Bihar jeevika Livelihood Specilist Sample Paper

Q1. Who directed the Indian animated film "Desi Oon," which won the prestigious Jury Award for Best Commissioned Film at the Annecy International Animation Festival 2025?
(a) Gitanjali Rao
(b) Suresh Triveni
(c) Suresh Eriyat
(d) Kireet Khurana
Ans.(c)
Sol. Indian animated film **Desi Oon** has won the prestigious **Jury Award for Best Commissioned Film at the Annecy International Animation Festival 2025** in France. The festival is widely considered the world's foremost event for animation.
Directed by celebrated animator Suresh Eriyat, Desi Oon has garnered multiple accolades across both national and international platforms. It recently bagged the **Best Film award at the WAVES Awards of Excellence 2025** and was one of the top entries in the Create in India Challenge, an initiative by the Ministry of Information & Broadcasting (I&B) under the WAVES 2025 summit.

Q2. In which year was the ANUBHAV Portal, which led to the institution of the ANUBHAV Awards, launched by the Government of India?
(a) 2010
(b) 2013
(c) 2015
(d) 2018
Ans.(c)
Sol. The correct answer is (C) 2015
Explanation:
The **ANUBHAV Portal** was **launched in March 2015** by the **Department of Pension & Pensioners' Welfare**, under the **Ministry of Personnel, Public Grievances & Pensions**.
The portal aimed to **collect and showcase written experiences** of retiring and retired Central Government employees to preserve valuable administrative knowledge and encourage continuity in governance.
Information Booster:
The **first ANUBHAV Awards** were presented soon after the successful implementation of the portal to encourage wider participation.
The portal contributes to building an **administrative history of India** through real-life narratives of civil servants.
It also motivates **new entrants into civil services** by showcasing good governance practices and inspirational stories.

Q3. Who among the following is a Padma Shri awardee, known for his work in promoting zero budget natural farming in India?
(a) Hardik Satishchandra Shah
(b) Muthulakshmi Reddy
(c) Subhash Palekar
(d) Sunil Yadav S.S.

Ans.(c)

Sol. The correct answer is (c) Subhash Palekar.

Explanation:

Subhash Palekar is a Padma Shri awardee recognized for his pioneering work in promoting **Zero Budget Natural Farming (ZBNF)** in India.

ZBNF is an approach that eliminates the need for chemical fertilizers and promotes sustainable and low-cost farming techniques that are eco-friendly and beneficial to the soil.

He was honored with the **Padma Shri** in 2019 for his contributions to the agricultural sector, particularly in promoting natural farming methods.

Information Booster:

Zero Budget Natural Farming (ZBNF) aims to reduce the financial burden on farmers by using natural methods and indigenous practices, which ultimately helps to cut down on the cost of inputs.

Subhash Palekar's approach is based on the use of locally available resources to improve soil health and enhance crop production without relying on chemical inputs.

Additional Knowledge:

(a) **Hardik Satishchandra Shah**:

Hardik Shah is not associated with the promotion of zero-budget natural farming. He is not a Padma Shri awardee.

He is known for his work in the field of agriculture, but his focus is not related to ZBNF.

(b) **Muthulakshmi Reddy**:

Muthulakshmi Reddy was a prominent Indian physician and social reformer, not an agriculturalist.

She was recognized for her contributions to women's health and education, but not for farming techniques.

(c) **Sunil Yadav S.S.**:

Sunil Yadav S.S. is not a Padma Shri awardee associated with zero-budget natural farming.

He has made contributions in other fields, but not in agricultural practices related to ZBNF.

Q4. Under the Employment Linked Incentive (ELI) Scheme, how are payments to employees disbursed?

(a) Cheques issued by state employment offices

(b) Cash handouts through local administrative centers

(c) Direct Benefit Transfer (DBT) via Aadhaar-Based Payment System (ABPS)

(d) Postal money orders delivered monthly

Ans.(c)

Sol. The correct answer is option (c) Direct Benefit Transfer (DBT) via Aadhaar-Based Payment System (ABPS)

Explanation

1. **Digital Payments for Employees**: Under the ELI Scheme, eligible first-time employees receive their incentive payments directly through the Aadhaar-Based Payment System (ABPS).
2. **DBT Platform**: The scheme uses the **Direct Benefit Transfer (DBT)** platform to ensure that funds go directly to the beneficiaries' Aadhaar-linked bank accounts.
3. **Secure and Transparent**: This method minimizes fraud and eliminates intermediaries, ensuring that the correct beneficiary receives the intended benefit.
4. **Installment Structure**: Employees receive the incentive (up to ₹15,000) in two parts—after 6 months of service and after 12 months plus completion of a financial literacy course.
5. **Aadhaar Verification**: ABPS uses Aadhaar authentication to securely verify identity and route funds to the correct bank account.
6. **Part of Digital India Initiative**: The mechanism is in line with the government's push toward digital governance and financial inclusion.

Information Booster
Mode: Direct Benefit Transfer (DBT)
System: Aadhaar-Based Payment System (ABPS)
Frequency: Two installments (6 & 12 months)
Security: Aadhaar verification
Goal: Direct, fast, and fraud-free transfer
Alignment: Digital India and financial inclusion
Additional Knowledge
(a) Cheques issued by state employment offices – Incorrect. No manual cheque distribution is involved.
(b) Cash handouts through local administrative centers – Incorrect. The scheme operates on a digital payment model, not cash.
(c) Direct Benefit Transfer (DBT) via Aadhaar-Based Payment System (ABPS) – Correct. This is the official mechanism for employee disbursements under the ELI Scheme.
(d) Postal money orders delivered monthly – Incorrect. Traditional postal methods are not used under this digital scheme.

Q5. Training for the Sanchar Mitra Scheme will be provided by experts from which of the following organizations?
(a) Indian Institute of Technology (IIT)
(b) National Communications Academy–Technology (NCA-T) and DoT Media Wing
(c) National Institute of Electronics and Information Technology (NIELIT)
(d) Ministry of Electronics and Information Technology (MeitY)
Ans.(b)
Sol. The correct answer is option (b) National Communications Academy–Technology (NCA-T) and DoT Media Wing
Explanation
The **Sanchar Mitra Scheme** provides **training** through experts from the **National Communications Academy–Technology (NCA-T)** and the **DoT Media Wing**. These institutions ensure that **Sanchar Mitras** (volunteers) are well-equipped with knowledge about **telecom services**, **cybersecurity**, and **mobile safety** to effectively raise awareness among the public.
Information Booster
Training for the **Sanchar Mitra Scheme** is provided by **NCA-T** and the **DoT Media Wing**.
The **Sanchar Mitras** are primarily university students from academic backgrounds such as **telecom**, **electronics**, **computer science**, and **cybersecurity**.
These volunteers are trained to engage in **community outreach** and raise awareness about **telecom safety** and **digital literacy**.
Additional Knowledge
(a) Indian Institute of Technology (IIT): Although IITs play a key role in **telecom education** and technology research, they are **not the primary training providers** for the **Sanchar Mitra Scheme**.
(c) National Institute of Electronics and Information Technology (NIELIT): NIELIT focuses on **electronics and IT education** but is not the **training provider** for the **Sanchar Mitra Scheme**.
(d) Ministry of Electronics and Information Technology (MeitY): While **MeitY** deals with broader IT and digital initiatives, it is **not directly involved** in the training of **Sanchar Mitras** for the scheme.

Q6. In which of the following states did Prime Minister Narendra Modi launch the Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA) on 2 October 2024?
(a) Bihar
(b) Odisha
(c) Jharkhand
(d) Assam
Ans.(c)
Sol. The Correct Answer is: **(c) Jharkhand**
Explanation:
On **2 October 2024**, Prime Minister **Narendra Modi** launched the **Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA)** from **Hazaribagh, Jharkhand**,
coinciding with the birth anniversary of **Mahatma Gandhi**.
The initiative aims to accelerate the **holistic development of tribal villages**, focusing on basic amenities, infrastructure, health, education, and livelihood in **Janjatiya (tribal) areas**.
Information Booster:
• **"Dharti Aaba"** is a title given to **Birsa Munda**, a revered tribal freedom fighter from Jharkhand.
• The program supports **mission-mode development** of 5,000 tribal villages by **2026**.
• Focuses on **last-mile delivery** of government schemes in tribal regions.
• Led by **Ministry of Tribal Affairs** in collaboration with state governments.

Q7. Who among the following is the founder of Swatantra Party?
(a) C Rajagopalachari
(b) Gopal Krishna Gokhale
(c) Vallabhbhai Patel
(d) Kamaraj
Ans.(a)
Sol. The correct answer is **(a) C Rajagopalachari**
Explanation:
- The **Swatantra Party** was founded in **1959** by **C. Rajagopalachari (Rajaji)**, India's last Governor-General.
- It was established in opposition to the socialist policies of the **Indian National Congress** under Jawaharlal Nehru.
- The party advocated **free enterprise, less government control, individual liberty, and free-market economy**.
- It gained strong support among **zamindars, business groups, and industrialists**.
- The party's influence declined after the 1970s and it was eventually merged with other opposition parties.

