

Bihar Jeevika Livelihoods Specialist Memory Based Paper Held On 21 November 2025

**Q.1** In which regiment did Mangal Pandey serve during his time in the British East India Company's army?

- A. 36th Madras Infantry
- B. 32nd Punjab Infantry
- C. 34th Bengal Native Infantry
- D. 29th British Regiment of Foot

**Answer:** C

**Sol:** Ans. (c)

Mangal Pandey served as a sepoy in the 6th Company of the 34th Bengal Native Infantry (BNI), stationed at Barrackpore, under the British East India Company. This regiment was one of the many native units composed of Indian soldiers and commanded by British officers. The Bengal Native Infantry was primarily made up of upper-caste Hindus, and Mangal Pandey, a Brahmin by caste, was part of this composition. The 34th BNI played a key role in the events leading up to the 1857 Revolt, as it was within this regiment that the dissent over the greased cartridges of the Enfield rifles first emerged. Pandey's resistance and open revolt against British officers on March 29, 1857, at Barrackpore became one of the first acts of defiance that would trigger the First War of Indian Independence. Following his rebellion and execution, the British disbanded the entire 34th Bengal Native Infantry, considering it too sympathetic to the cause of rebellion.

Information Booster

- Regiment: 34th Bengal Native Infantry
- Company: 6th Company
- Location: Barrackpore, Bengal Presidency
- Role: Sepoy
- Significance: Regiment where the 1857 revolt first sparked
- Post-Rebellion: Regiment was disbanded

Additional Knowledge

- (a) 36th Madras Infantry Incorrect. This regiment was part of the Madras Army under the British East India Company, but Mangal Pandey was never a part of it. He served in the Bengal Presidency.
- (b) 32nd Punjab Infantry Incorrect. This was part of the Punjab regiments. Mangal Pandey was associated with the Bengal Native Infantry, not the Punjab unit.
- (c) 34th Bengal Native Infantry Correct. This was Mangal Pandey's regiment. It was in this unit that he served as a sepoy and carried out his famous act of defiance against British officers in 1857.
- (d) 29th British Regiment of Foot Incorrect. This was a British regiment composed of European soldiers. Mangal Pandey, an Indian sepoy, served in a native infantry unit under British command.

**Q.2** Whom did Mangal Pandey shoot?

- A. Baugh & Hewson
- B. Finnis
- C. Hearsey
- D. Mitchell

**Answer:** A

**Sol: Correct Answer: (A) Baugh & Hewson**

**Explanation:**

Mangal Pandey, a sepoy of the 34th Bengal Native Infantry, revolted at Barrackpore on 29 March 1857. He fired at Lieutenant Baugh and Sergeant-Major Hewson, and later Major General Hearsey tried to control him. The mutiny by Mangal Pandey marked the spark of the 1857 Revolt.

**Information Booster:**

- Mangal Pandey was executed on 8 April 1857.
- His act inspired widespread rebellion among Indian soldiers.
- He opposed the use of greased cartridges made with cow and pig fat.
- Barrackpore became the first center of defiance.
- He is remembered as the first martyr of India's freedom struggle.

**Additional Information (Other Options):**

**Option (B) Finnis:** Officer killed at Meerut during revolt, not at Barrackpore.

**Option (C) Hearsey:** General Hearsey tried to calm the situation but was not shot.

**Option (D) Mitchell:** No such officer connected with this incident.

**Q.3** At the 71st National Film Awards, the Best Actor award was shared between Shah Rukh Khan and \_\_\_\_.

- A. Rajkummar Rao

- B. Pankaj Tripathi
- C. Vikrant Massey
- D. Vicky Kaushal

Answer: C

Sol:

The correct answer is (C) Vikrant Massey

Explanation:

- Best Actor award (tie):
- Shah Rukh Khan for *Jawan*.
- Vikrant Massey for *12th Fail*.
- This was a rare tie, celebrating two powerful performances.

Information Booster:

- *Jawan* (2023) was directed by **Atlee** and became one of SRK’s biggest blockbusters.
- *12th Fail* (2023) is based on the struggles of UPSC aspirants.
- Past Best Actor (2022): **Allu Arjun (Pushpa: The Rise)**.
- Vikrant Massey has steadily grown as one of India’s **most acclaimed new-generation actors**.

Q.4 In 1887, who was the president of Indian National Congress?

- A. Gopal Krishna Gokhale
- B. Surendranath Banerjee
- C. Badruddin Tyabji
- D. Dadabhai Naoroji

Answer: C

Sol: **Correct Answer:** (c) Badruddin Tyabji

Explanation:

- **Badruddin Tyabji** was the **President of the Indian National Congress session in 1887** held at **Madras**.
- He was the **first Muslim President** of the INC.
- His presidency emphasized **Hindu-Muslim unity** in the national movement.

Information Booster:

- The **Indian National Congress** was founded in **1885** by **A.O. Hume**.
- Early INC sessions were dominated by **Moderates** who believed in **constitutional and peaceful methods**.
- Badruddin Tyabji was also one of the **founders of the Bombay Presidency Association**.

Additional Knowledge:

- (a) **Gopal Krishna Gokhale** → Moderate leader, President of INC in **1905**.
- (b) **Surendranath Banerjee** → One of the earliest nationalist leaders, President in **1895**.
- (d) **Dadabhai Naoroji** → President in **1886, 1893, and 1906**; known for the **Drain of Wealth theory**.

Q.5 India's first pure green hydrogen plant commissioned in:

- A. Guwahati
- B. Jamshedpur
- C. Ranchi
- D. Jorhat

Answer: D

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

Explanation:

- India's first **pure green hydrogen plant** was commissioned in **Jorhat**, Assam.
- The plant was developed to produce hydrogen using renewable energy sources like wind and solar power, making it environmentally friendly.

**Information Booster:**

- Green hydrogen is produced through the electrolysis of water powered by renewable energy sources, making it a clean alternative to traditional hydrogen production methods.
- The commissioning of this plant is part of India's efforts to boost its renewable energy capacity and reduce carbon emissions.

**Additional Information:**

- Green hydrogen is considered crucial for India's energy transition towards a low-carbon economy, especially in sectors like transportation and industry.

**Q.6** Who won the gold medal by setting a National record of 45.12s in the men’s 400m at the National Inter-State Athletics Meet?

- A. Muhammed Anas
- B. Amoj Jacob
- C. Vishal T.K.
- D. Rajesh Ramesh

**Answer:** C

**Sol:** The correct answer is (c) Vishal T.K.

**Explanation:**

- Vishal T.K. clocked 45.12s to set a new National record in men's 400m.
- He won the gold medal at the National Inter-State Athletics Meet.
- The event was held at Nehru Stadium, Chennai.
- He is one of India’s fastest rising quarter-milers.
- He has run sub-46 seconds five times this season.

