

SSC Selection Post (Higher Secondary) Similar Paper (Held on 25 Jul 2025 S2)

Q.1 What comes next in the series 7 : 336 :: 11 : ?

- A. 1320
- B. 1210
- C. 1440
- D. 1331

Answer: A

Sol: Given:

7 : 336 :: 11 : ?

Logic:

Number \rightarrow (Number)³ - Number

Explanation:

$7^3 - 7 = 343 - 7 = 336$

$11^3 - 11 = 1331 - 11 = \mathbf{1320}$

Thus, correct option is (A).

Q.2 What comes next in the series 4 : 17 :: 10 : ?

- A. 99
- B. 100
- C. 101
- D. 102

Answer: C

Sol: Given:

4 : 17 :: 10 : ?

Logic:

Number \rightarrow (Number)² + 1

Explanation:

$(4)^2 + 1 = 16 + 1 = 17$

$10^2 + 1 = 100 + 1 = \mathbf{101}$

Thus, correct option is (C).

Q.3 Instruction: Apply consistent positional logic to decode the second pair.

JKL : MNO :: PQR : ?

- A. STU
- B. RST
- C. TUV
- D. QRS

Answer: A

Sol: Given:

JKL : MNO :: PQR : ?

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: Each letter in the first group is shifted forward by 3 positions to form the second group.

JKL \rightarrow MNO

J + 3 \rightarrow M, K + 3 \rightarrow N, L + 3 \rightarrow O

PQR \rightarrow ?

P + 3 \rightarrow S, Q + 3 \rightarrow T, R + 3 \rightarrow U

Thus, correct option is (A).

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Q.4 If "GOLD" is coded as "HOME", then "SONG" will be coded as:

- A. TONG
- B. TOO H
- C. TPOH
- D. SOHH

Answer: B

Sol:

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

Information Given:

GOLD → HOME

Logic: consonants +1, vowels same.

Explanation

Logic: Verify pattern on GOLD.

Step-by-step:

G (consonant) → H (+1)

O (vowel) → O (same)

L (consonant) → M (+1)

D (consonant) → E (+1)

✓ Rule fits perfectly.

Apply to SONG:

S → T (+1)

O → O (same)

N → O (+1)

G → H (+1)

Final Answer:

TOOH

Final Correct Option:

B

Q.5 If $12 / 3 = 5$, $15 / 5 = 4$, then $18 / 2 = ?$

- A. 10
- B. 9
- C. 8
- D. 11

Answer: A

Sol: Given:

$12 / 3 = 5$, $15 / 5 = 4$, $18 / 2 = ?$

Logic:

Result = (First number ÷ Second number) + 1

$12 ÷ 3 = 4$, $4 + 1 = 5$

$15 ÷ 5 = 3$, $3 + 1 = 4$

$18 ÷ 2 = 9$, $9 + 1 = 10$

Thus, correct option is (A).

Q.6 Which letter will come next in the series? Z, X, V, T, ?

- A. S
- B. R
- C. Q
- D. U

Answer: B

Sol: Given:

Z, X, V, T, ?

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: Each letter is moving backward by 2 positions in the English alphabet.

Z - 2 → X

X - 2 → V

V - 2 → T

T - 2 → **R**

Thus, correct option is (B).

Q.7 Fill in the next missing number: 5, 10, 20, 40, ?

- A. 60
- B. 80
- C. 50
- D. 100

Answer: B

Sol: Given:

5, 10, 20, 40, ?

Logic: Each number is multiplied by 2.

$5 \times 2 = 10$

$10 \times 2 = 20$

$20 \times 2 = 40$

$40 \times 2 = \mathbf{80}$

Thus, correct option is (B).

Q.8 Choose the odd one out: 5, 10, 15, 20, 26, 30

- A. 15
- B. 20
- C. 26
- D. 30

Answer: C

Sol: Given:

5, 10, 15, 20, 26, 30

Logic: All numbers except one are multiples of 5.

$5 = 5 \times 1$

$10 = 5 \times 2$

$15 = 5 \times 3$

$20 = 5 \times 4$

26 is not a multiple of 5

$30 = 5 \times 6$

Thus, correct option is (C).

Q.9 Find the missing letter in the series: A, D, G, J, ?

- A. L
- B. M
- C. N
- D. K

Answer: B

Sol: Given:

A, D, G, J, ?

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: Each letter is moved forward by 3 positions in the English alphabet.

A + 3 → D

D + 3 → G

G + 3 → J

J + 3 → **M**

Thus, correct option is (B).

Q.10 Which of the following numbers is different from the rest?

- A. 49
- B. 121
- C. 144
- D. 150

Answer: D

Sol: Logic: All except one are perfect squares.

Explanation:

Option A: $49 = 7^2$ (perfect square)

Option B: $121 = 11^2$ (perfect square)

Option C: $144 = 12^2$ (perfect square)

Option D: **150 is not a perfect square**

Thus, correct option is (D).

Q.11 "Battery : Torch" is related to "Fuel : ?"

- A. Engine
- B. Gas
- C. Smoke
- D. Heat

Answer: A

Sol: Given:

Battery : Torch :: Fuel : ?

Logic: The first item is a source of energy used to operate the second item.

A battery provides energy to run a torch.

Similarly,

fuel provides energy to run an **engine**.

Thus, correct option is (A).

Q.12 Find the alternative that will replace the question mark. Architect : Building :: Sculptor : ?

- A. Museum
- B. Statue
- C. Chisel
- D. Stone

Answer: B

Sol: Given:

Architect : Building :: Sculptor : ?

Logic: A person is related to what they create.

An architect designs a building.

A sculptor creates a **statue**.

Thus, correct option is (B).

Q.13 What should come at the place of question mark? BDF : HJL :: NPR : ?

- A. TVX
- B. UWY
- C. TUV
- D. VXZ

Answer: A

Sol: Given:

BDF : HJL :: NPR : ?

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: Each letter in the first group is shifted forward by 6 positions to form the second group.

BDF → HJL

B + 6 → H, D + 6 → J, F + 6 → L

NPR → ?

N + 6 → T, P + 6 → V, R + 6 → X

So, the missing group is **TVX**.

Thus, correct option is (A).

Q.14 Identify the pattern and choose the correct option: If $5 @ 3 = 16$, $8 @ 2 = 60$, then $10 @ 4 = ?$

- A. 84
- B. 100
- C. 96
- D. 116

Answer: A

Sol: Given:

$5 @ 3 = 16$, $8 @ 2 = 60$, $10 @ 4 = ?$

Logic: $A @ B = A^2 - B^2$

$5 @ 3 = 5^2 - 3^2 = 25 - 9 = 16$

$10 @ 4 = 10^2 - 4^2 = 100 - 16 = 84$

Thus, correct option is (A).

Q.15 If $4 + 2 = 20$, $6 + 3 = 45$, then $7 + 5 = ?$

- A. 70
- B. 74
- C. 84
- D. 90

Answer: B

Sol: Given:

$4 + 2 = 20$, $6 + 3 = 45$, $7 + 5 = ?$

Logic:

Result = (First number)² + (Second number)²

$4^2 + 2^2 = 16 + 4 = 20$

$6^2 + 3^2 = 36 + 9 = 45$

Similarly,

$$7^2 + 5^2 = 49 + 25 = \mathbf{74}$$

Thus, correct option is (B).

Q.16 If $A * B$ means A is multiplied by B and the result is halved, find $6 * 4$:

- A. 24
- B. 12
- C. 10
- D. 6

Answer: B

Sol: Given:

$A * B$ means A is multiplied by B and the result is halved.

Logic:

$$A * B = (A \times B) \div 2$$

Explanation:

$$6 * 4 = (6 \times 4) \div 2 = 24 \div 2 = \mathbf{12}$$

Thus, correct option is (B).

Q.17 Direction: Four words have been given, out of which three are alike and the fourth one is different. Choose the odd one out.

- A. Physics
- B. Botany
- C. Zoology
- D. History

Answer: D

Sol: Given:

Physics, Botany, Zoology, History

Logic: Three subjects are branches of science, while one is not.

Explanation:

Physics is a branch of science.

Botany is a branch of science.

Zoology is a branch of science.

History is not a branch of science.