Information Booster:
- C. Rajagopalachari was also called **"Rajaji"**.
- He was the **last Governor-General of India (1948–1950)**.
- First Indian Governor-General after Lord Mountbatten.
- Opposed to the centralising and socialist tendencies of Congress.
- Swatantra Party became the **largest opposition party in 1967 Lok Sabha elections**.

Additional Knowledge:
- Gopal Krishna Gokhale → Founded the **Servants of India Society (1905)**.
- Vallabhbhai Patel → Known as the **Iron Man of India**, first Deputy PM, key in unifying princely states.
- K. Kamaraj → Congress leader from Tamil Nadu, famous for the **Kamaraj Plan (1963)** to revamp Congress.

Q8. Who was the founder of the Prarthana Samaj, which promoted social reform in Maharashtra?
(a) Atmaram Pandurang
(b) Gopal Krishna Gokhale
(c) Keshub Chandra Sen
(d) Dadabhai Naoroji
Ans.(a)
Sol. The Correct Answer is A: Atmaram Pandurang
Explanation
Founded in **1867** by **Atmaram Pandurang**, **Prarthana Samaj** aimed at **social and religious reforms** in Maharashtra. Influenced by **Brahmo Samaj**, it promoted **monotheism, women's rights, and social equality**.

Key Points
- **Atmaram Pandurang** established Prarthana Samaj in **1867**, later strengthened by **M.G. Ranade**.
- Advocated **women's education, widow remarriage, and caste reforms**.
- Played a crucial role in Maharashtra's **socio-religious transformation**.

Additional Information
- **Gopal Krishna Gokhale**: Founded **Servants of India Society (1905)** for social reforms.
- **Keshub Chandra Sen**: A key leader of **Brahmo Samaj**, driving religious reforms.
- **Dadabhai Naoroji**: Known as the **Grand Old Man of India**, first **Indian MP in British Parliament**.

Q9. In which of the following years did the Muslim League pass a resolution demanding a measure of autonomy for the Muslim majority areas?
(a) 1944
(b) 1940
(c) 1935
(d) 1937
Ans.(b)
Sol. The correct answer is: **B) 1940**
Explanation:
- The Muslim League passed the **Lahore Resolution on 23 March 1940**, demanding autonomy for Muslim-majority areas.
- It was adopted at the annual session held at Minto Park, Lahore.
- The resolution became the basis for the demand for **Pakistan**.
- It sought independent states in the north-western and eastern zones of India.

Information Booster:
- The resolution is also called the **Pakistan Resolution**.
- It was presented by **Fazlul Huq**, the Premier of Bengal.
- The session was presided over by **Muhammad Ali Jinnah**.
- This marked a turning point in Indian politics before independence.
- It rejected the idea of a united India under one constitution.

Q10. Who was the first chairman of ISRO?
(a) Satish Dhawan
(b) M.G.K. Menon
(c) Vikram Sarabhai
(d) Udupi Ramachandra Rao
Ans.(c)
Sol. The correct answer is (c) Vikram Sarabhai
Explanation:
Dr. Vikram Sarabhai is widely regarded as the "Father of the Indian Space Program" and served as the first chairman of **ISRO**.
He played a pivotal role in the establishment of **ISRO** in **1969** and laid the foundation for India's space exploration, focusing on using space technology for national development.
Information Booster:
Before **ISRO**, Dr. Sarabhai established the **Physical Research Laboratory (PRL)** in Ahmedabad in **1947**, which became a premier institution for space and allied sciences.
The **Vikram Sarabhai Space Centre (VSSC)** in Thiruvananthapuram, a key space research facility of **ISRO**, is named in his honor.
Additional Knowledge:
Satish Dhawan (Option a): Satish Dhawan was the third chairman of **ISRO**, known for his leadership during the critical development of the **SLV-3** (Satellite Launch Vehicle) and his role in setting up **ISRO**'s development infrastructure.
M.G.K. Menon (Option b): M.G.K. Menon was an eminent physicist and the second chairman of **ISRO** (1972-1972) following Vikram Sarabhai's passing.
Udupi Ramachandra Rao (Option d): Dr. Udupi Ramachandra Rao was instrumental in the launch of **India's first satellite Aryabhata** and succeeded Satish Dhawan as the chairman of **ISRO**. He is often called "India's Satellite Man."

Q11. Which of the following businesses/banking organisations was established by the Indian Business Community in 1927?
(a) Punjab National Bank
(b) Allahabad Bank
(c) CIBS
(d) FICCI
Ans.(d)
Sol. The correct answer is (d) FICCI.
• **FICCI** stands for **Federation of Indian Chambers of Commerce and Industry**, established in **1927** by **G.D. Birla and Purshottamdas Thakurdas** with encouragement from **Mahatma Gandhi**.
• It is India's **oldest and largest apex business organization**.
Information Booster:
• Founded during the **colonial era** to **represent Indian business interests** to the British.
• Headquarters: **New Delhi**.
• Plays a key role in **policy advocacy**, business promotion, and **economic development**.
• Conducts major annual summits like **India Economic Summit** and **FICCI Frames**.
Additional Information:
• Option (a) **Punjab National Bank** – Established in **1894**, by **Lala Lajpat Rai**, pre-dates FICCI.

• Option (b) **Allahabad Bank** – Founded in **1865**, was India's oldest joint-stock bank (merged with Indian Bank in 2020).
• Option (c) **CIBS** – Not a recognized financial or business entity relevant to this context.

Q12. What is the Eurozone?
(a) A group of countries in Europe that use the **dollar** as their currency
(b) A monetary union of **European Union (EU)** countries that use the **euro (€)** as their official currency
(c) A trade organization for European nations
(d) A political alliance among EU countries
Ans.(b)
Sol. The correct answer is option (b) A monetary union of **European Union (EU)** countries that use the **euro (€)** as their official currency.
Explanation
The **Eurozone** is a **monetary union** of **European Union (EU)** countries that have adopted the **euro (€)** as their official currency.
The euro was first introduced in **virtual transactions** in **1999**, and **physical euro notes and coins** were introduced later, in **2002**.
The **Eurozone** is governed by several key institutions, including the **European Central Bank (ECB)**, the **Eurogroup**, and national central banks of the eurozone countries.
Information Booster
The **Eurozone** consists of **EU countries** that use the **euro** as their official currency, promoting economic integration and stability.
The **European Central Bank (ECB)** oversees monetary policy, ensuring price stability and managing inflation across the Eurozone.
The **Eurogroup** consists of the finance ministers of eurozone countries and coordinates economic policy among them.
Additional Knowledge
Virtual Transactions (1999): The **euro** was initially introduced for **virtual transactions** in **1999**, allowing for electronic money transfers and other banking activities across eurozone countries.
Physical Euro (2002): **Euro notes and coins** were introduced in **2002**, replacing national currencies in countries within the Eurozone.
Institutions: The **European Central Bank (ECB)** is the main governing institution, ensuring the stability of the euro by setting interest rates and managing inflation. The **Eurogroup** coordinates fiscal policy and discusses matters related to the economy of the eurozone.

Q13. _____ is useful for the survival of species over time.
(a) Variation
(b) Budding
(c) Reproduction
(d) Population
Ans.(a)
Sol. The correct answer is **(A) Variation**.
Explanation:
Variation refers to the genetic differences within a species. It is crucial for the survival of a species over time because it provides the raw material for **natural selection**. When environmental changes occur, organisms

with advantageous traits are more likely to survive and reproduce. Without variation, a species would have limited ability to adapt to new conditions, making it more vulnerable to extinction.

Information Booster:

- **Variation**: The presence of **genetic diversity** within a population ensures that some individuals have characteristics that allow them to survive in changing environments. This is essential for **evolution** and **species survival**.
- **Genetic variation** arises through **mutations**, **genetic recombination** during **sexual reproduction**, and **gene flow** between populations.
- **Natural selection** acts on this variation, ensuring that advantageous traits are passed on to the next generation, leading to long-term survival and adaptability of the species.

Additional Knowledge:

Budding:

- A type of **asexual reproduction** in which an offspring develops as an outgrowth (bud) from the parent.
- It produces **genetically identical** offspring, limiting the **genetic variation** in the population, and may reduce the species' ability to adapt to changing environments.

Reproduction:

- While **reproduction** is necessary for the continuation of a species, it is the **variation** among offspring that allows for **adaptation** to new challenges, thus ensuring long-term survival.

Population:

- A larger **population** size can increase the chances of survival, but it is the **genetic variation** within that population that allows the species to **adapt** to new **ecological pressures** over time.

Q14. Genes that control the characteristics of a trait are located on:

(a) lysosome
(b) vacuoles
(c) chromosomes
(d) endoplasmic reticulum

Ans.(c)

Sol. The correct option is **(C) chromosomes**.