**Information Booster:**

- The men's 400m is one of the most competitive sprint events in Indian athletics.
- National Inter-State Athletics Meet is crucial for national rankings and selections.

**Additional Knowledge:**

Muhammed Anas (Option a)

- One of India's top 400m runners but not the winner of this event.

- Former national record holder in 400m.

Amoj Jacob (Option b)

- Member of India's 4x400m relay team, but not the winner of this race.

Rajesh Ramesh (Option d)

- Another top 400m runner from India, part of relay teams, but did not win this event.

**Q.7** Resources which get exhausted over years of consumption are called:

- A. Renewable
- B. Non-renewable
- C. Protected
- D. Reserved

**Answer:** B

**Sol:** The correct answer is (b) **Non-renewable**

Explanation:

- **Non-renewable resources** are resources that cannot be replenished on a human timescale and get **exhausted over years of consumption**.
- These resources are finite and include materials like **fossil fuels** (coal, oil, natural gas) and **minerals** (gold, iron, copper).
- Once these resources are depleted, they cannot be replaced or regenerated within a practical time frame, which makes their sustainable use and conservation essential.
- The extraction and use of non-renewable resources can lead to **environmental degradation** and long-term shortages.

Information Booster:

- **Non-renewable resources** have a **limited supply**, and their extraction often results in **environmental harm** such as pollution and habitat destruction.
- Examples of non-renewable resources are **fossil fuels** (coal, oil, natural gas), **minerals**, and certain **metal ores**.

Additional Knowledge:

**(a) Renewable:**

- **Renewable resources** are those that can be **replenished naturally** over time, such as **solar energy, wind energy, water**, and **biomass**.
- These resources are sustainable and can be used indefinitely if managed properly.

**(c) Protected:**

- **Protected resources** generally refer to those that are conserved or preserved through legislation or management practices but are not a specific type of resource like renewable or non-renewable.

**(d) Reserved:**

- **Reserved resources** typically refer to resources that are set aside or designated for specific uses, but it is not a term commonly used to describe a resource based on its ability to regenerate or its sustainability.

**Q.8** Where did ISRO conduct the hot test of the semi-cryogenic engine in 2025?

- A. ISRO Propulsion Complex, Mahendragiri, Tamil Nadu
- B. Satish Dhawan Space Centre, Sriharikota, Andhra Pradesh
- C. Liquid Propulsion Systems Centre, Mahendragiri, Tamil Nadu
- D. Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala

**Answer:** A

**Sol: The correct answer is: (a) ISRO Propulsion Complex, Mahendragiri, Tamil Nadu**

**Explanation:**

- ISRO conducted the hot test of the semi-cryogenic engine's Power Head Test Article (PHTA) at the ISRO Propulsion Complex (IPRC) in Mahendragiri, Tamil Nadu.

- The test aimed to validate the integrated performance of critical subsystems such as the gas generator, turbo pumps, pre-burner, and control components.
- The test was carried out for a short duration of 4.5 seconds, focusing on the ignition and generation of hot gas within the pre-burner chamber.
- The test proceeded as predicted until 1.9 seconds, validating the ignition and subsequent performance of PHTA.
- At 2.0 seconds, an unanticipated spike in turbine pressure and subsequent loss of turbine speed was observed, leading to the termination of the test as a precautionary measure.

Information Booster:

- The semi-cryogenic engine utilizes a propellant combination of Liquid Oxygen (LOX) and Kerosene.
- The Power Head Test Article forms the first hardware test of the engine development program.
- The test was carried out at the dedicated test facility recently established at IPRC for testing semi-cryogenic engines and stages.
- ISRO commenced testing of the PHTA in May 2023 at this facility.

Q.9 Which recent mission by ISRO aims to study the Sun from the Lagrange point L1?

- A. Aditya-L1
- B. Chandrayaan-3
- C. Shukrayaan-1
- D. Mangalyaan

Answer: A

Sol: Correct Answer: (a) Aditya-L1

Explanation:

- **Aditya-L1** is India's first space-based mission to study the **Sun**.
- It was launched by ISRO in **September 2023** and is placed at **Lagrange point 1 (L1)**, about 1.5 million km from Earth.
- L1 provides a continuous, uninterrupted view of the Sun without Earth's shadow.

Information Booster:

- Aditya-L1 carries **7 payloads** to study solar corona, solar wind, magnetic fields, and space weather.
- It will help in understanding the impact of solar activities on **Earth's climate and satellites**.
- It is comparable to NASA's *SOHO Mission*.
- The name *Aditya* means **Sun** in Sanskrit.
- ISRO's first dedicated solar observatory mission.

Additional Knowledge:

- **(b) Chandrayaan-3** → ISRO's lunar mission (2023), achieved India's first soft landing on the Moon's south pole.
- **(c) Shukrayaan-1** → Planned ISRO mission to **Venus**, yet to be launched.
- **(d) Mangalyaan** → Also called **Mars Orbiter Mission (MOM-1)**, launched in 2013 to study Mars.

Q.10 The 2025 SEA Games were scheduled to be held in which country?

- A. Malaysia
- B. Indonesia
- C. Vietnam
- D. Thailand

Answer: D

Sol: The correct answer is (d) **Thailand**

Explanation:

- The **2025 Southeast Asian (SEA) Games**, officially known as the **33rd SEA Games**, are scheduled to be held in **Thailand** from **December 9 to 20, 2025**.
- This marks the **seventh time** Thailand will host the SEA Games, with previous editions held in **1959, 1967, 1975, 1985, 1995**, and **2007**.
- The Games will take place across three main locations: **Bangkok, Chonburi**, and **Songkhla**, featuring **50 sports** and **574 events**.
- Thailand was officially confirmed as the host country for the event after winning the bid in January 2023.

Information Booster:

- The **SEA Games** is a biennial multi-sport event involving countries from Southeast Asia.
- The 2025 edition will feature a wide array of sports, including traditional disciplines like **athletics, swimming,** and **football,** as well as regional favorites such as **muay thai** and **sepaktakraw.**
- Thailand aims to showcase its rich cultural heritage and sporting excellence during the Games.

Additional Knowledge:

- (a) **Malaysia:** Scheduled to host the **34th SEA Games** in **2027.**
- (b) **Indonesia:** Last hosted the SEA Games in **2011** and is set to host the **2023 SEA Games.**
- (c) **Vietnam:** Hosted the **31st SEA Games** in **2022** and is not the host for the 2025 edition.

Q.11 Which edition of the National Games was held in the year 2025?