Thus, correct option is (D).

Q.18 Which item does NOT fit the group?

- A. Hammer
- B. Screwdriver
- C. Pliers
- D. Nail

Answer: D

Sol: Logic: Three are tools; one is not.

Explanation:

Option A: Hammer → tool

Option B: Screwdriver → tool

Option C: Pliers → tool

Option D: Nail → **not a tool (fastener)**

Thus, correct option is (D).

Q.19 Which of the following words CANNOT be formed using the letters of the word "EDUCATION"?

- A. NOTE

- B. DEAN
- C. CAUTION
- D. DUCKS

Answer: D

Sol: Given:

Word: EDUCATION

Logic: Check whether all letters of each option are present in the given word.

Explanation:

NOTE → N, O, T, E (all present)

DEAN → D, E, A, N (all present)

CAUTION → C, A, U, T, I, O, N (all present)

DUCKS → D, U present but C, K, S are not all available (K and S are missing)

Thus, correct option is (D).

Q.20 Which of the following words CANNOT be formed using the word "DISTRIBUTION" without repeating letters?

- A. TRUST
- B. BIRD
- C. DUST
- D. KITE

Answer: D

Sol: Given:

Word: DISTRIBUTION

Logic:

Check whether all letters of each option are present in the given word without repeating letters.

Explanation:

Option A: TRUST → T, R, U, S, T (all letters present; T appears twice and is available)

Option B: BIRD → B, I, R, D (all letters present)

Option C: DUST → D, U, S, T (all letters present)

Option D: KITE → K, I, T, E (**K and E are not present**)

Thus, correct option is (D).

Q.21 From the letters of the word "PRODUCT", how many distinct 4-letter words can be formed if the word must start and end with a vowel?

- A. 120
- B. 40
- C. 60
- D. 0

Answer: B

Sol: Given:

Word: PRODUCT (all letters distinct)

Vowels: O, U

Condition: 4-letter word must start and end with a vowel, no repetition

Concept Used:

Permutation without repetition

Start and end positions:

O _ _ U

U _ _ O

Formula Used:

$${}^n P_r = \frac{n!}{(n-r)!}$$

Solution:

There are 2 vowels O and U.

They must occupy the first and last positions without repetition.

Remaining letters are 5 consonants: P, R, D, C, T.

Fill the middle two positions using these consonants:

Number of ways = $5 \times 4 = 20$

Total number of words = $2 \times 20 = 40$

Q.22 Read the statement carefully and identify the conclusion that follows.

Statement: All good athletes eat healthily. John eats healthily.

- A. John is a good athlete
- B. John is not a good athlete
- C. John might be a good athlete
- D. Data is insufficient

Answer: D

Sol: Given:

Statement: All good athletes eat healthily. John eats healthily.

Logic:

If all good athletes eat healthily, it does not mean that everyone who eats healthily is a good athlete. Eating healthily is a common condition, not a sufficient condition.

John eats healthily, but there is no information stating that only good athletes eat healthily.

So, **John may or may not be a good athlete.**

Thus, correct option is (C).

Q.23 Instruction: Follow the exact letter shifts. WARM : XBSN :: COLD : ?

- A. DPME
- B. DOME
- C. DQNF
- D. EPME

Answer: A

Sol: Given:

WARM : XBSN :: COLD : ?

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: Each letter is shifted one position forward in the English alphabet.

Explanation:

W + 1 → X, A + 1 → B, R + 1 → S, M + 1 → N

Applying the same logic:

C + 1 → D, O + 1 → P, L + 1 → M, D + 1 → E

So, COLD → **DPME**

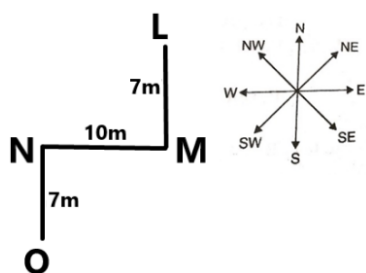
Thus, correct option is (A).

Q.24 M is 7 m South of L. N is 10 m West of M. O is 7 m South of N. In which direction is O from L?

- A. East
- B. North - East
- C. South - West
- D. North - West

Answer: C

Sol: Given: M is 7m South of L. N is 10 m West of M. O is 7 m South of N.



O is in the **South - West** to L.

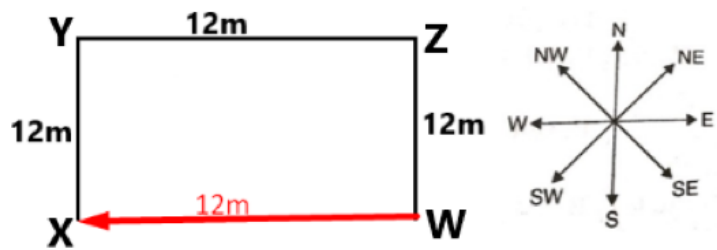
Q.25 Point Y is 12 m North of Point X. Point Z is 12 m East of Point Y. Point W is 12 m South of Point Z. How far is W from X?

- A. 12
- B. 24
- C. 0
- D. 6

Answer: A

Sol: Given:

Point Y is 12 m North of Point X.
Point Z is 12 m East of Point Y.
Point W is 12 m South of Point Z.



W is 12 m far from X.

Q.26 How many members can be nominated by the President of India to the Rajya Sabha?

- A. 8
- B. 10
- C. 12
- D. 14

Answer: C

Sol: The correct answer is **(C) 12**

Explanation:

- Under Article 80 of the Constitution, the Council of States (Rajya Sabha) is composed of not more than 250 members, of whom 12 are nominated by the President of India.
- These members are persons having special knowledge or practical experience in fields such as Literature, Science, Art, and Social Service.

Information Booster:

- The Rajya Sabha is a permanent body and is not subject to dissolution.
- One-third of its members retire every second year.

Additional Knowledge:

- 14 (Option D): Previously, the President could nominate 2 members from the Anglo-Indian community to the Lok Sabha (total 12+2=14), but this was abolished by the 104th Constitutional Amendment Act, 2019.

Q.27 What is the primary function of mitochondria in a cell?

- A. Protein synthesis
- B. Energy production
- C. Cell division
- D. Storage of genetic material

Answer: B

Sol: The correct answer is **(B) Energy production**

Explanation:

- Mitochondria are known as the 'Powerhouse of the Cell' because they generate most of the cell's supply of adenosine triphosphate (ATP).
- ATP is used as a source of chemical energy for various cellular processes.

Information Booster:

- Mitochondria have their own DNA and ribosomes, allowing them to produce some of their own proteins.

Additional Knowledge:

- Protein synthesis (Option A): Primary function of Ribosomes.
- Storage of genetic material (Option D): Primary function of the Nucleus.

Q.28 Which is the largest freshwater lake in India by surface area?

- A. Dal Lake
- B. Chilika Lake
- C. Wular Lake
- D. Vembanad Lake

Answer: C

Sol: The correct answer is **(C) Wular Lake**

Explanation:

- Wular Lake, located in the Bandipora district of Jammu and Kashmir, is one of the largest freshwater lakes in Asia.
- It was formed as a result of tectonic activity and is fed by the Jhelum River.

Information Booster:

- Wular Lake is a designated Ramsar site, highlighting its international ecological importance.

Additional Knowledge:

- Chilika Lake (Option B): The largest brackish water lagoon in India.
- Vembanad Lake (Option D): The longest lake in India, located in Kerala.

Q.29 Which of the following actions can lead to the impeachment of the President of India?

- A. Dissolving the Lok Sabha
- B. Addressing Parliament
- C. Violating the Constitution
- D. Appointing Governors

Answer: C

Sol: The correct answer is **(C) Violating the Constitution**

Explanation:

- Article 61 of the Indian Constitution provides the procedure for the impeachment of the President.
- The only ground for impeachment mentioned in the Constitution is 'Violation of the Constitution'.

Information Booster:

- Impeachment charges can be initiated by either House of Parliament.
- No President has been impeached in India so far.

Additional Knowledge:

- Dissolving the Lok Sabha (Option A): Done by the President on the advice of the Council of Ministers; it is a constitutional power, not a violation.

Q.30 What was a major cause behind the 'Deccan Riots' of 1875?