Explanation:

Genes, which determine the **traits** of an organism, are located on **chromosomes**. These **DNA-protein structures** are found in the **nucleus** and carry genetic instructions in a **linear sequence**.

Information Booster:

- Humans have **46 chromosomes** (23 pairs).
- **DNA** was first isolated by **Friedrich Miescher** in 1869.
- **Gregor Mendel** is known as the **Father of Genetics**.
- **Watson and Crick** proposed the **double helix structure** of DNA.
- The **Human Genome Project** was completed in **2003**.
- **Chromosome 23** determines the **sex** of a person (XX or XY).
- **Down syndrome** is caused by an extra **chromosome 21**.
- **Genes** are responsible for **protein synthesis** and **inherited traits**.

Additional Knowledge:

- **Lysosome**: **Contains enzymes** that break down **waste materials** and **pathogens** inside the cell.
- **Vacuoles**: **Stores water and nutrients**, and helps maintain **cell structure**, especially in **plant cells**.
- **Endoplasmic Reticulum (ER)**: **Rough ER** makes **proteins**, while **Smooth ER** helps in **lipid synthesis** and **detoxification**.

Q15. Which of the following missions aims to send a crew of three astronauts to an orbit of 400 kilometers above the Earth for three days?
(a) Mission Mangal
(b) Chandrayaan-2
(c) Gaganyaan
(d) Bhashkar-1
Ans.(c)
Sol. The correct answer is (c) Gaganyaan
Explanation:
The **Gaganyaan** mission is India's **human spaceflight program**, aiming to send a crew of **three astronauts** into space. The mission plans to take the astronauts to an **orbit of 400 kilometers** above the Earth and stay for **three days**. It is one of **ISRO's** ambitious projects and marks India's entry into the field of human space exploration.
Information Booster:
- **Gaganyaan** is **India's first manned mission**, which will be a significant step for ISRO in its space exploration goals.
- The mission aims to **orbit the Earth** for **three days** and will be conducted with the help of **PSLV** or **GSLV** rockets.
- The astronauts for the **Gaganyaan mission** are being specially trained in Russia.
- The **Gaganyaan mission** has faced several delays but is expected to be launched by **2025**.
- This mission will further India's **space exploration ambitions**, making it one of the few countries to undertake human space exploration.

Additional Information:
- **Mission Mangal** –**Mission Mangal** refers to the **Mars Orbiter Mission** (Mangalyaan), which was aimed at exploring Mars.
- **Chandrayaan-2** – **Chandrayaan-2** was a **moon exploration mission.**
- **Bhashkar-1 (d)**– **Bhashkar-1** was an **earth observation satellite.**

Q16. In which individual event, the 1st Olympic medal for independent India was won at Helsinki Olympics?
(a) Archery
(b) Boxing
(c) Wrestling
(d) Weightlifting
Ans.(c)
Sol. The correct answer is: (c) Wrestling
Explanation:
The first Olympic medal for independent India was won by K.D. Jadhav in wrestling at the 1952 Helsinki Olympics. He secured a bronze medal in the men's freestyle bantamweight category.
Information Booster:
K.D. Jadhav's medal in 1952 was India's first individual Olympic medal after independence.
His achievement was a breakthrough for Indian wrestling on the global stage.
Jadhav's victory is considered a milestone in India's Olympic history.
Key Facts:

Date: The games were held from July 19 to August 3, 1952.
Host City: Helsinki, Finland.
Number of Nations: 69 countries participated in the games.
Number of Events: There were 149 events in 17 sports.

Q17. Wimbledon Tournament is associated with which game?
(a) Football
(b) Golf
(c) Tennis
(d) Badminton
Ans.(c)
Sol. The correct answer is (c) Tennis
Explanation:
Wimbledon is the oldest and most prestigious tennis tournament in the world.
It is one of the **four Grand Slam** tournaments, along with the **Australian Open**, **French Open**, and **US Open**.
The tournament is played on **grass courts** in Wimbledon, London, and has a rich history and tradition, including its strict dress code of all-white attire for players.
Information Booster:
Wimbledon is known for its traditions, such as serving **strawberries and cream** to spectators and awarding the **Winner's Trophy**.
It is also famous for being the only Grand Slam played on grass, adding unique challenges for players.
Additional Knowledge:
Football (Option a): Major football tournaments include the **FIFA World Cup** and **UEFA Champions League**.
Golf (Option b): Major golf tournaments include **The Masters**, **PGA Championship**, and **British Open**.
Badminton (Option d): The **All England Open Badminton Championships** and **BWF World Championships** are key badminton events.

Q18. What should come in place of the question mark (?) in the given series based on the English alphabetical order?
MQU, JRT, GSS, DTR, ?
(a) AUQ
(b) AUP
(c) ATQ
(d) BUQ
Ans.(a)
Sol. Given series:
MQU, JRT, GSS, DTR, ?
Let's split each group into individual letters for better understanding:
M Q U
J R T
G S S
D T R
? ? ?
Step 1: Analyze the first letters:
M → J → G → D

(M = 13, J = 10, G = 7, D = 4) → decreases by 3 each step
→ Next: D - 3 = A
First letter of next term: A
Step 2: Analyze the second letters:
Q → R → S → T
(Q = 17, R = 18, S = 19, T = 20) → increasing by 1
→ Next: T + 1 = U
Second letter of next term: U
Step 3: Analyze the third letters:
U → T → S → R
(U = 21, T = 20, S = 19, R = 18) → decreasing by 1
→ Next: R - 1 = Q
Third letter of next term: Q
So, the next term is: AUQ
Correct Answer: A) AUQ

Q19. Read the following series and find which number will come in place of the question mark (?).
7, 13, 21, 31, 43, 57, 73, ?
(a) 89
(b) 91
(c) 93
(d) 97
Ans.(b)
Sol. Given:
The given series is: 7, 13, 21, 31, 43, 57, 73, ?
Formula Used:
The pattern in the series increases progressively by consecutive even numbers. We calculate the difference between consecutive terms.
Solution:
The differences between consecutive terms are as follows:
13 - 7 = 6
21 - 13 = 8
31 - 21 = 10
43 - 31 = 12
57 - 43 = 14
73 - 57 = 16
The differences are increasing by 2 each time: 6, 8, 10, 12, 14, 16. Thus, the next difference should be 18.
Therefore, the next term will be: 73 + 18 = 91.
Correct Answer:
The correct answer is: 91

Q20. Select the option in which the numbers share the same relationship as that shared by the given pair of numbers. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/deleting/multiplying etc. to

13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.

11 : 62

13 : 64

(a) 14: 37

(b) 12: 92

(c) 16: 67

(d) 9: 59

Ans.(c)

Sol. Given:

11 : 62

13 : 64

Logic: The pattern follows N + 51 = Results

Applying this logic:

11 + 51 = 62

13 + 51 = 64

Now, checking the options:

Option (a): 14 : 37 → 14 + 51 = 65 ≠ 37 **(Incorrect)**

Option (b): 12 : 92 → 12 + 51 = 63 ≠ 92 **(Incorrect)**

Option (c): 16 : 67 → 16 **+ 51 = 67(Correct)**

Option (d): 9 : 59 → 9 + 51 = 60 ≠ 59**(Incorrect)**

Thus, the correct option is **(c) 16 : 67.**

Q21. 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

Ans.(b)

Sol. Given: 80 + 20 ÷ 5 - 12× 92 = ?

Given Sign + ÷ - ×

New Sign ÷ - × +

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

Operationpreferencewise	Symbol
Brackets	[],, ()
Orders, of	$(power)$,√$(root), of$
Division	÷
Multiplication	×
Addition	+
Subtraction	−

New equation: 80÷ 20 - 5× 12 + 92 = ?

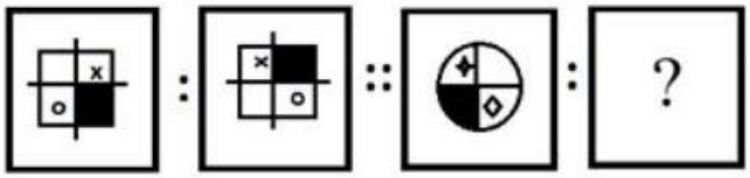
4 - 5× 12 + 92 = ?

4 - 60 + 92 = ?

96 - 60 = ?

? = **36**
Thus, correct option is (b).