- A. 40th
- B. 36th
- C. 38th
- D. 35th

Answer: C

Sol: The correct answer is (c) 38th

Explanation:

- The 38th edition of the National Games was held in 2025.
- The event featured participants from all Indian states and union territories.
- It aimed to promote grassroots sports and identify talent for international events.
- Hosted in multiple venues with disciplines ranging from athletics to indigenous games.
- The event was organized by the Indian Olympic Association in collaboration with host states.

Information Booster:

- The National Games are India’s premier multi-sport event, like a domestic Olympics.
- Goa hosted the 37th National Games in 2023.

Q.12 Oscar for Best Picture at the 96th Academy Awards in 2024 was awarded to which film?

- A. Barbie
- B. Killers of the Flower Moon
- C. Oppenheimer
- D. The Holdovers

Answer: C

Sol: The correct answer is (c) Oppenheimer

Explanation:

- Oppenheimer won the Oscar for Best Picture at the 96th Academy Awards in 2024.
- The film also secured six additional awards, highlighting its excellence in multiple categories.
- Christopher Nolan won Best Director for the same film.
- Cillian Murphy received Best Actor, and Robert Downey Jr. won Best Supporting Actor for their performances.
- The movie became one of the most awarded films of the year, recognized globally.

Information Booster:

- The 96th Academy Awards ceremony was held in 2024, honoring the best films of 2023.

- Oppenheimer is a biographical film about J. Robert Oppenheimer and the development of the atomic bomb during WWII.

Additional Knowledge:

(a) Barbie (Option a)

- Although a major box-office success, Barbie did not win Best Picture.
- It received nominations in various categories, including Best Supporting Actor and Best Original Song.

(b) Killers of the Flower Moon (Option b)

- Directed by Martin Scorsese, it received multiple nominations but did not win Best Picture.
- Lily Gladstone was a major contender for Best Actress.

(d) The Holdovers (Option d)

- The film received critical acclaim and won awards in acting categories, but not Best Picture.

Q.13 Who is the director of the film 'To Kill a Tiger', which was nominated in the 'Best Feature Documentary' category for the Oscars 2024?

- A. Anshuman Vichare
- B. Nisha Pahuja
- C. Kartiki Gonsalves
- D. Supriyo Sen

Answer: B

Sol: The correct answer is: (b) Nisha Pahuja.

- **Nisha Pahuja** is the director of the documentary film '**To Kill a Tiger**', which was nominated in the **Best Feature Documentary** category for the **Oscars 2024**.
- The film focuses on the true story of a young girl who survived a brutal sexual assault and the efforts of her family to bring the perpetrators to justice. It sheds light on the issue of child sexual abuse in India and the legal battles faced by victims.
- **Nisha Pahuja** is known for her impactful storytelling and her ability to bring attention to pressing social issues.

Information Booster:

- Nisha Pahuja is also known for her earlier works like '**The World Before Her**', which won several international awards.
- The Oscars recognition for '**To Kill a Tiger**' highlights the growing attention to social issues from Indian filmmakers on the global stage.

Additional Knowledge:

- **(a)Anshuman Vichare**: Not the director of this film. Anshuman Vichare is not associated with the film "To Kill a Tiger."
- **(c) Kartiki Gonsalves**: Kartiki Gonsalves directed the documentary "**The Elephant Whisperers**", which won the **Best Documentary Short** at the Oscars 2024, not "To Kill a Tiger."
- **(d) Supriyo Sen**: A filmmaker known for his work on documentaries, but he is not the director of "To Kill a Tiger."

Q.14 In which of the following years was the Bengal Sati Regulation enacted?

- A. 1837
- B. 1818
- C. 1829
- D. 1858

Answer: C

Sol: The correct answer is: (C) 1829

Explanation:

- The Bengal Sati Regulation (Regulation XVII) was enacted in **1829** by Lord William Bentinck.
- It declared the practice of Sati illegal and punishable.
- This reform was strongly supported by Raja Ram Mohan Roy.

Information Booster:



- Regulation applied first in **Bengal Presidency**.
- Later extended to Madras & Bombay Presidencies in 1830.
- Sati involved burning a widow on her husband’s pyre.
- One of the earliest major social reform laws in India.
- Marked a turning point in British social legislation.

**Q.15** The Champaran Satyagraha of 1917, Gandhi’s first major involvement in India’s freedom struggle, was launched in support of which group?

- A. Indigo farmers in Bihar
- B. Cotton mill workers in Bombay
- C. Tea plantation workers in Assam
- D. Peasant tenants in Awadh

**Answer:** A

**Sol: Correct Answer: (A) Indigo farmers in Bihar**

**Explanation:**

- The **Champaran Satyagraha (1917)** was Mahatma Gandhi’s first major Satyagraha in India.
- It was launched to support **indigo farmers (ryots)** of Bihar who were forced by British planters to grow indigo under the exploitative **Tinkathia system**.
- Gandhi investigated the issue, organised the peasants, and the British were compelled to abolish the system.

**Information Booster:**

- Champaran Satyagraha took place in **Champaran district, Bihar**.
- Leaders associated: **Rajendra Prasad, J.B. Kripalani, Brajkishore Prasad**.
- It marked the beginning of Gandhi’s role as a national leader.
- It was based on **non-violent resistance** and truth (Satyagraha).
- Result: Appointment of a committee that ended forced indigo cultivation.

**Additional Knowledge:**

- Cotton mill workers in Bombay → Related to **Ahmedabad Mill Strike (1918)**.
- Tea plantation workers in Assam → Connected to **non-cooperation movement (1921)**.
- Peasant tenants in Awadh → Related to **Kisan Sabhas & Baba Ram Chandra’s**

**Q.16** 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.17** Which of the following is the earliest to be constituted?

- A. Press Council of India
- B. United News of India
- C. NAM News Network
- D. Press Trust of India

**Answer:** D

**Sol:** The correct answer is (d) Press Trust of India

**Explanation:**

- Press Trust of India (PTI) was incorporated in August 1947, immediately after Independence, and began its news services by February 1949.
- It is India’s largest and oldest news agency, formed as a non-profit cooperative among newspapers.
- The other organizations were constituted much later, making PTI the earliest.

**Information Booster:**

- PTI serves most major newspapers, television channels, and digital platforms across India.
- It replaced the British-owned Reuters service in India after independence.

**Additional Knowledge:**

Press Council of India (Option a)

- Established on 4 July 1966.
- It functions as a statutory, quasi-judicial body to preserve freedom of the press and maintain journalistic standards.

United News of India – UNI (Option b)

- Founded on 19 December 1959.
- It is the second major news agency in India after PTI.

NAM News Network – NNN (Option c)

- Formed in November 2005 by the Non-Aligned Movement (NAM).
- It is a collaborative news platform of NAM member nations.