- A. Decline in textile exports
- B. Heavy taxation and exploitation by moneylenders
- C. Introduction of railways
- D. Partition of Bengal

Answer: B

Sol: The correct answer is **(B) Heavy taxation and exploitation by moneylenders**

Explanation:

- The riots began in Supa village (Pune) and spread across the Deccan region.
- Farmers were burdened by high land revenue under the Ryotwari system and trapped in debt cycles by moneylenders (Sahukars).

Information Booster:

- Following the riots, the British government passed the Deccan Agriculturists' Relief Act of 1879 to protect farmers from moneylenders.

Additional Knowledge:

- Partition of Bengal (Option D): Occurred in 1905, much later than the Deccan Riots.

Q.31 Which statement best describes Stage IV of demographic transition?

- A. High birth and death rates
- B. Declining death rate and high birth rate
- C. Low birth and death rates
- D. Rapid population growth

Answer: C

Sol: The correct answer is **(C) Low birth and death rates**

Explanation:

- Stage IV represents a developed society where both birth rates and death rates are low.
- The population becomes stable or grows very slowly.

Information Booster:

- Stage I: High Birth and Death rates (Pre-industrial).
- Stage II: High Birth rate and declining Death rate (Population Explosion).
- Stage III: Declining Birth rate and low Death rate.

Additional Knowledge:

- Some theories include a Stage V where the birth rate falls below the death rate, leading to population decline.

Q.32 Which of the following is a major objective of progressive taxation?

- A. To increase income inequality
- B. To reduce government expenditure
- C. To redistribute income and reduce inequality
- D. To eliminate indirect taxes

Answer: C

Sol: The correct answer is **(C) To redistribute income and reduce inequality**

Explanation:

- In a progressive tax system, the tax rate increases as the taxable amount increases.
- This ensures that those with a higher ability to pay contribute more, which the government then uses for social welfare, thereby reducing the gap between the rich and the poor.

Information Booster:

- Income Tax in India is a classic example of progressive taxation.

Additional Knowledge:

- Regressive Tax: A tax where the rate decreases as the income increases (often indirect taxes are considered regressive in effect).

Q.33 Which of the following is NOT a component of the revenue deficit?

- A. Revenue expenditure
- B. Revenue receipts
- C. Interest payments
- D. Capital expenditure

Answer: D

Sol: The correct answer is **(D) Capital expenditure**

Explanation:

- Revenue Deficit occurs when the government's total revenue expenditure exceeds its total revenue receipts.
- Capital expenditure relates to the creation of assets or reduction of liabilities and is part of the Capital Budget, not the Revenue Budget.

Information Booster:

- Revenue Expenditure includes salaries, pensions, and interest payments.
- Revenue Receipts include tax revenue and non-tax revenue (like dividends and interest).

Additional Knowledge:

- Fiscal Deficit: The difference between total expenditure and total receipts (excluding borrowings).

Q.34 Which of the following schemes provides direct income support to farmers?

- A. Pradhan Mantri Fasal Bima Yojana
- B. Soil Health Card Scheme
- C. Paramparagat Krishi Vikas Yojana
- D. Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)

Answer: D

Sol: The correct answer is **(D) Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)**

Explanation:

- PM-KISAN is a Central Sector scheme that provides an income support of ₹6,000 per year in three equal installments to all landholding farmer families.
- It was launched to supplement the financial needs of farmers in procuring inputs and ensuring crop health.

Information Booster:

- The scheme was launched in February 2019 (effective from Dec 2018).

Additional Knowledge:

- Pradhan Mantri Fasal Bima Yojana (Option A): An insurance-based scheme for crop failure.
- Soil Health Card (Option B): Provides information to farmers on nutrient status of their soil.

Q.35 Which pollutants are primarily monitored under the National Air Quality Index (AQI) in India?

- A. CO₂ and methane
- B. PM_{2.5} and PM₁₀
- C. Nitrogen and hydrogen
- D. Helium and ozone

Answer: B

Sol: The correct answer is **(B) PM_{2.5} and PM₁₀**

Explanation:

- The AQI in India monitors 8 major pollutants: PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃ (Ozone), NH₃ (Ammonia), and Pb (Lead).
- PM_{2.5} and PM₁₀ are particulate matters that have significant health impacts due to their ability to penetrate deep into the respiratory system.

Information Booster:

- AQI has six categories: Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe.

Additional Knowledge:

- CO₂ (Option A): While it is a greenhouse gas, it is not usually a 'pollutant' monitored under standard AQI levels because it doesn't have immediate local toxicity compared to CO.

Q.36 Who is set to become the first Indian woman to command the International Space Station (ISS)?

- A. Kalpana Chawla
- B. Sunita Williams
- C. Tessa Thomas
- D. Ritu Karidhal

Answer: B

Sol: The correct answer is **(B) Sunita Williams**

Explanation:

- Sunita Williams, an Indian-origin NASA astronaut, has been selected to command the ISS during Expedition 71.
- She holds several records for spaceflights and spacewalks by a woman.

Information Booster:

- The International Space Station (ISS) is a modular space station in low Earth orbit, a collaborative project between NASA, Roscosmos, JAXA, ESA, and CSA.

Additional Knowledge:

- Kalpana Chawla (Option A): The first woman of Indian origin to go to space.
- Tessy Thomas (Option C): Known as the 'Missile Woman of India'.

Q.37 A car is moving in a circular track with uniform speed. Which of the following statements is correct?

- The car has zero acceleration because its speed is constant.
- The direction of the car's velocity does not change.
- The car experiences centripetal acceleration towards the centre.
- The motion is non-uniform because the speed changes.

Answer: C

Sol: The correct answer is **(C) The car experiences centripetal acceleration towards the centre.**

Explanation:

- Even if the speed is uniform, the direction of velocity changes at every point in circular motion.
- A change in velocity (direction) means the object is accelerating. This acceleration is directed towards the center of the circle and is called centripetal acceleration.

Information Booster:

- The magnitude of centripetal acceleration is given by $a = v^2/r$.

Additional Knowledge:

- Option A is wrong because speed is a scalar, but velocity is a vector; change in direction means acceleration is not zero.

Q.38 Which Mandal of the Rigveda is primarily devoted to hymns dedicated to Indra?

- First
- Second
- Third
- Eighth

Answer: D

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

Explanation:

- While Indra is the most celebrated deity in the Rigveda with about 250 hymns across various Mandals, the Eighth Mandal contains a very high concentration of hymns specifically for him.
- Indra is regarded as the god of rain and thunder (Purandara - breaker of forts).

Information Booster:

- The Rigveda consists of 10 Mandals (books) and 1028 hymns (Suktas).

Additional Knowledge:

- Third Mandal (Option C): Contains the Gayatri Mantra, dedicated to the solar deity Savitr.

Q.39 The Indo-Islamic architecture is best known for which of the following features?

- Sloping wooden roofs
- Large domes and pointed arches
- Thatched structures
- Mud-brick walls

Answer: B

Sol: The correct answer is **(B) Large domes and pointed arches**

Explanation:

- Indo-Islamic architecture introduced the 'Arcuate' style (arches and domes) to India, replacing the 'Trabeate' style (beams and lintels).
- Key features include minarets, calligraphy, and floral patterns instead of human figures.

Information Booster:

- Examples include the Taj Mahal, Qutub Minar, and Gol Gumbaz.

Additional Knowledge:

- Sloping wooden roofs (Option A): Characteristics of Himalayan or Kerala temple architecture.

Q.40 Which two countries are central partners in the India-Middle East-Europe Economic Corridor (IMEC)?

- A. Egypt and Turkey
- B. Oman and Kuwait
- C. Saudi Arabia and UAE
- D. Lebanon and Syria

Answer: C

Sol: The correct answer is **(C) Saudi Arabia and UAE**

Explanation:

- IMEC was announced at the 2023 G20 Summit in New Delhi.
- It consists of two corridors: the East Corridor connecting India to the Arabian Gulf and the Northern Corridor connecting the Arabian Gulf to Europe via Saudi Arabia and the UAE.

Information Booster:

- IMEC is seen as a counter to China's Belt and Road Initiative (BRI).