Q22. 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) 

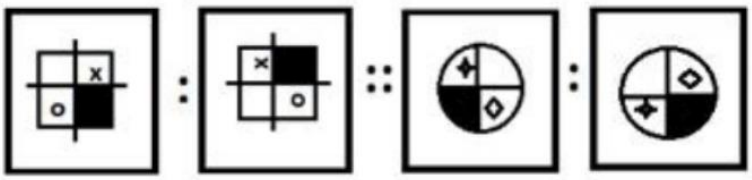
(b) 

(c) 

(d) 

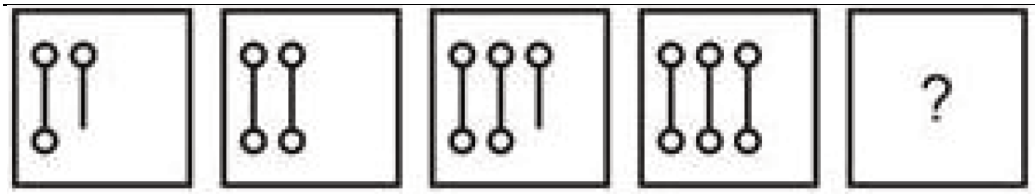
Ans.(d)

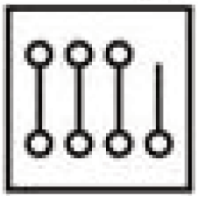
Sol. Logic: Inner shape is moving anti clock wise direction.

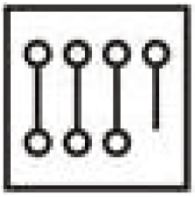


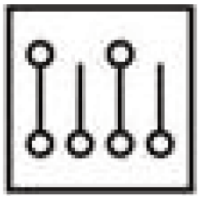
Thus, correct option is (d).

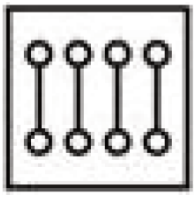
Q23. In the following question, select the figure which can be laced at the sign of question mark (?) from the given alternatives.



(a) 

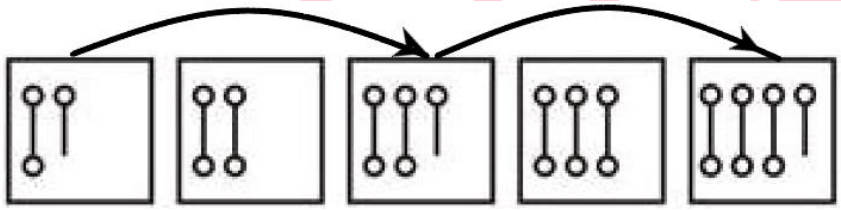
(b) 

(c) 

(d) 

Ans.(b)

Sol. Logic: In each box, a small circle and a line are being added one after the other in turn.



Thus, correct option is (b).

Q24. Find the odd one out of the choices given therein.

(a) Aizawal

(b) Itanager

(c) Tripura

(d) Shillong

Ans.(c)

Sol. Options and Explanations:

A. Aizawl – Capital city of Mizoram

B. Itanagar – Capital city of Arunachal Pradesh

C. Tripura – A **state**, not a city

D. Shillong – Capital city of Meghalaya

All other options (A, B, D) are capital cities of northeastern Indian states, while C. Tripura is itself a **state**, not a capital city. Therefore, **Tripura** is the odd one out.
Thus, correct option is (c).

Q25. Find the odd one out of the choices given therein.
(a) Mango
(b) Apple
(c) Potato
(d) Blackberry
Ans.(c)
Sol. Explanation of options;
A. Mango – fruit
B. Apple – fruit
C. Potato – **vegetable (tuber)**
D. Blackberry – fruit
All options except **Potato** are fruits, while Potato is a **vegetable** that grows underground.
Thus, correct option is (c).

Q26. Which of the following does NOT belong to this group?
A. Cotton
B. Wool
C. Rayon
D. Cardboard
(a) C
(b) A
(c) D
(d) B
Ans.(c)
Sol. Given:
A. Cotton B. Wool C. Rayon D. Cardboard
Now, we check the given words.
Cotton – natural fiber from plants, used in textiles.
Wool – natural fiber from animals (sheep), used in textiles.
Rayon – semi-synthetic fiber, used in textiles (although man-made, it's still used like natural fibers).
Cardboard – not a textile fiber; it's a heavy paper product used in packaging, not clothing or fabrics.
So, **cardboard** does not belong the group.
Thus, correct option is (c).

Q27. What is the quantity of copper in 1 kg of alloy if the alloy contains 32% copper, 40% zinc and the rest is nickel?
(a) 280 g
(b) 240 g
(c) 400 g
(d) 320 g

Ans.(d)
Sol. Given:
- Total weight of alloy = 1 kg
- Copper = 32%
- Zinc = 40%
- Nickel = Rest of the alloy
Solution:
Quantity of copper in 1 kg alloy
$= 32\% \times 1\text{kg} = (\frac{32}{100}) \times 1 = 0.32\text{kg}$
The quantity of copper in 1 kg of alloy is 320g.

Q28. Which of the following two ratios is greater, 17:18 and 10:11?
(a) 17/18
(b) 10/11
(c) Both are same
(d) Cannot determine
Ans.(a)
Sol. Given:
We need to compare the two ratios: 17 : 18 and 10 : 11
Solution:
$\frac{17}{18} \approx 0.9444$
$\frac{10}{11} \approx 0.9091$
Since 0.9444 > 0.9091,
the ratio 17 : 18 is greater than 10 : 11
Therefore, the greater ratio is 17 : 18

Q29. The average expenditure of Mr. Sharma for the January to June is Rs: 4200 and he spent Rs. 1200 in January and Rs.1500 in July. The average expenditure for the months of February to July is?
(a) Rs. 2750
(b) Rs. 3250
(c) Rs. 4250
(d) Rs. 4500
Ans.(c)
Sol. Given:
The average expenditure of Mr. Sharma from January to June is Rs. 4,200.
Expenditure in January = Rs. 1,200.
Expenditure in July = Rs. 1,500.
Formula Used:
Average expenditure = $\frac{\text{Total expenditure}}{\text{Number of months}}$
Total expenditure from January to June = Average expenditure × Number of months
Total expenditure from February to July = Total expenditure from January to June + Expenditure in July - Expenditure in January
Solution:

Total expenditure from January to June = 4200 × 6 = Rs. 25,200
Total expenditure from February to June = 25,200 - 1,200 = Rs. 24,000
Total expenditure from February to July = Rs. 24,000 + 1,500 = Rs. 25,500
The average expenditure from February to July = $\frac{25,500}{6}$ = Rs. 4,250
Therefore, the average expenditure for the months of February to July is Rs. 4,250

Q30. Vijay invests a sum of Rs. 5400 and Mohan invests a sum of Rs. 9400 at the same rate of simple interest per annum. If, at the end of 6 years, Mohan gets Rs. 600 more interest than Vijay, then find the rate of interest per annum (in percentage).
(a) 3.5
(b) 4.5
(c) 1.5
(d) 2.5
Ans.(d)
Sol. Given:
Vijay's Principal = Rs. 5400
Mohan's Principal = Rs. 9400
Time = 6 years
Difference in interest = Rs. 600
Formula Used:
Simple Interest= $\frac{P\times R\times T}{100}$ Difference in SI= $\frac{(P_M-P_V)\times R\times T}{100}$
Solution:

$$\frac{(9400-5400)\times R\times 6}{100} = 600$$
$$\frac{4000\times 6\times R}{100} = 600$$
$$240R = 600$$
$$R = \frac{600}{240} = 2.5$$

The rate of interest = 2.5% per annum

Q31. Rishi has Rs. 1612 with him. He divided it amongst his sons Shan and Piyush and asked them to invest it at 8% rate of interest compounded annually. It was seen that Shan and Piyush got same amount after 19 and 20 years respectively. How much (in Rs.) did Rishi give to Shan?
(a) 687
(b) 837
(c) 875
(d) 775
Ans.(b)
Sol. Given:
Total money = Rs. 1612
Shan's investment time = 19 years
Piyush's investment time = 20 years
Rate of interest = 8% compounded annually
Both received the same amount at the end

Formula Used:

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

Where:

• A = Amount after time T

• P = Principal

• R = Rate of interest

• T = Time

Solution:

Let the amounts invested be:

Shan = x

Piyush = 1612 - x

Amount after 19 years for Shan = $x \times (1.08)^{19}$

Amount after 20 years for Piyush =$(1612 - x) \times (1.08)^{20}$

Since both amounts are equal:

$x \times (1.08)^{19} = (1612 - x) \times (1.08)^{20}$

x = (1612 - x) × 1.08

x = 1740. 96- 1.08x

x + 1.08x = 1740.96

2.08x = 1740.96

x = 837

Rishi gave Rs. 837 to Shan.

Q32. The selling price of an article is Rs 750 and the profit percentage is 25 percent. If the profit percentage is 35 percent, then what will be the selling price of the article?