**Q.18** What should come in place of the question mark (?) in the given series?

27, ?, 63, 99, 147, 207

- A. 51
- B. 39
- C. 46
- D. 42

**Answer:** B

**Sol: Given:** 27, ?, 63, 99, 147, 207

**Logic:** Numbers are increasing multiple of 12.

$27 + 12 = \mathbf{39}$

$39 + 24 = 63$

$63 + 36 = 99$

$99 + 48 = 147$

$147 + 60 = 207$

So, the missing term is **39**.

Thus, correct option is (b).

- Q.19** What should come in place of the question mark (?) in the given series based on the English alphabetical order?  
GBV, LGA, QLF, VQK, ?
- A. AVP  
B. APO  
C. AVI  
D. APV

**Answer:** A

**Sol: Given:** GBV, LGA, QLF, VQK, ?

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

**Logic:** Letters are increasing + 5 place.  
G + 5 = L, L + 5 = Q, Q + 5 = V, V + 5 = **A**  
B + 5 = G, G + 5 = L, L + 5 = Q, Q + 5 = **V**  
V + 5 = A, A + 5 = F, F + 5 = K, K + 5 = **P**  
So, the missing term is **AVP**.  
Thus, correct option is (a).

- Q.20** Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?
- A. SK – MO  
B. QI – KN  
C. OG – IL  
D. ME – GJ

**Answer:** A

**Sol:**

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

**Logic:** 1st letter - 6 = 3rd letter and 2nd letter + 5 = 4th letter  
Now, we check each options.  
**Option (a):** SK – MO (**Not Follow**)  
S - 6 = M, K + 5  $\neq$  O  
**Option (b):** QI – KN (**Follow**)  
Q - 6 = K, I + 5 = N  
**Option (c):** OG – IL (**Follow**)  
O - 6 = I, G + 5 = L  
**Option (d):** ME – GJ (**Follow**)  
M - 6 = G, E + 5 = J  
Thus, correct option is (a).

- Q.21** OEUB is related to NFSE in a certain way based on the English alphabetical order. In the same way, KIMN is related to JJKQ. To which of the following is HLGW related, following the same logic?
- A. GMEZ  
B. POSK  
C. CMZE  
D. MESJ

**Answer:** A

**Sol: Given:** OEUB is related to NFSE and KIMN is related to JJKQ with same logic.

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

**Logic:** 1st letter - 1, 2nd letter + 1, 3rd letter - 2 and 4th letter + 3 place.  
**For,** OEUB - NFSE  
O - 1 = N, E + 1 = F, U - 2 = S, B + 3 = E  
**For,** KIMN - JJKQ  
K - 1 = J, I + 1 = J, M - 2 = K, N + 3 = Q  
Similarly,  
HLGW - ?  
H - 1 = **G**, L + 1 = **M**, G - 2 = **E**, W + 3 = **Z**  
So, **HLGW** is related to **GMEZ**.  
Thus, correct option is (a).

- Q.22** VS21 is related to CZ11 in a certain way. In the same way, LI39 is related to SP29. To which of the given options is BY25 related, following the same logic?
- A. IG15
  - B. JF20
  - C. IF17
  - D. IF15

**Answer:** D

**Sol: Given:** VS21 is related to CZ11 and LI39 is related to SP29 with same logic.

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

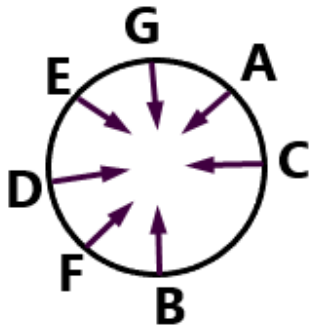
**Logic:** Letters are increasing + 7 and number is decreasing - 10 place.  
**For,** VS21 - CZ11  
V + 7 = C, S + 7 = Z, 21 - 10 = 11  
**For,** LI39 - SP29  
L + 7 = S, I + 7 = P, 39 - 10 = 29  
Similarly,  
BY25 - ?  
B + 7 = **I**, Y + 7 = **F**, 25 - 10 = **15**  
So, **BY25** is related to **IF15**.  
Thus, correct option is (d).

- Q.23** A, B, C, D, E, F and G are sitting around a circular table facing the centre. B sits third to the right of E. F sits to the immediate left of B. C is the immediate neighbour of A and B. G is not the immediate neighbour of F. How many people sit between D and G when counted from the left of G?
- A. Four
  - B. Two
  - C. Five
  - D. Three

**Answer:** A

Sol: Given:

Seven people A, B, C, D, E, F and G are sitting around a circular table facing the centre.  
B sits third to the right of E.  
F sits to the immediate left of B.  
C is the immediate neighbour of A and B.  
G is not the immediate neighbour of F.  
According to the given information, circular seating arrangements will be:



As per the diagram, there are 4 people sit between D and G when counted from the left of G.  
Thus, the correct option is **(A) Four**.

**Q.24** Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?  
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- A. GD-BH
- B. NK-IP
- C. RO-MT
- D. JG-EL

Answer: A

Sol:

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

**Logic:** 1st letter - 5 = 3rd letter and 2nd letter + 5 = 4th letter  
Now, we check each options.  
**Option (a):** GD-BH (**Not Follow**)  
G - 5 = B, D + 5  $\neq$  H  
**Option (b):** NK-IP (**Follow**)  
N - 5 = I, K + 5 = P  
**Option (c):** RO-MT (**Follow**)  
R - 5 = M, O + 5 = T  
**Option (d):** JG-EL (**Follow**)  
J - 5 = E, G + 5 = L  
Thus, correct option is (a).

**Q.25** Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which pair DOES NOT belong to that group?  
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster pair.)

- A. EX-OK
- B. ZS-JF
- C. IB-PO
- D. MF-WS

Answer: C

Sol: Logic:

1st Letter + 10 = 3rd Letter  
2nd Letter - 13 = 4th letter

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

Let's analyze the options:

**Option (a):** EX - OK

E + 10 = O

X - 13 = K

**Option (b):** ZS - JF

Z + 10 = J

S - 13 = F

**Option (c):** IB - PO **(Pattern Not Follow)**

I + 7 = P

B - 13 = O

**Option (d):** MF - WS

M + 10 = W

F - 13 = S

**Odd One Out:** The odd one out is **(c) IB - PO** because it doesn't follow the same pattern as other options follow.

Thus, the correct option is **(c) IB-PO**

**Q.26** Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group?

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

- A. SO-ON
- B. AW-XT
- C. PL-MI
- D. TP-QM

**Answer:** A

**Sol:** Let's check the options:

**Logic:** Each letter decreased by -3 place in English alphabet.

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

**Option A:** SO → ON → **Pattern Not Follow**

S - 3 = P (not O)