Additional Knowledge:

- The project involves rail, ship-to-rail transit networks, and data/energy cables.

Q.41 What type of services does AIIMS primarily provide?

- A. Agricultural research
- B. Advanced medical treatment, education, and research
- C. Industrial consultancy
- D. Financial investment services

Answer: B

Sol: The correct answer is **(B) Advanced medical treatment, education, and research**

Explanation:

- AIIMS (All India Institute of Medical Sciences) is a group of autonomous public medical universities of higher education.
- They serve as institutions of national importance, providing tertiary-level healthcare and conducting medical research.

Information Booster:

- The first AIIMS was established in New Delhi in 1956.

Additional Knowledge:

- Agricultural research (Option A): Primarily handled by ICAR (Indian Council of Agricultural Research).

Q.42 Which book by Ramachandra Guha explores the history of independent India?

- A. The Discovery of India
- B. India After Gandhi
- C. The Anarchy
- D. The Idea of India

Answer: B

Sol: The correct answer is **(B) India After Gandhi**

Explanation:

- 'India After Gandhi: The History of the World's Largest Democracy' is a seminal work by Ramachandra Guha that covers India's history from 1947 onwards.
- It details the challenges of nation-building, wars, and political evolution.

Information Booster:

- Ramachandra Guha is a renowned Indian historian and biographer of Mahatma Gandhi.

Additional Knowledge:

- The Discovery of India (Option A): Written by Jawaharlal Nehru.
- The Anarchy (Option C): Written by William Dalrymple.

Q.43 What is the primary objective of the National Anti-Doping Agency (NADA)?

- A. Promote sports tourism
- B. Enforce anti-doping rules in sports
- C. Organize Olympic events
- D. Provide scholarships to athletes

Answer: B

Sol: The correct answer is **(B) Enforce anti-doping rules in sports**

Explanation:

- NADA is the national organization responsible for promoting, coordinating, and monitoring the doping control program in all forms of sports in India.
- It works in accordance with the World Anti-Doping Agency (WADA) code.

Information Booster:

- NADA's primary motto is 'Play Fair'.

Additional Knowledge:

- Doping refers to the use of banned performance-enhancing substances by athletes.

Q.44 Given below are Column A (Organizations) and Column B (Headquarters). Choose the correct option by matching them.

Column A – Organization	Column B – Headquarters
A. ASEAN	i. Brussels
B. SAARC	ii. Jakarta
C. African Union	iii. Addis Ababa
D. European Union	iv. Kathmandu

- A. A-ii, B-iv, C-iii, D-i
- B. A-i, B-ii, C-iv, D-iii
- C. A-iii, B-i, C-ii, D-iv
- D. A-iv, B-iii, C-i, D-ii

Answer: A

Sol: The correct answer is **(A) A-ii, B-iv, C-iii, D-i**

Explanation:

- ASEAN (Association of Southeast Asian Nations) is headquartered in Jakarta, Indonesia.
- SAARC (South Asian Association for Regional Cooperation) is headquartered in Kathmandu, Nepal.
- African Union (AU) is headquartered in Addis Ababa, Ethiopia.
- European Union (EU) is headquartered in Brussels, Belgium.

Information Booster:

- SAARC was established in 1985 in Dhaka.
- ASEAN was established in 1967 with the Bangkok Declaration.

Additional Knowledge:

- Brussels (Option D-i) also serves as the headquarters for NATO.

Q.45 Which of the following countries is NOT a member of BRICS?

- A. India
- B. Brazil
- C. Germany
- D. South Africa

Answer: C

Sol: The correct answer is **(C) Germany**

Explanation:

- BRICS is an acronym for Brazil, Russia, India, China, and South Africa.
- Germany is a member of the G7 and the EU but not BRICS.

Information Booster:

- From January 1, 2024, BRICS expanded to include new members like Egypt, Ethiopia, Iran, and the UAE.

Additional Knowledge:

- The term 'BRIC' was coined by Jim O'Neill in 2001; South Africa joined in 2010.

Q.46 Which of the following statements are correct regarding the Digital Personal Data Protection Act, 2023?

1. It regulates the processing of digital personal data.
2. It applies to data processed within India and outside India if offering goods or services in India.
3. It completely bans cross-border data transfer.
4. It provides rights to individuals regarding their personal data.

- A. 1, 2, and 4 only
- B. 1 and 3 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

Answer: A

Sol: The correct answer is **(A) 1, 2, and 4 only**

Explanation:

- Statement 1 is correct: The Act provides for the processing of digital personal data in a manner that recognizes both the right of individuals to protect their personal data and the need to process such personal data for lawful purposes.
- Statement 2 is correct: It has extra-territorial jurisdiction if data is processed outside India in connection with any activity related to offering goods or services to Data Principals within India.
- Statement 4 is correct: It grants individuals (Data Principals) rights such as the right to access, correction, and erasure.

Information Booster:

- Statement 3 is incorrect because the Act allows cross-border data transfer to certain countries/territories unless specifically restricted by the Central Government.

Additional Knowledge:

- The Act introduces the concept of 'Data Fiduciary' (the entity determining the purpose of processing) and 'Data Principal' (the individual whose data is processed).

Q.47 One of the key objectives of ISRO's Aditya-L1 Mission is to study the _____ of the Sun.

- A. Ocean currents
- B. Corona and solar wind
- C. Asteroid belt
- D. Lunar surface

Answer: B

Sol: The correct answer is **(B) Corona and solar wind**

Explanation:

- Aditya-L1 is India's first solar mission, designed to study the Sun's atmosphere, specifically the chromosphere and the outermost layer called the Corona.

- It aims to understand Coronal Mass Ejections (CMEs), solar flares, and solar wind properties.

Information Booster:

- The spacecraft is placed in a halo orbit around the Lagrange point 1 (L1) of the Sun-Earth system, about 1.5 million km from Earth.

Additional Knowledge:

- Lunar surface (Option D): This was the primary objective of the Chandrayaan missions.

Q.48 When was the Shanghai Cooperation Organisation (SCO) established?

- A. 1995
- B. 2001
- C. 2005
- D. 2010

Answer: B

Sol: The correct answer is **(B) 2001**

Explanation:

- The SCO was announced on June 15, 2001, in Shanghai by the leaders of China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan.
- It evolved from the 'Shanghai Five' mechanism founded in 1996.

Information Booster:

- India and Pakistan became full members of the SCO in 2017 during the Astana Summit.
- Iran became a full member in 2023.

Additional Knowledge:

- The SCO's Regional Anti-Terrorist Structure (RATS) is based in Tashkent.

Q.49 "Laylat al-Qadr" is referred to as the "Night of":

- A. Power
- B. Forgiveness
- C. Resurrection
- D. Revelation

Answer: A

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

Explanation:

- Laylat al-Qadr, also known as the Night of Power or Decree, is considered the holiest night in Islam.
- It is believed to be the night when the first verses of the Quran were revealed to Prophet Muhammad.

Information Booster:

- It occurs during one of the odd-numbered nights of the last ten days of Ramadan.

Additional Knowledge:

- The Quran states that worship on this single night is better than worship for a thousand months.

Q.50 The term "Vis" in the Rig Vedic period primarily referred to:

- A. A king
- B. A priestly class
- C. A clan or a group of families
- D. A village assembly

Answer: C

Sol: The correct answer is **(C) A clan or a group of families**

Explanation:

- In Early Vedic society, 'Vis' was a subdivision of the tribe (Jana).

- The common people were often called 'Vis'.

Information Booster:

- The king was often called 'Vispati' or 'Gopa'.

Additional Knowledge:

- A priestly class (Option B): Known as Brahmins.
- A village assembly (Option D): Known as the Grama or Sabha/Samiti.

Q.51 A large solid metallic sphere of radius 10 cm is melted to form small spheres of radius 2 cm. How many such small spheres can be formed?

- A. 64
- B. 100
- C. 125
- D. 250

Answer: C

Sol: Given:

R = 10 cm, r = 2 cm.

Formula Used:

$$\text{Number} = \frac{\text{Volume of Big Sphere}}{\text{Volume of Small Sphere}} = \frac{R^3}{r^3}$$

Solution:

$$N = \left(\frac{10}{2}\right)^3 = 5^3 = 125.$$

Final Answer

So the correct answer is (c)

Q.52 Consider the following statements.