(a) Rs 900

(b) Rs 800

(c) Rs 720

(d) Rs 810

Ans.(d)

Sol. Given:

Selling price (SP) = Rs. 750 at a profit of 25%

To find: New selling price when the profit percentage is 35%

Formula Used:

SP = $CP \times (1 + \frac{\text{Profit \%}}{100})$

CP = $\frac{SP}{1+\frac{\text{Profit \%}}{100}}$

Solution:

Cost Price = $\frac{750}{1+\frac{25}{100}} = \frac{750}{1.25} = 600$

New SP = $600 \times (1 + \frac{35}{100}) = 600 \times 1.35 = Rs.810$

Q33. Ramani started a business with a capital of ₹8,000. Vanita joined the business after 4 months with a capital of ₹6,000. At the end of one year of business if they earned a profit of ₹3,600, then the share of Vanita is:

(a) ₹1,500
(b) ₹1,800
(c) ₹1,200
(d) ₹2,400

Ans.(c)

Sol. Given:

Ramani's capital = ₹8,000
Vanita's capital = ₹6,000 (joined after 4 months)
Total profit = ₹3,600
Business duration = 12 months

Solution:

Ramani's investment time = 12 months → 8000 × 12 = 96,000
Vanita's investment time = 8 months → 6000 × 8 = 48,000
Profit ratio = 96000 : 48000 = 2 : 1
Vanita's share

$= \frac{1}{3} \times 3600 = ₹1{,}200$

Alternate Method:

R	:	V
8×12	:	6×8
2	:	1

3 unit = 3600
Vanita's share 1 unit = 1200

Q34. Suhas travelled by train to cover $\frac{5}{12}$ of the journey, and then traveled by bus to cover $\frac{1}{3}$ of the journey. After that he travelled the remaining 36 km on a bicycle. How much in all did Suhas travel?

(a) 168 km
(b) 132 km
(c) 150 km
(d) 144 km

Ans.(d)

Sol. Given:

By train = $\frac{5}{12}$ of the journey

By bus = $\frac{1}{3}$ of the journey

Remaining = 36 km (by bicycle)

Solution:

Fraction by train + fraction by bus = $\frac{5}{12}+\frac{1}{3}$

$=\frac{5}{12}+\frac{4}{12}=\frac{9}{12}=\frac{3}{4}$

Remaining journey = $1-\frac{3}{4}=\frac{1}{4}$

So,

$\frac{1}{4}$ of total = 36

Total = 36 × 4 = 144 km

Total distance Suhas travelled = 144 km

Q35. Two places R and S are 800 km apart from each other. Two persons start from R towards S at an interval of 2 hours. Whereas A leaves R for S before B. The speeds of A and B are 40 km/h and 60 km/h respectively. B overtakes A at M, which is on the way from R to S. What is the distance from R, where B overtakes A?

(a) 260km

(b) 235km

(c) 240 km

(d) 300km

Ans.(c)

Sol. Given:

A and B start from R towards S.

A leaves 2 hours before B.

Speed of A (S_A) = 40 km/h.

Speed of B (S_B) = 60 km/h.

B overtakes A at point M, meaning they both cover the same distance from R to M.

Formula Used:

Distance = Speed × Time

Since B overtakes A, the distances covered by both are the same when B catches up with A

Solution:

Let T_A be the time taken by A to meet at M

Let T_B be the time taken by B to meet at M

Using A's speed and time:

$D_M = S_A \times T_A = 40 \times 6 = 240\text{km}$

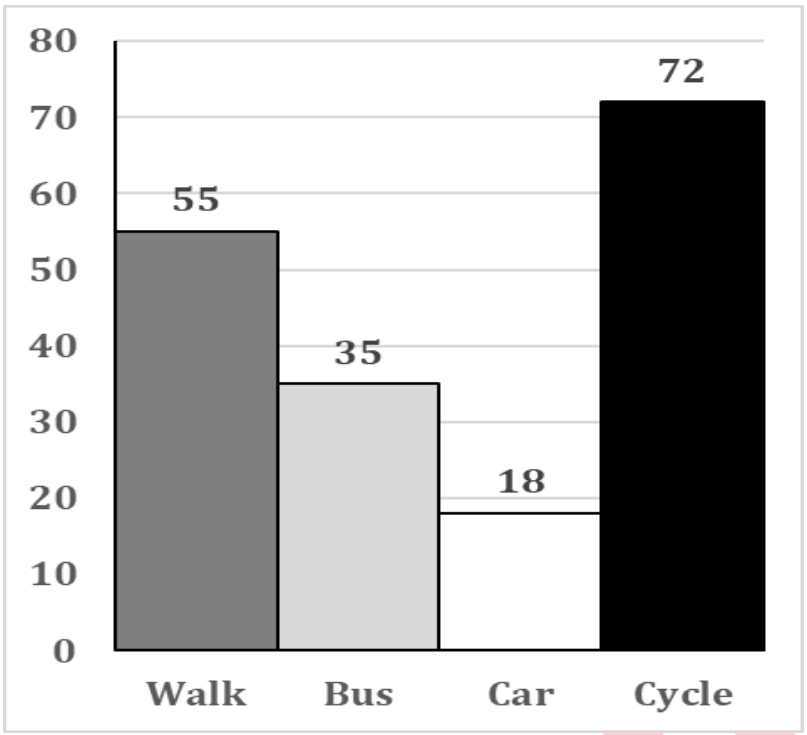
Using B's speed and time (for verification):

$D_M = S_B \times T_B = 60 \times 4 = 240\text{km}$

Both calculations yield the same result, confirming the distance.

Therefore, the distance from R where B overtakes A is 240 km

Q36. The following graph shows the number of employees using different modes of transport to reach their workplace.



The number of employees who walked to work was approximately what percentage more than those who travelled by bus?

(a) 45%

(b) 57%

(c) 35%

(d) 18%

Ans.(b)

Sol. Given:

The number of employees who walked to work is 55, while those who travelled by bus is 35.

Solution:

Difference = 55 - 35 = 20

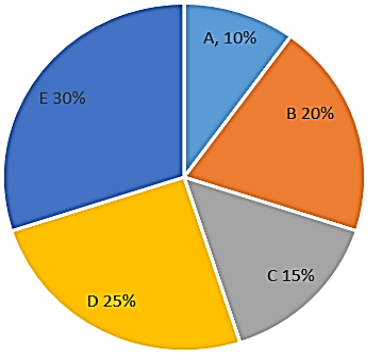
Percentage More

$= \frac{20}{35} \times 100 \approx 57\%$

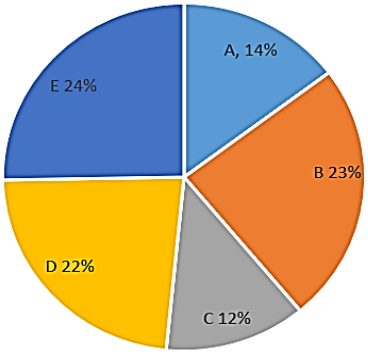
So, the number of employees who walked to work is approximately 57% more than those who travelled by bus.

Q37. The 1st pie chart given below shows the percentage distribution of total population in five different villages (A, B, C, D and E). The 2nd pie chart given below shows the percentage distribution of number of females in five different villages. The total population of the villages is 60,000 . If the number of females in village B is 4600 then find the number of males in village A.

Percentage distribution of total population in five different villages



Percentage distribution of number of women in five different villages



(a) 3300
(b) 3000
(c) 3200
(d) 3100

Ans.(c)

Sol. Given:

Total Population = 60000

Number of females in village B = 4600

Percentage of Population in village A = 10%

Percentage of female in village A = 14%

Percentage of female in village B = 23%

Solution:

Total female Population = $\frac{4600}{23} \times 100 = 20000$

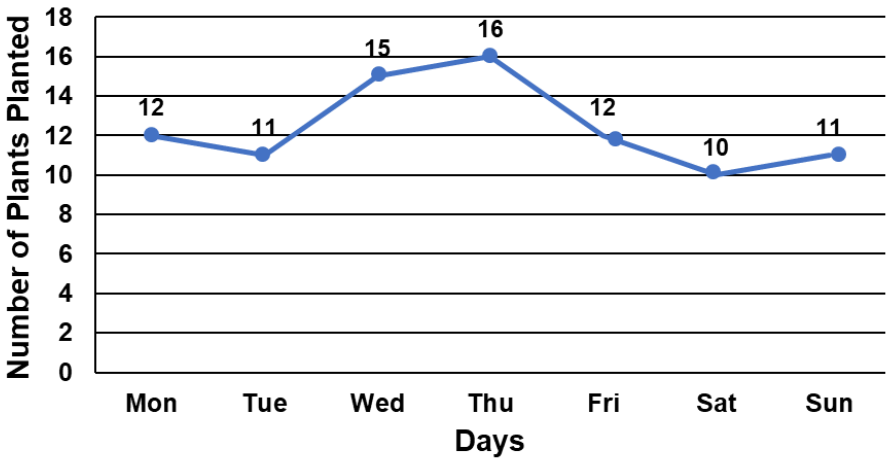
Female papulation in village A = $20000 \times \frac{14}{100} = 2800$

Total population is village A = $\frac{10}{100} \times 60000 = 6000$

Male Population in village A = 6000 - 2800 = 3200

Q38. Study the given graph and answer the question that follows.

The line graph shows the number of plants planted by a student during the week.