O - 3 = L (not N)

**Option B:** AW → XT

A - 3 = X

W - 3 = T

**Option C:** PL → MI

P - 3 = M

L - 3 = I

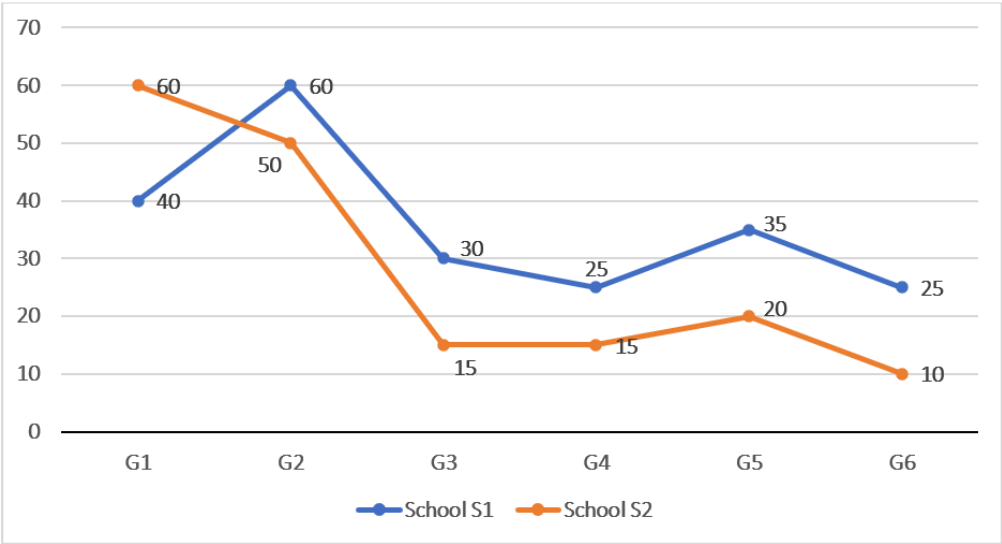
**Option D:** TP → QM

T - 3 = Q

P - 3 = M

Thus, the correct option is **(A) SO-ON.**

**Q.27** The line chart given below shows the number of students playing different games in two schools.



- Which of the following statement is correct?
- I. The average of number of students playing G1 in S1 and S2 is 50.
- II. The ratio of number of students playing G3 in S1 to the number of students playing G3 in S2 are 2:1.
- A. Only I
- B. Both I and II
- C. Neither I nor II
- D. Only II

Answer: B

Sol: Given:

For School S1:

G1: 40, G2: 60, G3: 30, G4: 25, G5: 35, G6: 25.

For School S2:

G1: 60, G2: 50, G3: 15, G4: 15, G5: 20, G6: 10.

Solution:

Statement I:

Average number of students playing G1 in S1 and S2:

$$\frac{(60 + 40)}{2} = \frac{100}{2} = 50.$$

So, Statement I is correct.

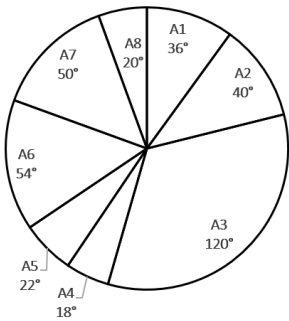
Statement II:

Ratio of students playing G3 in S1 to G3 in S2:

G3 in S1 = 30, G3 in S2 = 15.

The ratio is 30:15 = 6:3 = 2:1.  
Hence, Statement II is also correct.

**Q.28** The pie chart given below shows the demand of 8 different articles. Total demand of all 8 articles is 36000. Demand of a particular article is shown in terms of degree with respect to the total demand of all these 8 articles.



- J1 = The average of demand of articles A2, A3, A4 and A8.
- J2 = The difference between demand of articles A7 and A1.
- What is the value of (J1 - J2)?

- A. 3350
- B. 3250
- C. 4550
- D. 3550

Answer: D

Sol: Given:

$$360^{\circ} = 36000$$

**Solution:**

$1^{\circ} = 100$

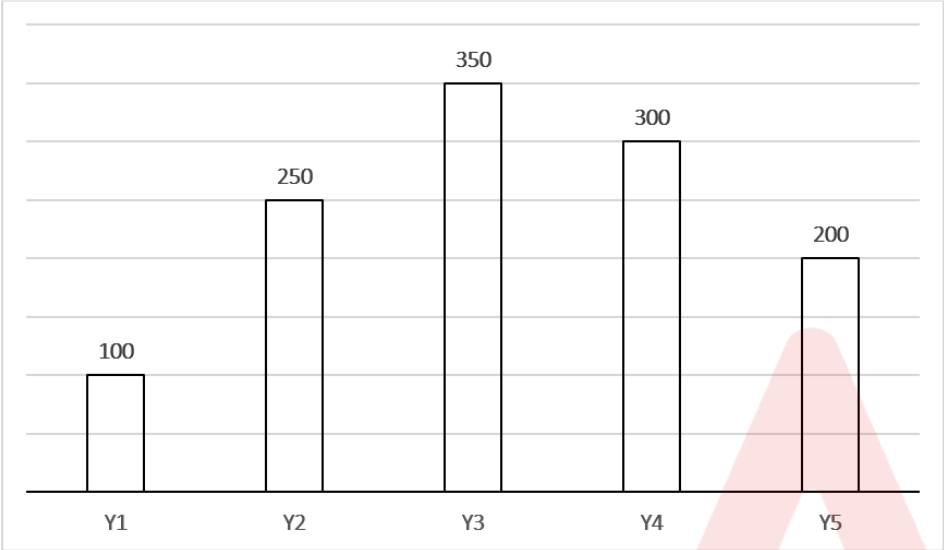
$J1 = 100 \times \frac{(40 + 120 + 18 + 20)}{4} = 25 \times 198 = 4950$

$J2 = 100 \times (50 - 36) = 100 \times 14 = 1400$

$J1 - J2 = 4950 - 1400 = 3550$

Hence, the correct option is (d).

**Q.29** The bar graph given below shows the number of working days of a company in 5 different years.



What is the average of number of working days in all years?

- A. 340
- B. 240
- C. 320
- D. 360

**Answer:** B

**Sol: Given:**

Working days in Y1–Y5: 100, 250, 350, 300, 200.

**Formula Used:**

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

**Solution:**

$\text{Sum} = 100 + 250 + 350 + 300 + 200 = 1200$

$\text{Number of years} = 5$

$\text{Average} = \frac{1200}{5} = 240 \text{ days.}$

**Q.30** In an election between two candidates 90 % of the registered voters cast their vote and 15 % of the votes polled were found invalid. Winning candidate got 51% of the valid votes and won the election by a margin of 2142 votes. How many voters were registered?