Assertion (A): 1 is a prime number.

Reason (R): A prime number has exactly two factors, 1 and itself.

- A. Both A and R are true
- B. A is false, but R is true
- C. A is true, but R is false
- D. Both A and R are false

Answer: B

Sol: Given:

Assertion (A): 1 is a prime number.

Reason (R): Prime number definition (exactly two factors).

Solution:

Check A: 1 is NOT a prime number. It has only one factor (1). So A is false.

Check R: The definition of a prime number is indeed that it has exactly two distinct factors: 1 and the number itself. So R is true.

Final Answer

So the correct answer is (b)

Q.53 A shopkeeper allows a discount of 10% on the marked price and gains 20%. If the cost price is ₹900, find the marked price.

- A. ₹1100
- B. ₹1150
- C. ₹1200
- D. ₹1080

Answer: C

Sol: Given:

Discount = 10%. Gain = 20%. CP = ₹900.

Formula Used:

$$\frac{MP}{CP} = \frac{100 + P\%}{100 - D\%}$$

Solution:

$$\frac{MP}{900} = \frac{120}{90}$$

$$MP = 900 \times \frac{120}{90} = 10 \times 120 = 1200.$$

Final Answer

So the correct answer is (c)

Q.54 From the top of a 50m high tower, the angle of depression of a car on the ground is 30° . What is the distance of the car from the base of the tower?

- A. 50 m
- B. $50\sqrt{3}$ m
- C. $25\sqrt{3}$ m
- D. 100m

Answer: B

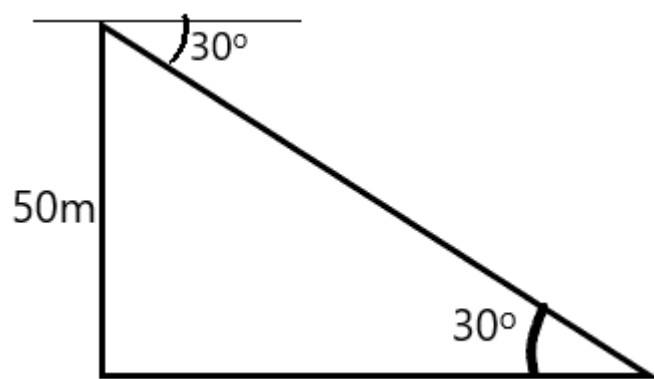
Sol: Given:

Height $h = 50$ m. Angle = 30°

Formula Used:

Distance = $h \cot \theta$

Solution:



$$\text{Distance} = 50 \times \cot 30^\circ$$

$$\cot 30^\circ = \sqrt{3}$$

$$\text{Distance} = 50\sqrt{3} \text{ m}$$

Final Answer

So the correct answer is (b)

Q.55 What is the smallest positive integer by which 72 must be multiplied to make it a perfect square?

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

Answer: A

Sol: Given:

Number 72.

Solution:

$$\text{Prime factorization of } 72 = 36 \times 2 = 6^2 \times 2 = 2^3 \times 3^2.$$

To make the power of 2 even, we need to multiply by 2.

$$72 \times 2 = 144 = 12^2.$$

Final Answer

So the correct answer is (a)

Q.56 In $\triangle PQR$, $\angle Q = 90^\circ$. S is the midpoint of PQ, and ST is drawn perpendicular to PR. If PQ = 6 cm and QR = 8cm, find the length of PR.

- A. 12 cm
- B. 10 cm

- C. 14 cm
- D. 9 cm

Answer: B

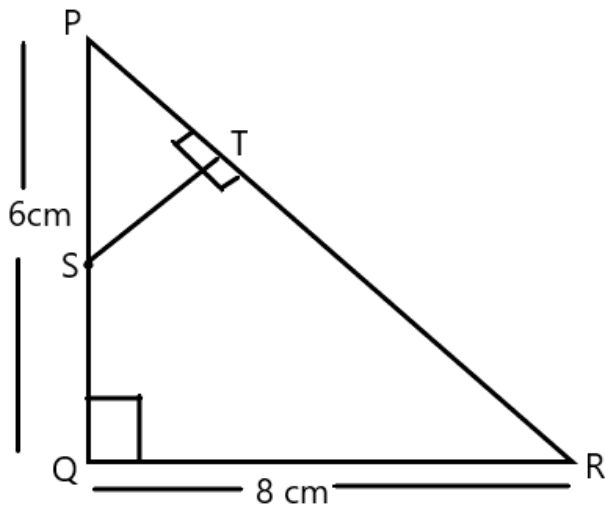
Sol: Given:

Right $\triangle PQR$ (at Q). $PQ = 6$, $QR = 8$.

Formula Used:

Pythagoras Theorem: $PR^2 = PQ^2 + QR^2$

Solution:



$$PR = \sqrt{6^2 + 8^2} = \sqrt{36 + 64} = \sqrt{100} = 10 \text{ cm.}$$

Final Answer

So the correct answer is (b)

Q.57 A warehouse has a floor in the shape of a rectangle $20 \text{ m} \times 15 \text{ m}$, with a triangular extension on one end. The triangle has a base of 15 m and a height of 8 m . What is the total area of the floor?

- A. 360 m^2
- B. 350 m^2
- C. 340 m^2
- D. 380 m^2

Answer: A

Sol: Given:

Rectangle: $20 \text{ m} \times 15 \text{ m}$.

Triangle: Base = 15 m , Height = 8 m .

Formula Used:

Area = Area of Rectangle + Area of Triangle

$$\text{Area} = (l \times b) + \left(\frac{1}{2} \times \text{base} \times \text{height}\right)$$

Solution:

$$\text{Area of Rectangle} = 20 \times 15 = 300 \text{ m}^2$$

$$\text{Area of Triangle} = \frac{1}{2} \times 15 \times 8 = 15 \times 4 = 60 \text{ m}^2$$

$$\text{Total Area} = 300 + 60 = 360 \text{ m}^2$$

Final Answer

So the correct answer is (a)

Q.58 Pipe A can fill a tank in 10 hours, and Pipe B can fill it in 15 hours. Pipe C can empty the tank in 12 hours. If all three are opened together, how long will it take to fill the tank?

- A. 12 hours
- B. 15 hours
- C. 20 hours
- D. 10 hours

Answer: A

Sol: Given:

Rates: A = +1/10, B = +1/15, C = -1/12.

Solution:

$$\text{Net Rate} = \frac{1}{10} + \frac{1}{15} - \frac{1}{12}$$

$$\text{Net Rate} = \frac{6+4-5}{60} = \frac{5}{60} = \frac{1}{12}$$

Time = 12 hours.

Final Answer

So the correct answer is (a)

Q.59 A man invests ₹10,000 at 10% compound interest per annum. After 1 year, he adds ₹5,000 more. What will be the total amount at the end of 2 years from the start?

- A. ₹17,500
- B. ₹17,600
- C. ₹18,150
- D. ₹16,500

Answer: B

Sol: Given:

Initial P = 10,000. Rate = 10%.

After 1 year, adds 5,000.

Solution:

Amount after 1 year = 10,000 × 1.10 = 11,000.

New Principal for 2nd year = 11,000 + 5,000 = 16,000.

Interest for 2nd year = 16,000 × 10% = 1,600.

Total Amount at end of year 2 = 16,000 + 1,600 = 17,600.

Final Answer

So the correct answer is (b)

Q.60 A retailer lists a shirt for ₹3000. He offers a discount of 20% on the list price. What additional discount must he offer to bring the final price down to ₹2160?

- A. 8%
- B. 10%
- C. 12%
- D. 15%

Answer: B

Sol: Given:

List Price (LP) = ₹3000.

First Discount (D1) = 20%.

Final Price (SP) = ₹2160.

Formula Used:

$$SP = LP(1 - D1/100)(1 - D2/100)$$

Solution:

Price after first discount = 3000 × 0.80 = 2400.

Required reduction = 2400 - 2160 = 240.

$$\text{Additional Discount \%} = \frac{240}{2400} \times 100 = 10\%$$

Final Answer

So the correct answer is (b)

Q.61 A quadrilateral PQRS is cyclic. If $\angle P = 85^\circ$ and $\angle R = 95^\circ$, what is the value of $\angle Q + \angle S$?