What is the ratio of the number of plants planted on Friday to the number of plants planted on Saturday?
(a) 1 : 9
(b) 7 : 9
(c) 2 : 5
(d) 6 : 5
Ans.(d)
Sol. Solution:
Number of plants planted on Friday = 12
Number of plants planted on Saturday = 10
Required Ratio = 12 : 10 = 6 : 5

Q39. Choose the options that are similar.
I. HALTR QWERT LOMNI ZUYOP 97531
II. ZUYOP HALTR LOMNI 97531 QWERT
III. HALTR QWERT LOMIN ZUYOP 97531
IV. ZUYOP QWERT LOMNI 97532 HALTR
(a) Only I and II
(b) Only I and III
(c) Only II and III
(d) Only I and IV
Ans.(a)
Sol. Compare each option with Option I:
Option I and II:
All words are in the same order: HALTR QWERT LOMNI ZUYOP 97531
all terms are similar. These are similar
Option I and III: AND Option II and III:
Third word is different: LOMNI (Option I) vs LOMIN (Option III)
Since the spelling differs, these are not similar
Option I and IV:
The order of digits is different. one is 97531and another is 97532
These are not similar
Correct Answer: (a) Only I and II
Let me know if you want additional questions of this type.

Q40. Find the options that are similar.
I. TURPO GRITX MAZLI NOPQU 41971
II. TURPO GRITX MAZLI NOPQU 41972
III. NOPQU GRITX MAZLI 41971 TURPO
IV. TURPO GRITX MZALI NOPQU 41971
(a) Only I and II
(b) Only I and III
(c) Only II and IV
(d) Only I and IV

Ans.(b)

Sol. Option I and II:

The words are exactly the same and in the same order:

TURPO GRITX MAZLI NOPQU

The only difference is in the number at the end (41971 vs 41972).

These are considered as not similar.

Option I and III:

The word are same in different order..

Therefore, these are similar.

Option I and IV:

One word is different. In Option IV, MZALI is used instead of MAZLI, which is a spelling error or variation.

Therefore, these are not similar.

Option II and IV:

41972 changes to 41971, hence is is also different.

Final Answer: Only I and III are similar.

Correct Option: (b) Only I and III

Q41. Which statement about perennial crops is correct, and which example best fits this category?

(a) They complete their life cycle in one season; Example – Wheat

(b) They live for several years and yield multiple harvests; Example – Mango

(c) They require two years to complete life cycle; Example – Sugarcane

(d) They grow in monsoon season and require high humidity; Example – Cotton

Ans.(b)

Sol. ✅ (b): Perennial crops live for several years and yield multiple harvests from the same plant without replanting each season. Examples include mango, guava, and other fruit trees. Their perennial nature allows them to remain productive for years if provided with suitable management and climate.

❌ (a): Wheat is a seasonal crop, not perennial.

❌ (c): Two-year completion refers to biennial crops like papaya, not sugarcane (annual).

❌ (d): Cotton is a Kharif crop, not perennial, and is sown annually.

Q42. Citrus fruits flourish in sub-tropical regions mainly because:

(a) They require chilling temperatures below freezing for fruit set

(b) Moderate winter temperatures prevent frost damage while enhancing flavor

(c) They need high altitude and low humidity

(d) They require prolonged snow cover during dormancy

Ans.(b)

Sol. ✅ (b): Citrus fruits such as oranges, lemons, and grapefruits thrive in sub-tropical climates because mild winters prevent frost injury while providing just enough coolness to develop color, aroma, and sweetness. The extended growing season ensures proper fruit maturation.

❌ (a): Below-freezing conditions damage citrus tissues; they are not cold-hardy like temperate crops.

❌ (c): High altitude with low humidity is suitable for certain temperate or arid crops, not citrus.

❌ (d): Snow cover is irrelevant to citrus cultivation and would harm the crop.

Q43. Which zone faces alkalinity in soils as a major problem?
(a) West Coast Plains & Ghats
(b) East Coast Plains & Hills
(c) Trans-Gangetic Plains
(d) Western Dry Region
Ans.(b)
Sol. ✅ (b):
The alluvial clay and loam soils here are prone to alkalinity due to poor drainage.
Alkalinity reduces nutrient availability and affects crop growth.
Suggested measures include drainage improvement and crop diversification.
❌ (a): West Coast soils are lateritic and coastal alluvium, not alkaline in nature.
High rainfall leaches salts away.
❌ (c): Trans-Gangetic Plains do face local salinity and alkalinity, but it is not the dominant problem.
❌ (d): The Western Dry Region suffers mainly from water scarcity and sandy soils, not alkalinity.

Q44. In India, wheat is primarily classified as which type of crop based on its growing season, and what climatic conditions favor its cultivation?
(a) Kharif crop – Warm, wet climate
(b) Rabi crop – Cold, dry climate
(c) Zaid crop – Warm, dry climate
(d) Perennial crop – Warm, humid climate
Ans.(b)
Sol. ✅ (b): Wheat is a Rabi crop, sown in October–November after the retreat of monsoon rains and harvested in March–April. It grows best in cold weather during its vegetative phase and requires dry, warm conditions for ripening. Low humidity during maturity reduces pest and disease incidence.
❌ (a): Warm, wet climates suit Kharif crops like rice.
❌ (c): Warm, dry climates favor Zaid crops such as watermelon and groundnut, not wheat.
❌ (d): Perennial crops live for several years, unlike wheat which completes its cycle within one season.

Q45. The concentration between just deficient for maximum growth and just adequate for maximum growth is ……
(a) Deficient nutrient range
(b) Sufficient nutrient range
(c) Critical nutrient range
(d) Maximum nutrient range
Ans.(c)
Sol. The **critical nutrient range (CNR)** is the range of nutrient concentration in plant tissues that separates **deficiency** from **adequacy**. It is the narrow zone between: The point where nutrient concentration is just too low to support maximum yield. The point where nutrient concentration is just sufficient for maximum growth.
Key points: If the concentration falls below the critical range → growth and yield decline. If the concentration is within or above the range → there is no further yield response, though excess may later cause toxicity. This concept helps in **nutrient diagnosis and fertilizer recommendation**.

Incorrect options: Deficient nutrient range (Option a) indicates concentrations too low to sustain normal growth. Sufficient nutrient range (Option b) indicates concentrations fully adequate for growth. Maximum nutrient range (Option d) is not a standard soil fertility term.
Hence, the correct answer is **critical nutrient range (c)**.

Q46. National Centre of Organic Farming is at
(a) Lucknow
(b) Ghaziabad
(c) Pune
(d) Delhi
Ans.(b)
Sol. • The National Centre of Organic Farming (NCOF) was set up under the **Ministry of Agriculture, Govt. of India**. • It promotes organic farming practices and provides training to farmers. • The center also oversees **biofertilizer quality control, certification systems, and policy planning**. • Ghaziabad (Uttar Pradesh) was chosen due to its central location and connectivity. • NCOF coordinates with state-level centers to expand organic farming nationwide. • Its role is crucial for India's move towards **sustainable agriculture and residue-free food**.

Q47. The yields of both crops in intercropping are higher than their pure crop on unit area basis.
(a) Companion cropping
(b) Parallel cropping
(c) multi-tiered cropping
(d) Synergetic cropping
Ans.(d)
Sol. Synergetic cropping refers to intercropping systems where the yields of both crops grown together are higher than the yields of the same crops when grown alone.
This synergy often comes from complementary resource use.
Explanation:
(a) Companion cropping – Companion cropping involves planting different crops together but does not necessarily guarantee higher yields.
(b) Parallel cropping – Parallel cropping refers to growing different crops side by side without interaction, which doesn't necessarily lead to higher yields.
(c) Multi-tiered cropping – This involves growing multiple layers of crops in the same space, but it doesn't always result in higher yields for both crops.
(d) Synergetic cropping – **Correct answer.** Synergetic cropping is the correct term, where intercropped crops benefit from each other, resulting in higher overall yields than monocropping.

Q48. India has been divided into agro-eco regions (AERs) and agro-eco-sub-regions (AESR) as:
(a) 25 : 60
(b) 20 : 60
(c) 15 : 60
(d) 30 : 60

Ans.(b)

Sol. The National Bureau of Soil Survey and Land Use Planning (NBSS&LUP) developed a classification system for agro-ecological zones in India based on:

Climate (rainfall, temperature)

Soil type

Length of growing period

Physiography

As per this system:

India is divided into 20 Agro-Ecological Regions (AERs).

These are further sub-divided into 60 Agro-Ecological Sub-Regions (AESRs).

This classification helps in region-specific crop planning, land use management, and sustainable agricultural practices.

Hence, the correct answer is Option (b).

Q49. The Planning Commission of India (1989) delineated the country into different agro-climatic regions based on homogeneity in rainfall, temperature, topography, cropping and farming systems, and water resources. India was divided into how many such regions?

(a) 12

(b) 15

(c) 18

(d) 16

Ans.(b)

Sol. In 1989, the Planning Commission of India, along with the Indian Council of Agricultural Research (ICAR), made a significant attempt to classify the country into Agro-Climatic Regions (ACRs) for better planning and development of agriculture.