- A. 140000
- B. 140002
- C. 139999
- D. 140001

**Answer:** A

**Sol: Given:**



90% of registered voters voted.

15% of votes polled were invalid.

Winning candidate got 51% of valid votes.

Margin of victory = 2142 votes.

Find total registered voters

**Formula Used:**

Valid votes = (Total votes polled) × (1 – invalid %)

**Solution:**

Let total registered voters = N

Votes polled = 0.90N

Valid votes = 0.90N × 0.85 = 0.765N

Margin = (51% – 49%) of valid votes = 2% of valid votes

$$0.02 \times 0.765N = 2142$$

$$0.0153N = 2142$$

$$N = \frac{2142}{0.0153} = 140000$$

**Q.31** The marked price of a water cooler is Rs. 5,420. The shopkeeper offers an off season discount of 15% on it and an additional discount of 5% for cash payment customer. Find the cost price for a customer who pays cash payment.

- A. Rs. 4,390
- B. Rs. 4,376.65
- C. Rs. 4,325.38
- D. Rs. 4,354.50

**Answer:** B

**Sol: Given:**

Marked Price (MP) = Rs. 5,420

Off-season discount = 15%

Additional cash discount = 5%

**Formula Used:**

Successive Discount Price = MP × (1 – d<sub>1</sub>) × (1 – d<sub>2</sub>)

where, d = discount %

**Solution:**

$$\begin{aligned} \text{Price after discount} &= 5420 \times \left(1 - \frac{15}{100}\right) \times \left(1 - \frac{5}{100}\right) \\ &= 5420 \times \frac{85}{100} \times \frac{95}{100} \end{aligned}$$

= ₹4,376.65

- Q.32** An amount of ₹658 is divided among three persons in the ratio of 18 : 12 : 2. The difference between the largest and the smallest shares (in ₹) in the distribution is:
- A. 329
  - B. 426
  - C. 261
  - D. 242

**Answer:** A

**Sol: Given:**  
Total amount = ₹658

Ratio = 18 : 12 : 2

Find the difference between the largest and smallest shares.

**Solution:**

Total ratio = 18 + 12 + 2 = 32

Largest share (18 parts):

$$\frac{18}{32} \times 658 = \frac{9}{16} \times 658 = 370.125$$

Smallest share (2 parts):

$$\frac{2}{32} \times 658 = \frac{1}{16} \times 658 = 41.125$$

Difference:

$$370.125 - 41.125 = ₹329$$

- Q.33** The sum of five numbers is 655. The average of the first two numbers is 75 and the third number is 118. Find the average of the remaining two numbers?
- A. 194
  - B. 193
  - C. 194.5
  - D. 193.5

**Answer:** D

**Sol: Given:**  
Sum of 5 numbers = 655

Average of first two numbers = 75

Third number = 118

Find: Average of remaining two numbers

**Formula Used:**

$$\text{Average} = \frac{\text{Sum of last two numbers}}{2}$$

**Solution:**

Sum of first two numbers =  $75 \times 2 = 150$

Sum of first three numbers:

$$150 + 118 = 268$$

Sum of last two numbers:

$$655 - 268 = 387$$

Average of last two numbers:

$$\frac{387}{2} = 193.5$$

**Q.34** Find the simple interest (in ₹) on ₹1,200 at an interest rate of 4% per month for 9 months.

- A. ₹56
- B. ₹432
- C. ₹36
- D. ₹72

**Answer:** C

**Sol: Given:**

Principal (P) = ₹1,200

Rate of interest (R) = 4% per month

Time (T) = 9 months

Find the simple interest.

**Formula Used:**

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

**Solution:**

$$SI = \frac{1200 \times 4 \times \frac{9}{12}}{100}$$

$$= \frac{1200 \times 3}{100}$$

$$= 12 \times 3$$

$$= ₹36$$

**Q.35** If ₹10,000 becomes ₹12,100 in 2 years at compound interest compounded annually, what is the annual percentage rate of compounding?

- A. 10
- B. 12
- C. 8
- D. 9

Answer: A

Sol: Given:

Principal P = ₹10,000  
Amount after 2 years A = ₹12,100  
Compounded annually

Formula Used:

Compound Interest formula:  
 $A = P(1+r)^t$

Solution:

$$(1+r)^2 = \frac{A}{P}$$

$$(1+r)^2 = \frac{12100}{10000} = 1.21$$

$$1+r = \sqrt{1.21} = 1.1$$

$$r = 1.1 - 1 = 0.1 = 10\%$$

Q.36 A shopkeeper buys a laptop for Rs. 30,000 and sells it for ₹35,000. Calculate the profit percentage (rounded off to 2 decimal places).

- A. 17.67%
- B. 15.67%
- C. 16.67%
- D. 14.67%

Answer: C

Sol: Given:

Cost Price (CP) = ₹30,000

Selling Price (SP) = ₹35,000

Find: Profit %

Formula Used:

$$\text{Profit\%} = \left( \frac{\text{Profit}}{CP} \right) \times 100$$

Solution:

$$\text{Profit} = 35,000 - 30,000 = ₹5,000$$

$$\text{Profit\%} = \left( \frac{5000}{30000} \right) \times 100$$

$$= 16.6667\%$$

$$= 16.67\% \text{ (approx)}$$

Q.37 Out of the total profit of Rs. 15,500 in a business of A and B, A gets Rs. 5,500 as profit. If the investment of A is Rs. 67,500 less than the investment of B, then the investment of B (in Rs.) is:

- A. 1,25,000
- B. 1,50,000
- C. 1,60,000
- D. 1,55,000

**Answer:** B

**Sol: Given:**

Total profit = Rs. 15,500

A’s profit = Rs. 5,500

B’s profit = 15,500 – 5,500 = 10,000

A’s investment is Rs. 67,500 less than B’s.

Find B’s investment.

**Concept Used:**

Profit is proportional to investment in partnership.

A’s Profit : B’s Profit = A’s Investment : B’s Investment

**Solution:**

Profit ratio = 5500 : 10000 = 11 : 20

Let investments be 11k and 20k.

Difference = 20k – 11k = 9k

Given 9k = 67,500

=> k = 7,500

B’s investment = 20k = 20 × 7,500 = Rs. 1,50,000

**Q.38** Aryan has to reach Ahmedabad which is 889 km away in 17 hours. His starting speed for 5 hours was 29 km/hr. For the next 96 km his speed was 24 km/hr. By what speed he must travel now so as to reach Ahmedabad in decided time of 17 hours?