- A. 160°
- B. 180°
- C. 190°
- D. 200°

Answer: B

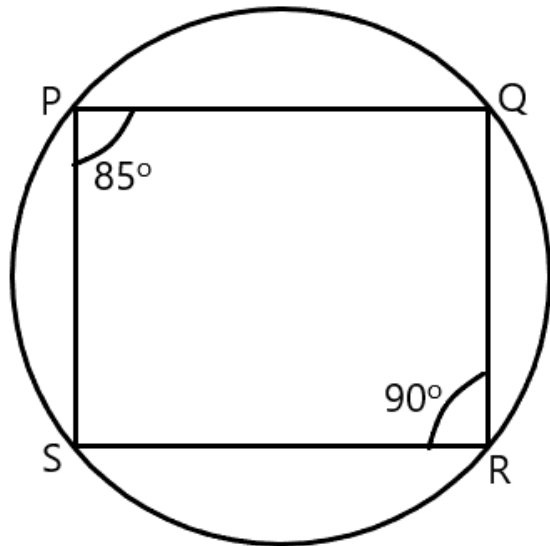
Sol: Given:

Cyclic Quadrilateral PQRS.
 $\angle P = 85^\circ, \angle R = 95^\circ$.

Formula Used:

Sum of opposite angles in a cyclic quadrilateral is 180°
 Sum of all internal angles is 360°

Solution:



Check given angles: $P + R = 85 + 95 = 180^\circ$ (This confirms it's cyclic).

We need $\angle Q + \angle S$.

Since Q and S are also opposite angles, their sum must be 180° .

$\angle Q + \angle S = 180^\circ$.

Final Answer

So the correct answer is (b)

Q.62 Which of the following is a correct property regarding circles?

- A. The angle subtended by an arc at the centre is half the angle subtended by it at any point on the remaining part of the circle.
- B. Angles in the same segment of a circle are unequal.
- C. The angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
- D. A cyclic parallelogram is a rhombus.

Answer: C

Sol: Given:

Statements about circle properties.

Formula Used:

Standard Circle Theorems.

Solution:

A: False. Angle at center is double, not half.

B: False. Angles in the same segment are equal.

C: True. This is a fundamental theorem (Angle at Center Theorem).

D: False. A cyclic parallelogram is a rectangle.

Final Answer

So the correct answer is (c)

Q.63 A person completes $\frac{3}{5}$ of a task on Day 1. On Day 2, he completes $\frac{1}{4}$ of the remaining work. What fraction of the total work is left?

- A. $\frac{1}{10}$
- B. $\frac{3}{10}$
- C. $\frac{3}{20}$
- D. $\frac{1}{5}$

Answer: B

Sol: Given:

Day 1 work = $\frac{3}{5}$. Remaining = $\frac{2}{5}$.

Day 2 work = $\frac{1}{4}$ of Remaining = $\frac{1}{4} \times \frac{2}{5} = \frac{1}{10}$.

Solution:

Total work done = $\frac{3}{5} + \frac{1}{10} = \frac{6}{10} + \frac{1}{10} = \frac{7}{10}$.

Work Left = $1 - 7/10 = 3/10$.

Final Answer

So the correct answer is (b)

Q.64 If the cost price of 20 articles is equal to the selling price of 15 articles, what is the profit percentage?

- A. 25%
- B. 30%
- C. 33.33%
- D. 40%

Answer: C

Sol: Given:

CP of 20 = SP of 15

Formula Used:

$$\text{Profit \%} = \frac{\text{Goods Left}}{\text{Goods Sold}} \times 100$$

Solution:

Let CP of 1 article = 1. CP of 15 = 15. SP of 15 = CP of 20 = 20.

Profit = 20 - 15 = 5.

$$\text{Profit \%} = \frac{5}{15} \times 100 = \frac{1}{3} \times 100 = 33.33\%$$

Final Answer

So the correct answer is (c)

Q.65 A vendor buys 200 toys at ₹150 each. He finds 10% of them broken and sells them at a 40% loss. The rest are sold at a 20% profit. What is his overall profit or loss percentage?

- A. 12% profit
- B. 14% profit
- C. 10% profit
- D. 15% profit

Answer: B

Sol: Given:

Total toys = 200.

Broken = 10% = 20 toys. Sold at -40% profit.

Good = 90% = 180 toys. Sold at +20% profit.

Formula Used:

$$\text{Weighted Average Profit \%} = \frac{(n_1 \times p_1) + (n_2 \times p_2)}{n_1 + n_2}$$

Solution:

Since CP is same for all:

$$\text{Overall \%} = \frac{(20 \times -40) + (180 \times 20)}{200}$$

$$= \frac{-800 + 3600}{200}$$

$$= \frac{2800}{200}$$

$$= 14\%$$

Overall profit is 14%.

Overall profit is 14%.

Final Answer

So the correct answer is (b)

Q.66 Which of the following numbers cannot be the unit digit of a perfect square?

- A. 1
- B. 4
- C. 8
- D. 9

Answer: C

Sol: Given:

Unit digits of perfect squares.

Solution:

Possible unit digits of squares: 0, 1, 4, 5, 6, 9.

Impossible unit digits: 2, 3, 7, 8.

Option C is 8, which cannot be a unit digit.

Final Answer

So the correct answer is (c)

Q.67 If $a = \sqrt{5}$ and $b = 5 - \sqrt{5}$, which of the following is true?

- A. $a+b$ is irrational
- B. $a-b$ is rational
- C. $a \times b$ is rational
- D. $a+b$ is rational

Answer: D

Sol: Given:

$$a = \sqrt{5}$$

$$b = 5 - \sqrt{5}$$

Solution:

Calculate $a + b$:

$$a + b = \sqrt{5} + (5 - \sqrt{5}) = 5.$$

Since 5 is a rational number, $a + b$ is rational.

Check other options:

$$a - b = \sqrt{5} - (5 - \sqrt{5}) = 2\sqrt{5} - 5 \text{ (Irrational).}$$

$$ab = \sqrt{5}(5 - \sqrt{5}) = 5\sqrt{5} - 5 \text{ (Irrational).}$$

Final Answer

So the correct answer is (d)

Q.68 If the side length of a square is tripled, by what factor does the area increase?

- A. 3 times
- B. 6 times
- C. 9 times
- D. 27 times

Answer: C

Sol: Given:

Side length becomes 3 times the original.

Formula Used:

$$\text{Area of Square} = \text{side}^2$$

Solution:

Let original side = s .

$$\text{Original Area } A_1 = s^2.$$

New side = $3s$.

$$\text{New Area } A_2 = (3s)^2 = 9s^2$$

$$\text{Factor of increase} = \frac{A_2}{A_1} = \frac{9s^2}{s^2} = 9$$

Final Answer

So the correct answer is (c)

Q.69 The average monthly salary of 19 employees and 1 manager is ₹6000. If the manager earns ₹16000, what is the average (approximate) salary of the employees?

- A. ₹5200
- B. ₹5473
- C. ₹5500
- D. ₹5000

Answer: B

Sol: Given:

Total people = 20 (19 employees + 1 manager).

Combined Average = ₹6000.

Manager's Salary = ₹16000.

Formula Used:

Total Sum = Average × Count

Solution:

Total Salary of all 20 = $20 \times 6000 = 120,000$.

Total Salary of 19 employees = Total - Manager's Salary

= $120,000 - 16,000 = 104,000$.

Average Salary of Employees = $\frac{104,000}{19} \approx 5473.68$.

Closest integer option is ₹5473.

Final Answer

So the correct answer is (b)

Q.70 If $\sin 2A = \cos(A - 45^\circ)$, where $2A$ is an acute angle, find the value of A .

- A. 42°
- B. 45°
- C. 24°
- D. 50°

Answer: B

Sol: Given:

$\sin 2A = \cos(A - 45^\circ)$.

Formula Used:

$\sin \theta = \cos(90^\circ - \theta)$.