Key details:

India was divided into 15 agro-climatic regions, each having distinct climate, soil types, water resources, and cropping systems.

This classification aimed to:

Promote region-specific agricultural strategies

Optimize resource use

Improve agricultural productivity and sustainability

These 15 regions were further subdivided into sub-regions, taking into account administrative boundaries and resource availability.

Hence, the correct answer is Option (b).

Q50. For Artificial Insemination, semen should have a minimum sperm concentration of:

(a) 5 million/ml

(b) 10 million/ml

(c) 18 million/ml

(d) 20 million/ml

Ans.(b)

Sol. The Correct Answer is: (B) 10 million/ml

Explanation:

For **artificial insemination** to be successful, the semen used should have a minimum sperm concentration of **10 million sperm per milliliter**. This concentration ensures that enough healthy sperm are available to achieve fertilization.

Semen with a higher concentration increases the chances of successful insemination, but a minimum of 10 million sperm/ml is generally required for effective reproduction in most animals.

Information Booster:

- **Semen concentration** is critical for **fertility success** in artificial insemination. Higher concentrations provide more sperm, increasing the likelihood of fertilization.
- The sperm concentration needs to be sufficient to compensate for any potential loss in sperm quality during the handling, storage, and insemination process.

Q51. Milch purpose breed of cattle is

(a) Gir
(b) Red Sindhi
(c) Sahiwal
(d) All of the above

Ans.(d)

Sol. All of the above are milch (dairy) cow breeds in India include the Sahiwal, Red Sindhi, Gir, and Tharparkar, known for their high milk yields and adaptability to tropical climates. Other milch breeds,

---

Q52. Dairy cows and buffaloes require water about:

(a) 10-12 litres/day
(b) 18-20 litres/day
(c) 27-28 litres/day
(d) 30-35 litres/day

Ans.(d)

Sol. The correct answer is: (D) 30-35 litres/day

Explanation:

Dairy cows and buffaloes require a significant amount of water for their daily needs, especially when they are producing milk. The average water intake for dairy cows and buffaloes is between **30-35 litres/day**. This requirement may vary depending on factors such as the size of the animal, the stage of lactation, temperature, and feed type.

Information Key Points:

- Water intake is crucial for **milk production**, digestion, and overall health.
- Factors such as temperature and feed intake can affect water consumption.

Q53. Avishaan sheep is a cross of how many breeds?

(a) 2
(b) 4
(c) 3
(d) None of the above

Ans.(c)

Sol. · Correct answer: (c) 3

Avishaan sheep is a crossbreed of **three** different sheep breeds. It was developed to enhance traits such as wool quality and resistance to disease.

Other options:

(a) 2: Incorrect, as Avishaan is a cross of three breeds.
(b) 4: Incorrect, as the breed is a combination of three breeds.
(d) None of the above: Incorrect, as the correct answer is 3.

Q54. Which sector of agri-business is involved in storage, processing, and marketing?
(a) Input
(b) Farm
(c) Product
(d) Distribution
Ans.(c)
Sol. The Product sector deals with the post-production activities including storage, processing, and marketing of the finished agricultural products.

Q55. Type of storage structure used for bulk storage of grains
(a) Silo
(b) Shed
(c) Warehouse
(d) Cold storage
Ans.(a)
Sol. 1. **Definition of Silo:**
A silo is a modern storage structure designed to store grains in bulk. It is commonly constructed from steel or reinforced concrete.
2. **Types of Silos:**
Shallow Bins (Squat Silos):
Wall height to diameter ratio is 0.5 or less.
Suitable for low-cost, high-quality storage and can compete with sheds.
Deep Bins (Vertical Silos):
Includes flat-bottom and hopper-bottom vertical silos.
Used for large-volume storage in modern processing plants.
3. **Advantages of Silos:**
Provide safe and efficient storage for large quantities of grains.
Protect grains from pests, moisture, and weather conditions.
Commonly used in large-capacity processing plants.
4. **Significance:**
Silos are an essential part of modern storage systems, ensuring quality preservation of stored grains and reducing post-harvest losses.

Q56. Crops stored in Kothar-type storage
(a) Vegetables
(b) Oilseeds
(c) Paddy, maize, sorghum, wheat
(d) Fruits
Ans.(c)
Sol. 1. **Definition of Kothar Storage:**
Traditional storage used in **India** for grains.
2. **Capacity:**
Stores **9 to 35 tonnes** of grains.
3. **Improved Kothar:**
Uses **5 cm thick wooden planks** for better protection.

Q57. Why is proper hygiene essential during fish processing?
(a) To maintain color only
(b) To prevent bacterial contamination
(c) To improve flavor only
(d) To remove excess salt
Ans.(b)
Sol. ✅ (b) To prevent bacterial contamination: • Fish can be contaminated from various sources—soil, dust, surface water, sewage, spoiled foods, and human contact. • Proper hygiene prevents harmful bacteria from multiplying on fish. • It ensures food safety, quality, and extends shelf life. • Essential in all processing methods, especially where no heat treatment is used.
❌ (a) To maintain color only: • Color maintenance is secondary; safety is the priority.
❌ (c) To improve flavor only: • Flavor is affected by spoilage, but hygiene is not applied for flavor alone.
❌ (d) To remove excess salt: • Washing removes salt, but it's a different process from ensuring hygiene.

Q58. Blanching is done in vegetables before processing to:
(a) Inactivate the natural enzymes
(b) Spoil color, texture, and flavors
(c) Improve taste and flavor
(d) Facilitate processing
Ans.(a)
Sol. Blanching is a crucial pre-processing step in vegetable preservation. It involves briefly boiling or steaming vegetables before cooling them in ice water. This process inactivates enzymes, preventing undesirable changes in color, texture, and flavor during storage. Blanching also helps retain nutrients, remove microorganisms, and improve the efficiency of freezing and drying processes.

Q59. Which fish processing method is the most energy-intensive?
(a) Smoking
(b) Freezing
(c) Salting
(d) Drying
Ans.(b)
Sol. ✅ (b) Freezing: • Freezing fish requires constant low temperatures, necessitating high energy usage. • It involves large investments in equipment like freezers, generators, and insulated storage. • Despite the cost, freezing maintains the best nutritional quality and long shelf life.
❌ (a) Smoking: • Requires some fuel but far less energy than freezing.
❌ (c) Salting: • No significant energy use involved.
❌ (d) Drying: • Especially sun drying, is energy-free in terms of fuel or electricity.

Q60. The Integrated Rural Development Programme (IRDP) was launched in India on:
(a) 2 October, 1980
(b) 30 January, 1980
(c) 14 November, 1985
(d) 14 January, 1990

Ans.(a)

Sol. The correct answer is: A) 2 October, 1980

The **Integrated Rural Development Programme (IRDP)** was **launched on 2 October, 1980** by the Government of India.

It was a major initiative aimed at **providing employment, raising income levels, and promoting self-reliance** among the rural poor through a mix of subsidies and bank credit.

Information Booster (Key Points):

- **Objective:** To offer **sustainable livelihood opportunities** to the rural poor.
- **Target Group:** Marginal farmers, agricultural laborers, rural artisans, and scheduled castes/tribes.
- **Assistance:** Included financial aid, skill training, and access to productive assets.
- **Implemented By:** District Rural Development Agencies (DRDAs).
- The IRDP was later **merged** into the **Swaranjayanti Gram Swarozgar Yojana (SGSY)** in 1999, which evolved into the **National Rural Livelihoods Mission (NRLM)**.

Q61. Which of the following is considered the first mechanical computer designed by Charles Babbage?

(a) ENIAC
(b) Abacus
(c) UNIVAC
(d) Analytical Engine

Ans.(d)

Sol. The **Analytical Engine** is considered the first mechanical computer designed by **Charles Babbage**. It was a groundbreaking design for a general-purpose computing machine, featuring components such as an arithmetic logic unit, control flow through conditional branching and loops, and memory. Though it was never completed in Babbage's lifetime, it laid the foundation for future computers.

Important Key Points:

1. **General-Purpose Design**: The Analytical Engine was designed to perform any calculation, unlike earlier machines that were specialized for specific tasks.
2. **Key Innovations**: It included features such as a punched card input system, a central processing unit (CPU), and memory storage.
3. **Legacy**: Charles Babbage is often referred to as the "father of the computer" for his conceptual contributions that influenced the development of modern computing.

Knowledge Booster:

ENIAC: ENIAC (Electronic Numerical Integrator and Computer) was one of the earliest electronic general-purpose computers, but it was developed in the 1940s, long after the Analytical Engine.

Abacus: The abacus is an ancient tool for performing arithmetic calculations but is not a mechanical computer.

UNIVAC: UNIVAC (Universal Automatic Computer) was one of the first commercially produced computers in the 1950s, developed after the Analytical Engine.

Q62. Which among the following ports is also called as mouse port?