- A. 86 km/hr
- B. 85 km/hr
- C. 87 km/hr
- D. 81 km/hr

**Answer:** D

**Sol: Given:**

Total distance to Ahmedabad = 889 km

Total time available = 17 hours

First part: 5 hours at 29 km/hr

Second part: 96 km at 24 km/hr

Required: Speed for remaining distance

**Formula Used:**

Distance = Speed × Time

**Solution:**

Distance covered in first 5 hours =  $29 \times 5 = 145$  km

Distance covered next = 96 km

Time taken =  $\frac{96}{24} = 4$  hours

Total distance covered so far =  $145 + 96 = 241$  km

Remaining distance =  $889 - 241 = 648$  km

Time consumed so far =  $5 + 4 = 9$  hours

Time left =  $17 - 9 = 8$  hours

Required speed =  $\frac{648}{8} = 81$  km/hr

**Q.39    Address 1:** Dr. Ramesh Agarwal, 305/2, Liberty Road, Jaipur - 302001  
**Address 2:** Dr. Ramesh Agarwal, 305/2, Liberty Road, Jaipur - 302001

Are these likely to be the same?

- A. No, the house numbers do not match
- B. Yes, all major details match
- C. No, the surnames are different
- D. No, the city names are different

**Answer:** B

**Sol:** The house number, road name, and postal code are the same. The only difference is in the surname spelling, which could be a typo or a difference in personal preference.

**Conclusion:** The addresses are likely the same with a minor surname difference.

**Correct Answer:**  
B) Yes, all major details match

**Q.40    Address A:** Priya Sharma, 15/3, MG Road, Bangalore - 560001  
**Address B:** P. Sharma, 15/3A, MG Road, Bangalore - 560001  
What is the most significant difference between the two addresses?

- A. Different road
- B. Different house number
- C. Different surname
- D. Different postal code

**Answer:** B

**Sol:    Given:** The two addresses are compared.

Analysis: The only significant difference between the two addresses is the house number. Address A has "15/3", while Address B has "15/3A".

Conclusion: The most significant difference is the house number.

Correct Answer:  
B) Different house number

**Q.41** The devices that work with computer systems as soon as they are connected are described as:

- A. Hot Swapping
- B. Bay Swap
- C. Plug-N-Play
- D. USB Swapping

**Answer:** C

**Sol:** **Plug N Play** refers to **hardware devices** that are recognized by the **operating system** immediately upon **connection**, without requiring **manual configuration** or additional **driver installation**. This allows the device to start working **instantly** after being plugged in.

**Important Key Points:**

- 1. **Plug N Play** devices need **no manual setup**.
- 2. The **operating system** detects and configures the device **automatically**.
- 3. Common examples include **USB keyboards, mice, and storage devices**.
- 4. It improves **ease of use** and **system compatibility**.

**Knowledge Booster:**

- **Option a** is incorrect because **Hot Swapping** refers to removing or inserting devices **without shutting down** the system.
- **Option b** is incorrect because **Bay Swap** is not a standard term used in hardware connectivity.
- **Option d** is incorrect because **USB Swapping** is not a recognized feature or term related to automatic device configuration.

**Q.42** Which of the following is the time taken by the CPU to access a location in memory?

- A. Instruction cycle
- B. Memory formatting time
- C. Memory access time
- D. CPU frequency

**Answer:** C

**Sol:** The correct answer is: **C) Memory access time**

**Explanation:**

- **Memory access time** refers to the time taken by the **CPU** to access a specific location in memory and retrieve or store data. It includes both the **time to address the memory** and the **time to retrieve the data**.
- It is a critical performance factor in computing, as faster memory access time leads to **improved system performance**.

**Information Booster:**

- **Instruction cycle** refers to the time taken by the CPU to fetch, decode, and execute an instruction.
- **Memory formatting time** is not a standard term related to memory access in CPUs.
- **CPU frequency** refers to the speed at which the CPU operates, measured in **hertz (Hz)**, and is different from the time taken to access memory.

**Additional Knowledge:**

- **Memory access time** can be affected by factors such as **cache memory, RAM type**, and the **architecture of the system**.
- In systems with **cache memory**, the CPU often accesses data from the **cache** first, significantly reducing the **memory access time** compared to accessing data directly from main memory.

**Q.43** Which of the following is not a web mail provider?

- A. Gmail
- B. Outlook
- C. Baidu
- D. Yahoo

**Answer:** C

**Sol:** The correct answer is (c) Baidu.

- **Baidu** is a **Chinese search engine**, not a webmail service.

**Information Booster:**



- Gmail → Provided by **Google** (launched 2004).
- Outlook → Provided by **Microsoft**.
- Yahoo Mail → Provided by **Yahoo** (launched 1997).
- Additional Knowledge:**
- Baidu is often called the **“Google of China.”**
- Popular webmail protocols: **POP3, IMAP, SMTP**.
- Email stands for **Electronic Mail**.

**Q.44** Which of the following keyboard shortcuts is used to move through each of the open tabs going to the right in Chrome browser?

- A. Alt + Tab
- B. Ctrl + Tab
- C. Ctrl + N
- D. Alt + N

**Answer:** B

- Sol:** The correct answer is (b) Ctrl + Tab
- **Ctrl + Tab** allows switching to the next tab (right side) in the browser.
  - Useful for navigating multiple open tabs quickly.
  - Information Booster:**
  - Move to previous tab: **Ctrl + Shift + Tab**
  - Open a new tab: **Ctrl + T**
  - Close current tab: **Ctrl + W**
  - Additional Knowledge:**
  - Reopen last closed tab: **Ctrl + Shift + T**
  - Switch to specific tab: **Ctrl + 1 to Ctrl + 8**

**Q.45** Which of the following is a feature of a Dot Matrix Printer?

- A. Coloured Printing
- B. High-Resolution Printing
- C. Prints Multiple Copies using Carbon Paper
- D. Quiet Printing

**Answer:** C

- Sol:** A key feature of **Dot Matrix Printers** is their ability to **print multiple copies using carbon paper**. This is because dot matrix printers use an impact mechanism, where the print head strikes an ink ribbon to form characters on the paper, allowing them to produce multiple copies simultaneously if carbon paper is placed between the sheets.
- Important Key Points:**
1. **Dot Matrix Printers** are impact printers, making them suitable for tasks that require printing multiple copies using carbon paper, such as receipts and invoices.
  2. Although outdated compared to modern printers, dot matrix printers are still used in specific applications where such functionality is needed.
- Knowledge Booster:**
- **Coloured Printing** is not a feature of dot matrix printers, as they are typically limited to monochrome.
  - **High-Resolution Printing** is not characteristic of dot matrix printers; they offer lower resolution compared to modern printers like inkjet or laser.
  - **Quiet Printing** is not a feature of dot matrix printers; they tend to be noisier than modern non-impact printers.