Solution:

$\cos(90^\circ - 2A) = \cos(A - 45^\circ)$

$90^\circ - 2A = A - 45^\circ$

$3A = 135^\circ$

$A = 45^\circ$

Final Answer

So the correct answer is (b)

Q.71 A trader gains 25% after allowing a discount of 20% on the marked price. If no discount is allowed, what will be his profit percentage?

- A. 46.25%
- B. 50%
- C. 56.25%
- D. 52.50%

Answer: C

Sol: Given:

Gain = 25%.

Discount = 20%.

Formula Used:

Ratio CP : MP = $(100 - \text{Discount}\%) : (100 + \text{Gain}\%)$

Solution:

CP : MP = $(100 - 20) : (100 + 25) = 80 : 125$.

Let CP = 80, MP = 125.

If no discount, SP = MP = 125.

Profit = $125 - 80 = 45$.

Profit % = $\frac{45}{80} \times 100 = \frac{9}{16} \times 100 = 56.25\%$.

Final Answer

So the correct answer is (c)

Q.72 If $\cos \theta = 5/13$ and θ is acute, find the value of $\sin \theta + \cot \theta$

- A. $17/13$
- B. $196/65$
- C. $212/65$
- D. $209/156$

Answer: D

Sol: Given:

$$\cos \theta = 5/13$$

Formula Used:

Right triangle triplet (5, 12, 13).

Base = 5, Hypotenuse = 13, Perpendicular = 12.

Solution:

$$\sin \theta = \frac{12}{13}$$

$$\cot \theta = \frac{5}{12}$$

$$\text{Sum} = \frac{12}{13} + \frac{5}{12} = \frac{144 + 65}{156} = \frac{209}{156}$$

Final Answer

So the correct answer is (d)

Q.73 If $\cos(90^\circ - \theta) = 4/5$, then what is the value of $\tan \theta$?

- A. $4/3$
- B. $3/4$
- C. $5/4$
- D. $3/5$

Answer: A

Sol: Given:

$$\cos(90^\circ - \theta) = 4/5.$$

Formula Used:

$$\cos(90^\circ - \theta) = \sin \theta.$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta}.$$

Solution:

$$\sin \theta = 4/5.$$

This corresponds to a 3 - 4 - 5 triangle where Perpendicular = 4, Hypotenuse = 5, Base = 3.

$$\tan \theta = \frac{\text{Perpendicular}}{\text{Base}} = \frac{4}{3}.$$

Final Answer

So the correct answer is (a)

Q.74 Simplify: $\sqrt{18} + \sqrt{50}$

- A. $8\sqrt{2}$
- B. $7\sqrt{2}$
- C. $4\sqrt{3}$
- D. $10\sqrt{2}$

Answer: A

Sol: Given:

$$\sqrt{18} + \sqrt{50}.$$

Solution:

$$\sqrt{18} = \sqrt{9 \times 2} = 3\sqrt{2}.$$

$$\sqrt{50} = \sqrt{25 \times 2} = 5\sqrt{2}.$$

$$\text{Sum} = 3\sqrt{2} + 5\sqrt{2} = 8\sqrt{2}.$$

Final Answer

So the correct answer is (a)

Q.75 The sum of two numbers is 12 and their product is 32. What is the value of the sum of their squares?

- A. 80
- B. 100
- C. 144
- D. 64

Answer: A

Sol: Given:

$$a + b = 12.$$

$$ab = 32.$$

Formula Used:

$$a^2 + b^2 = (a + b)^2 - 2ab$$

Solution:

$$a^2 + b^2 = (12)^2 - 2(32)$$

$$= 144 - 64$$

$$= 80.$$

Final Answer

So the correct answer is (a)

Q.76 Arrange the parts to form a correct sentence:

- (1) He entered the meeting link.
- (2) The audio started breaking.
- (3) The session had already started.
- (4) He messaged the coordinator at once.

- A. 1-3-2-4
- B. 3-2-1-4
- C. 1-2-3-4
- D. 1-3-4-2

Answer: A

Sol: The correct option is (a).

To form a meaningful and grammatically correct sequence, we must arrange the events in a logical time order.

- Sentence (1) should come first because it introduces the initial action: he joined the meeting by entering the link.
- Sentence (3) logically follows because after joining, he realizes the session had already started. This is a natural observation immediately after entering.
- Sentence (2) comes next because during an ongoing session, a technical issue (audio breaking) can occur after joining.
- Sentence (4) must be the last because the message to the coordinator is a reaction to the problem (audio breaking) and the urgent situation.
- Thus, the coherent sentence flow is: joining the meeting, noticing it has started, facing audio issues, and then informing the coordinator.

So the correct answer is (a)

Q.77 Choose the option that completes the sentence using the correct spelling.

The _____ silence in the room made everyone uneasy.

- A. ominous
- B. ominus
- C. omineous
- D. omminous

Answer: A

Sol: The correct option is (a).

Option (A) is the correctly spelt word.

Correct spelling is: "ominous". It means giving the impression that something bad or unpleasant is going to happen; threatening or menacing in nature (Hindi meaning: अशुभ संकेत देने वाला / अनिष्टसूचक). It is commonly used for situations, signs, or feelings that create fear or anxiety about the future.

Example: The ominous silence before the announcement worried everyone in the hall.

Meanings of all the given options:

- Option A: Ominous – suggesting future trouble or danger (अशुभ/अनिष्टसूचक).
- Option B: Ominus – not a standard English spelling; incorrect form (गलत वर्तनी).
- Option C: Omineous – incorrect spelling; not acceptable in standard English (गलत वर्तनी).
- Option D: Omminous – incorrect spelling due to double 'm'; non-standard form (गलत वर्तनी).

So the correct answer is (a)

Q.78 Choose the most suitable option to replace the highlighted part of the sentence. If the sentence is already correct, select 'No substitution required'.

In spite the severe cold, they continued the expedition.

- A. Despite of
- B. Despite the
- C. Because of
- D. No substitution required

Answer: B

Sol: The correct option is (b).

Explanation: The phrase "in spite" must be followed by "of" when it is used before a noun or a noun phrase. Therefore, "In spite the severe cold" is grammatically incorrect because it omits "of". The correct alternatives are either "in spite of the severe cold" or "despite the severe cold". Since the highlighted portion is "In spite the", the best substitution is "Despite the", which makes the sentence correct and concise.

Grammatical rule used: "In spite of" and "despite" are used to show contrast (concession). "In spite" requires "of" before a noun/pronoun, but "despite" is directly followed by a noun/pronoun without "of".

Example: Despite the heavy rain, the match continued.

Information booster: Avoid using "despite of" in standard English. Although it is sometimes heard in informal usage, the correct forms are "despite" or "in spite of".

So the correct answer is (b)

Q.79 Choose the synonym of the word 'Substantial'.

- A. Flimsy
- B. Trivial
- C. Significant
- D. Feeble

Answer: C

Sol: The correct option is (c).

The correct synonym of the given word is (c) Significant.

Substantial: It means large in amount, value, or importance; considerable and real rather than imaginary (Hindi meaning: पर्याप्त / महत्वपूर्ण / ठोस). It is used for something that has weight, importance, or a large quantity.

Example: The company made substantial profits this year.

Significant: It means important, meaningful, or noticeable; having a considerable effect or meaning (Hindi meaning: महत्वपूर्ण / सार्थक). It matches "substantial" in the sense of importance and considerable amount.

Example: There was a significant improvement in his performance.

Synonyms: considerable, important, meaningful, noteworthy.

Antonyms: insignificant, trivial, minor, negligible.

Meanings of all the other given options:

- Option A: Flimsy – weak and easily broken; not strong (कमज़ोर/झीना).
- Option B: Trivial – of little importance; petty (तुच्छ/मामूली).
- Option D: Feeble – very weak; lacking strength (दुर्बल/कमज़ोर).

So the correct answer is (c)

Q.80 A sentence is provided in direct speech. From the four given options, choose the one that most accurately conveys the sentence in its corresponding indirect speech.

He said, "I have finished my assignment."

- He said that he had finished his assignment.
- He said that he has finished his assignment.
- He said that he finished his assignment.
- He said he finishes his assignment.

Answer: A

Sol: The correct option is (a).

To convert direct to indirect speech, we must change the reporting structure and apply tense backshift when the reporting verb is in the past ("said"). The direct sentence uses Present Perfect tense: "I have finished". In indirect speech, Present Perfect generally changes to Past Perfect when the reporting verb is in the past.

