.8, 7.9, ?

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 ...).
$15 \times 0.2 = 3 \rightarrow 3 + 2 = 5$
$5 \times 0.3 = 1.5 \rightarrow 1.5 + 3 = 4.5$
$4.5 \times 0.4 = 1.8 \rightarrow 1.8 + 4 = 5.8$
$5.8 \times 0.5 = 2.9 \rightarrow 2.9 + 5 = 7.9$
$7.9 \times 0.6 = 4.74 \rightarrow 4.74 + 6 = \mathbf{10.74}$
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.
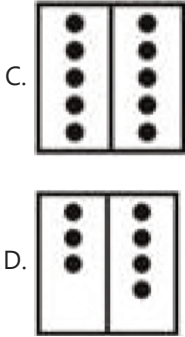

Thus, correct option is (d).

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	÷
Multiplication	×
Addition	+
Subtraction	−

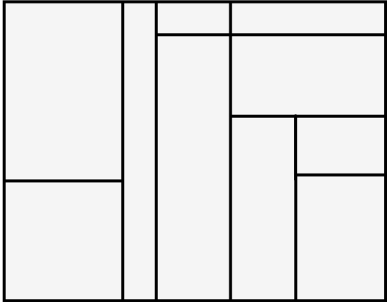**New equation:** 80 ÷ 20 - 5 × 12 + 92 = ?
4 - 5 × 12 + 92 = ?
4 - 60 + 92 = ?
96 - 60 = ?
? = **36**
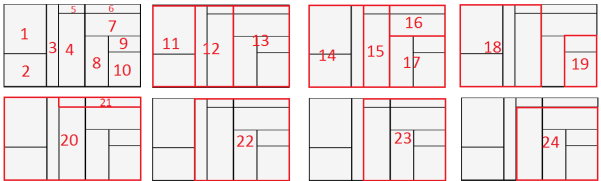Thus, correct option is (b).

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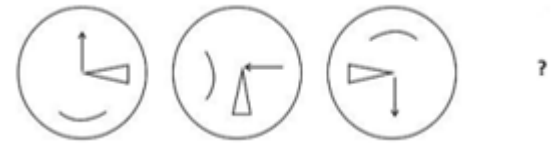

A. 24
B. 21
C. 22
D. 20

Answer: A

Sol: There are 24 rectangles are given below.

Thus, correct option is (a).

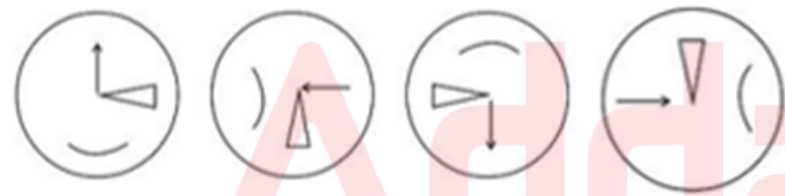**Note** - square can be a rectangle but a rectangle cannot be a square.

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 (8³)
b) 343 = 7×7×7 (7³)
c) 216 = 6×6×6 (6³)
d) 289 = 17×17 **(17²)**
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 = 4³, 216 = 6³
B) 216 : 512
216 = 6³, 512 = 8³
C) 125 : 343
125 = 5³, 343 = 7³
D) 343 : 728
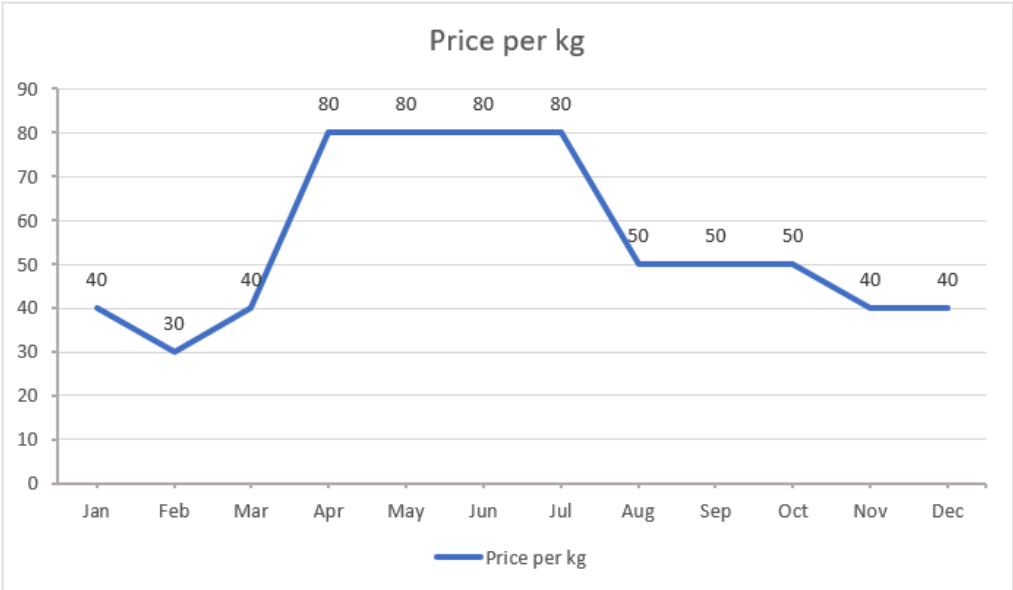343 = 7³, 728 = Not a cube
→ 728 is between them, so not a cube
Different one: D) 343 : 728
Because only this pair **does not** contain two perfect cubes.
Thus, correct option is (d).