**Q.46** Hyperlinks can be created between a Word document and \_\_\_\_\_.

- A. another word document
- B. a webpage on the www
- C. a webpage on a company Internet
- D. all of these

**Answer:** D

- Sol:**
- Hyperlinks can be created between a Word document and:
1. **Another Word document**
  2. **A webpage on the World Wide Web (WWW)**
  3. **A webpage on a company's internal network (Intranet)**
- Important Key Points:**

- 1. **Link to another Word document:** You can create a hyperlink in a Word document that links to another Word document, making it easy to navigate between related files.
  - 2. **Link to a webpage on the WWW:** You can link to external webpages on the internet by creating a hyperlink to a URL.
  - 3. **Link to a webpage on a company's intranet:** You can create a hyperlink to an internal webpage on your company's network (intranet), allowing easy access to resources available within the organization.
- Knowledge Booster:**
- **Hyperlinks** are an essential part of Word documents, allowing you to connect various resources, whether they are local files, external websites, or internal company resources.
  - Hyperlinks improve document interactivity and usability by providing quick access to related content.

**Q.47** Which of the following statement is true with respect to the Random-Access Memory?

- A. Used specially for the booting process
- B. Stores data in Gigabytes
- C. Non-volatile memory
- D. Writing data to the memory is faster

**Answer:** D

**Sol:** The correct answer is (d) Writing data to the memory is faster

Explanation:

- **Random-Access Memory (RAM)** is a type of computer memory that can be read from and written to. It is the primary working memory of a computer system.
- One of its key characteristics is that it allows **fast and direct access** to any memory address, regardless of its physical location.
- Compared to other types of storage like Hard Disk Drives (HDDs) or Solid State Drives (SSDs), RAM has significantly **faster read and write speeds**.
- This high speed is essential for the CPU to quickly access data and instructions for currently running programs and processes, which is why it is used as the computer's main memory.

Information Booster:

- The term "random access" means that the time it takes to access any piece of data is the same, no matter where it is located.
- RAM is a **volatile memory**, meaning it requires continuous power to retain the stored information. The data is lost as soon as the power is turned off.
- RAM is divided into two main types: **Static RAM (SRAM)**, which is faster and more expensive, and **Dynamic RAM (DRAM)**, which is slower, less expensive, and commonly used for a computer's main memory.
- The amount of RAM (e.g., 8 GB, 16 GB) is a critical factor for the performance of a computer, especially when running multiple applications or resource-intensive software.

Additional Knowledge:

(a) Used specially for the booting process (Option a)

- The **booting process** primarily uses instructions stored in **Read-Only Memory (ROM)** or Flash Memory, which contains the BIOS (Basic Input/Output System) or UEFI (Unified Extensible Firmware Interface).
- RAM is only used during the boot process after the initial instructions from ROM are executed, to load the operating system.

(b) Stores data in Gigabytes (Option b)

- While modern RAM modules do store data in **Gigabytes (GB)** (e.g., 8 GB, 16 GB, 32 GB), this is not a unique or defining characteristic.
- Many other storage devices, such as hard drives and SSDs, also store data in Gigabytes or even Terabytes (TB), making this a general feature of storage rather than a specific truth about RAM.

(c) Non-volatile memory (Option c)

- This statement is **false**. RAM is a **volatile memory**.
- This means that the data stored in RAM is temporary and is completely erased when the power is turned off.
- A **non-volatile memory** retains its data even without power, examples of which include ROM, hard disk drives, SSDs, and USB flash drives.

**Q.48** Except which of the following functions, a formula with a logical function shows the words "TRUE" or "FALSE" as a result?

- A. NOT
- B. OR
- C. IF
- D. AND

**Answer:** C

**Sol:**

The IF function in Excel is unique because it can return different results based on a condition, rather than just "TRUE" or "FALSE." While logical functions like **NOT**, **OR**, and **AND** return **TRUE** or **FALSE** based on the evaluation of conditions, the **IF** function allows you to specify custom outcomes

if a condition is met (TRUE) or not met (FALSE).

Important Key Points:

- 1. NOT, OR, and AND are all logical functions that evaluate conditions and return either TRUE or FALSE.
- 2. The IF function allows you to return specific values or text (such as "Yes", "No", or a numerical result) depending on whether a condition is TRUE or FALSE.
- 3. The IF function syntax is: =IF(logical\_test, value\_if\_true, value\_if\_false), where you can specify values for both true and false outcomes.
- 4. Logical functions are primarily used to test conditions and decisions, while IF provides more flexibility by allowing custom results.

Knowledge Booster:

- (a) NOT: The NOT function inverts a logical value, turning TRUE to FALSE and vice versa.
- (b) OR: The OR function returns TRUE if at least one of the conditions is true; otherwise, it returns FALSE.
- (d) AND: The AND function returns TRUE only if all conditions are true; otherwise, it returns FALSE.

Q.49 Unauthorized access to a bank account for carrying online transactions is an example of:

- A. Phishing
- B. Intellectual property theft
- C. Virus attack
- D. Hacking

Answer: D

Sol: Hacking refers to gaining unauthorized access to data in a system. In this case, accessing someone's bank account without permission to carry out online transactions is classified as hacking.

Important Key Points:

- 1. Hacking - Involves unauthorized access to computer systems or accounts for malicious purposes.
- 2. Phishing - A form of social engineering used to trick users into providing sensitive information, usually through fake emails or websites.

Knowledge Booster:

- Intellectual Property Theft: Involves stealing or using someone else's intellectual work without permission, which is unrelated to unauthorized bank transactions.
- Virus Attack: Refers to malicious software that infects a computer system but does not directly involve unauthorized bank account access.

Q.50 Which one of the following software applications would be the most appropriate for performing numerical and statistical calculations?

- A. Database
- B. Spreadsheet
- C. Graphics package
- D. Document processor

Answer: B

Sol: A Spreadsheet is designed to handle numerical data, apply formulas, and perform statistical calculations efficiently. It allows users to organize data in rows and columns, use built in functions, and generate charts for analysis. Therefore, it is the most suitable tool for numerical and statistical tasks.

Important Key Points:

- 1. Spreadsheet applications support mathematical and statistical functions.
- 2. They organize data in a tabular form for easy manipulation.
- 3. They can generate graphs and charts to visualize data patterns.
- 4. Examples include Microsoft Excel, Google Sheets, and LibreOffice Calc.

Knowledge Booster:

- Option a is incorrect because a Database is mainly used for storing and managing data, not direct calculation.
- Option c is incorrect because a Graphics package focuses on image creation and editing.
- Option d is incorrect because a Document processor is used for text creation and formatting, not numeric analysis.