(a) Video Graphic Array
(b) High-Definition Media Interface
(c) Firewire
(d) PS/2

Ans.(d)

Sol. The **PS/2 port** is commonly referred to as the **mouse port**, as it was traditionally used to connect a **mouse** or a **keyboard** to a computer. Introduced by IBM in 1987, this port was a standard for peripherals before the adoption of USB.

Important Key Points:

1. PS/2 ports are **round 6-pin connectors** used for connecting input devices like mice and keyboards.
2. They have largely been replaced by USB ports in modern systems but were once a standard interface.
3. Different colored ports were used to distinguish between keyboard (purple) and mouse (green).

Knowledge Booster:

- Video Graphic Array (VGA): Used for connecting monitors and displays, not peripherals like mice.
- High-Definition Media Interface (HDMI): Used for transmitting high-definition audio and video signals.
- Firewire: A high-speed interface for transferring data, often used with external drives and cameras, not mice or keyboards.

Q63. _____ software is sued for tasks such as managing disks and troubleshooting hardware problems.

(a) Application
(b) Operating system
(c) Utility
(d) Network system

Ans.(c)

Sol. Utility software is designed to perform **specific maintenance or support tasks** that help manage, analyze, and optimize the performance of a computer. These tasks include **disk cleanup**, **defragmentation**, **hardware diagnostics**, **antivirus scanning**, and **file management**. Utilities work alongside the operating system to ensure the system runs efficiently and securely.

Important Key Points:

1. **Utility software** handles **system maintenance** and **optimization functions**.
2. Common examples include **Disk Cleanup**, **CHKDSK**, **Defragmenter**, and **Antivirus tools**.
3. They help troubleshoot **hardware or software issues** by scanning and fixing problems.
4. Utilities often run in the background or are manually executed when needed.
5. They are essential for **extending system life and maintaining performance**.

Knowledge Booster:

- **(a) Application**: Performs user-specific tasks like word processing or web browsing—not system maintenance.
- **(b) Operating system**: Manages hardware and software resources but is **not limited** to maintenance tasks.
- **(d) Network system**: Relates to managing **network operations**, not general hardware troubleshooting.

Q64. Main memory of a computer system is:

(a) Volatile
(b) Non-volatile
(c) Restricted
(d) Non-restricted

Ans.(a)

Sol. Main memory (RAM - Random Access Memory) is **volatile memory**, which means it requires continuous electrical power to maintain the stored data. When the computer is turned off or loses power, all data stored in main memory is **permanently lost**. This is a fundamental characteristic that distinguishes main memory from secondary storage devices like hard drives or SSDs, which retain data even without power.

Important Key Points:

1. **Power Dependency**: Requires constant electrical power to retain data.
2. **Data Loss**: All contents are erased when power is removed.
3. **Temporary Storage**: Used for storing currently running programs and active data.
4. **Fast Access**: Provides quick read/write access for the CPU.
5. **DRAM Technology**: Most main memory uses Dynamic RAM which needs periodic refreshing.
6. **System Performance**: Volatile nature allows for high-speed data processing.
7. **Boot Process**: Must be reloaded with operating system and programs on each startup.
8. **Working Space**: Serves as temporary workspace for active processes.

Knowledge Booster:

Non-volatile describes storage devices like **hard drives**, **SSDs**, **ROM**, and **flash memory** that retain data even when power is turned off. These are typically used for permanent storage.

Restricted and **Non-restricted** refer to **access control** or **permission levels**, not the fundamental characteristic of memory persistence. These terms relate to security and user privileges rather than the physical properties of memory.

Q65. Which of the following options lists all devices used for output from a computer?

(a) Laser printer, Inkjet printer, Scanner

(b) LED display monitor, Inkjet printer, Plotter

(c) Flat panel display, Plotter, Barcode scanner

(d) Laser printer, Optical character reader, Plotter

Ans.(b)

Sol. LED monitor shows visuals, inkjet printer produces printouts, and plotter creates large-scale graphics. These devices send data from the computer to the user.

Scanner, barcode scanner, and OCR read input into the system, not output.

Important Key Points:

1. Output devices present data from computer to user.
2. Plotters are used for high-precision designs.
3. Printers and monitors are common output tools.

Knowledge Booster:

Speakers, projectors, and braille displays are also output devices. Input devices include mouse, keyboard, scanner, and webcam.

Q66. Which of the following is a standard intemet protocol used for transmitting the files from one computer to another computer connected to the intemet?

(a) SMTP

(b) FTP

(c) TELNET

(d) HTTP

Ans.(b)

Sol. The correct answer is: (b) FTP

Explanation:

FTP (File Transfer Protocol) is a **standard network protocol** used for the **transfer of files** between computers on a TCP/IP-based network such as the Internet. It allows users to upload and download files from servers, manage files and directories remotely, and is commonly used for website content transfer.

Information Booster:

- **FTP** uses **port 21** by default.
- It operates in **client-server mode**.
- **Secure variants** include **SFTP (SSH File Transfer Protocol)** and **FTPS (FTP Secure)**.
- FTP was first specified in **RFC 959**.
- Commands like GET, PUT, LS, CD, etc., are used in FTP sessions.
- FTP supports **anonymous login** for public access files.

Additional Information:

- **SMTP (Simple Mail Transfer Protocol)**: Used for **sending emails** between servers, not file transfer.
- **FTP (File Transfer Protocol)**: **Correct** – Used to **upload/download files** over the internet.
- **TELNET**: Used to provide a **command-line interface for remote login**.
- **HTTP (Hypertext Transfer Protocol)**: Used to **access and transfer web pages**, not general file transfer.

Q67. Which of the following is the default operating system of Microsoft devices ?

(a) Chrome 05

(b) Linux

(c) Windows

(d) iOS

Ans.(c)

Sol. Windows is the official and default operating system developed by Microsoft. It is pre-installed on most Microsoft-branded devices such as Surface laptops, desktops, and tablets. It supports a wide range of software and hardware and is known for its user-friendly interface.

Important Key Points:

1. Windows OS includes popular versions like Windows 10, Windows 11, etc.
2. It is widely used in personal computing, enterprise environments, and education.
3. Microsoft is both the developer and distributor of the Windows operating system.

Knowledge Booster:

- **Chrome OS** is developed by Google and is used in Chromebooks.
- **Linux** is an open-source OS used on servers and some desktops, but not default on Microsoft devices.
- **iOS** is developed by Apple and is used only on iPhones and iPads.

Q68. Which part of the computer is responsible for logical operations?

(a) RAM

(b) Control Unit

(c) ALU

(d) Hard Disk

Ans.(c)

Sol. The **ALU (Arithmetic Logic Unit)** is the part of the **CPU** responsible for performing all **logical operations** like comparisons (AND, OR, NOT) and decision-making tasks. It also handles **arithmetic operations**, making it a crucial component for data processing within the computer.

Important Key Points:

1. **ALU** performs both **arithmetic** and **logical operations** inside the CPU.
2. It works in coordination with the **control unit** to process data.
3. Logical decisions made by the **ALU** influence program flow and outcomes.

Knowledge Booster:

• **RAM** – Used for **temporary storage** of data; it does not perform any operations.
• **Control Unit** – Manages and directs operations but **does not perform logical tasks** itself.
• **Hard Disk** – A **permanent storage device**, not involved in processing operations.

Q69. Software that disrupts the normal function of a computer is known as _____.

(a) Malware
(b) Virus
(c) Hacker
(d) Trojan Horse

Ans.(a)

Sol. Malware (Malicious Software) is a general term for **any software that disrupts, damages, or gains unauthorized access to a computer system**. It includes viruses, worms, Trojan horses, ransomware, and spyware.

Virus: A type of malware that **attaches itself to files and spreads** when executed.
Trojan Horse: A **malicious program disguised as legitimate software** that tricks users into installing it.
Hacker: A person who **gains unauthorized access** to systems, not a type of software.

Important Key Points:

1. **Malware is a broad category** that includes viruses, worms, Trojans, spyware, and ransomware.
2. **Viruses and Trojans are types of malware**, but malware covers all harmful software.
3. **Hackers use malware to exploit system vulnerabilities** for stealing data or controlling devices.
4. **Preventive measures**:

Use **antivirus software**
Avoid downloading unknown files
Keep software and OS **updated**

Knowledge Booster:

Worms: Spread without user action and can slow down networks.
Ransomware: Encrypts files and demands payment to unlock them.
Spyware: Secretly collects user data and sends it to hackers.

Q70. Which of the following short cut key(s) is used to select current column completely?

(a) Shift + Spacebar+Tab
(b) Shift + Spacebar
(c) Ctrl + Spacebar
(d) Ctrl + A

Ans.(c)

Sol. In MS Excel, pressing **Ctrl + Spacebar** selects the **entire column** where the active cell is located. This shortcut is frequently used in formatting, inserting, or deleting columns quickly.

Important Key Points:

1. Ctrl + Spacebar selects the full column.
2. Shift + Spacebar selects the **entire row**.
3. Ctrl + A selects the **entire worksheet** or a region of data.
4. Efficient use of shortcuts improves Excel productivity.