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
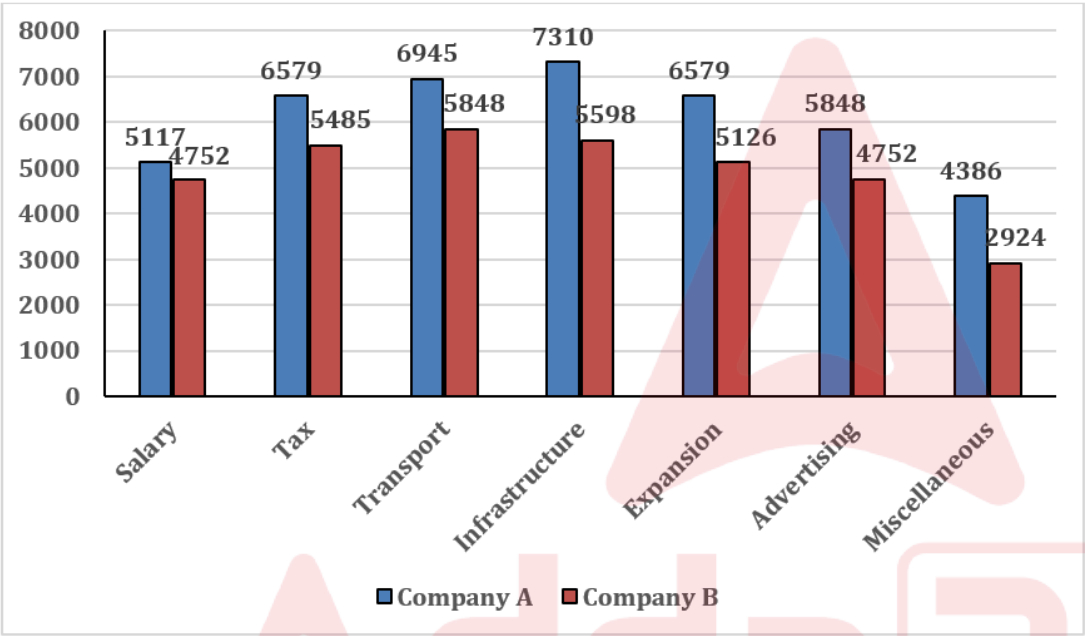Aug: 50
Sep: 50
Oct: 50
Nov: 40
Dec: 40

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 = $\dfrac{50 + 50}{2}$ = 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
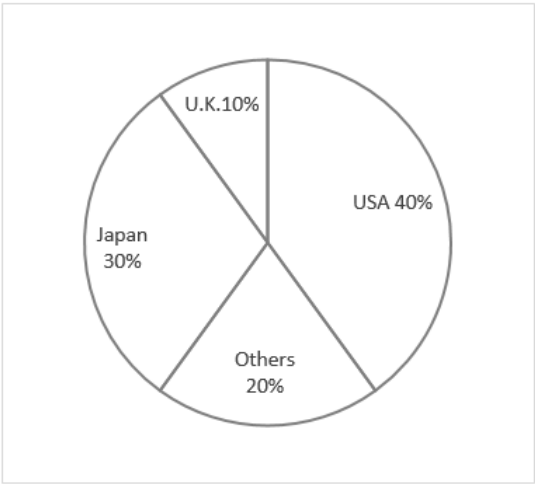Infrastructure (Company B) = 5598

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 = $\dfrac{₹905}{35}$ = ₹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 = $P\left(1 + \dfrac{r}{100}\right)^t$

where:

A = Amount

P = Principal

r = Rate of interest

t = Time in years

Compound Interest (CI) when compounded semi-annually:

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

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 = $\dfrac{225}{0.0025}$ = 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. = $\dfrac{P \times R^2}{100^2}$

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

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

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

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

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

$$P = 25000$$

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 = $\dfrac{2z + 150}{35}$

$\dfrac{z}{15} = \dfrac{2z + 150}{35}$

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.

- **Heads** are components in hard drives that read/write data onto platters but do not divide storage.