Rule-based changes applied:

- Reporting verb: "said" remains "said" (no question or request here).
- Conjunction: Use "that" to join the reported clause.
- Pronoun change: "I" changes to "he" because the speaker is "He".
- Tense backshift: "have finished" (Present Perfect) changes to "had finished" (Past Perfect).
- Possessive change: "my" changes to "his" to match the subject "he".

Therefore, the correct indirect form is: "He said that he had finished his assignment."

So the correct answer is (a)

Q.81 Change the following from active to passive:

He placed the parcel in the wooden box beside the entrance.

- The parcel had been placed in the wooden box by him beside the entrance.
- The parcel was placed in the wooden box by him beside the entrance.
- The wooden box was placed with the parcel by him beside the entrance.
- The parcel is being placed in the wooden box beside the entrance by him.

Answer: B

Sol: The correct option is (b).

To convert an active sentence into passive voice, we make the object of the active sentence the subject of the passive sentence and use the appropriate form of "be" + past participle (V3). The given active sentence is in Simple Past tense: "He placed the parcel".

Structure used:

Active voice: Subject + V2 + Object + other words.

Passive voice: Object (as Subject) + was/were + V3 + by + Subject + other words.

Step-by-step conversion:

- Object in active: "the parcel" becomes the subject in passive.
- Verb "placed" (V2) becomes "was placed" (was + V3) because the tense is Simple Past and the new subject "parcel" is singular.
- Agent "He" becomes "by him".
- Place phrases "in the wooden box beside the entrance" remain unchanged and are placed appropriately after the verb phrase.

Thus, the correct passive sentence is: "The parcel was placed in the wooden box by him beside the entrance."

Why other options are incorrect:

- Option A: "had been placed" is Past Perfect passive, which changes the tense incorrectly.
- Option C: Changes the subject incorrectly to "wooden box" and distorts meaning.
- Option D: "is being placed" is Present Continuous passive, not Simple Past.

So the correct answer is (b)

Q.82 Fill in the blank with an appropriate article.

We finally visited _____ Himalayas during our vacation.

- A. a
- B. an
- C. the
- D. much

Answer: C

Sol: The correct option is (c).

The correct option to fill in the blank is (c) the.

Explanation: Names of mountain ranges are treated as plural proper nouns and generally take the definite article "the" (for example, the Alps, the Andes, the Himalayas). Since "Himalayas" refers to a specific and well-known mountain range, we use "the" to indicate definiteness.

Example: They trekked in the Himalayas last winter.

Why other options are incorrect:

- Option A: "a" is used with singular countable nouns; "Himalayas" is a plural proper noun range, so "a" is not suitable.
- Option B: "an" is also for singular countable nouns beginning with a vowel sound; not applicable here.
- Option D: "much" is a quantifier used with uncountable nouns; it cannot function as an article before a proper noun.

Information booster: Use "the" with groups of islands, mountain ranges, rivers, seas, deserts, and plural country names (e.g., the Netherlands).

So the correct answer is (c)

Q.83 What is the active voice of the following sentence?

When was the monument built by the emperor and later it was restored by the council?

- A. When was the emperor built the monument and later they had restored it by the council?
- B. When the emperor builds the monument and later who restored it by the council?
- C. When did the emperor build the monument and later the council restored it?
- D. When the emperor built the monument and later he were restored it by the council?

Answer: C

Sol: The correct option is (c).

To convert from passive to active voice, we make the agent (introduced by "by") the subject, change the verb into the correct tense, and keep the object as the receiver of action. The sentence contains two passive clauses joined by "and later".

Structure used:

Passive voice: Object + was/were + V3 + by + Subject.

Active voice: Subject + V2 + Object.

Step-by-step conversion:

- First clause: "the monument built by the emperor" becomes "the emperor built the monument". Since the question is in past, "When was ... built?" becomes "When did ... build?"
- Second clause: "it was restored by the council" becomes "the council restored it".
- Maintain sequence: "and later" remains to show the second action happened afterwards.

Thus, the correct active form is: "When did the emperor build the monument and later the council restored it?"

Why other options are incorrect:

- Option A: Incorrect question formation ("was the emperor built"), wrong tense and unnecessary "by the council" again.
- Option B: Wrong tense ("builds") and incorrect structure of the second clause.
- Option D: Incorrect grammar ("he were restored") and wrong subject-agent mapping.

So the correct answer is (c)

Q.84 Identify the word in this sentence that contains an error.
He dived in the lake with his shoes on.

- A. shoes
- B. lake
- C. dived
- D. in

Answer: D

Sol: The correct option is (d).
Option (d) contains an error.

Detailed explanation of error: The verb "dive" is normally followed by the preposition "into" when we mean entering water from outside by jumping or plunging. The sentence describes the action of entering the lake, so the correct expression is "dived into the lake", not "dived in the lake". "In the lake" would describe a location (already inside the lake), whereas "into the lake" describes movement from outside to inside.

Correct sentence: He dived into the lake with his shoes on.

Grammatical rule used: Use "into" for movement towards the inside of something; use "in" for position/location inside something.

Example: The child jumped into the pool. (movement) / The child is in the pool. (location)

Information booster: Similar movement prepositions include "onto" (movement to a surface) vs "on" (position on a surface).

So the correct answer is (d)

Q.85 The coach asked us to draw a straight ___ under the heading.

- A. lain
- B. line
- C. lynn
- D. lane

Answer: B

Sol: The correct option is (b).
The correct option to fill in the blank is (b) line.

Explanation: The phrase “draw a straight line” is a fixed and commonly used expression. “Line” refers to a long, narrow mark or stroke drawn on a surface (Hindi meaning: रेखा). It fits the context of making a straight mark under a heading.

Example: Please draw a straight line under the title.

Why other options are incorrect:

- Option A: Lain – past participle of “lie” (to recline); it does not mean a drawn mark (लेटा हुआ).
- Option C: Lynn – typically a proper noun/name; not a suitable common noun here (नाम/विशेष संज्ञा).
- Option D: Lane – a narrow road or path; unrelated to drawing under a heading (गली/मार्ग).

So the correct answer is (b)

Q.86 A sentence is provided in indirect speech. From the four given options, choose the one that most accurately conveys the sentence in its corresponding direct speech.

They said that they were playing chess.

- They said, “We are playing chess.”
- They said, “They are playing chess.”
- They said, “We had played chess.”
- They said, “We were playing chess.”

Answer: A

Sol: The correct option is (a).
To convert indirect speech to direct speech, we restore the original words of the speaker using quotation marks and adjust pronouns and tense appropriately. In indirect speech, “were playing” is Past Continuous. This form often appears because of backshift from Present Continuous (“are playing”) when the reporting verb is in the past (“said”). Therefore, the most accurate direct speech generally restores the tense to Present Continuous.

Rule-based changes applied:

- Remove the conjunction “that”.
- Use quotation marks to present the exact spoken words.
- Pronoun adjustment: “they” (reported) becomes “we” in direct speech because the original speakers referred to themselves.
- Tense restoration: “were playing” in reported speech can correspond to “are playing” in direct speech due to backshift rules.

Thus, the correct direct speech is: They said, “We are playing chess.”

Why other options are incorrect:

- Option B: Uses “they” inside the quote, which is inconsistent because the speakers would normally say “we” for themselves.
- Option C: Changes meaning to Past Perfect (“had played”), which indicates a completed action, not an ongoing one.
- Option D: Keeps Past Continuous; it can be possible in some contexts, but the standard restoration from backshift is Present Continuous, making option (A) the best match here.

So the correct answer is (a)

Q.87 Rearrange the parts of the sentence in the correct order.

Digital safety tools

P. in online banking systems

Q. help secure personal information

R. from identity theft

S. during cashless transactions

- SRPQ
- RSPQ

- C. PSQR
- D. QSRP

Answer: D

Sol: The correct option is (d).
Option (d) is the correct order of the given parts.

To form a complete and meaningful sentence, we first need the main verb phrase after the subject "Digital safety tools". The clause "help secure personal information" (Q) provides the core meaning and must come immediately after the subject. Next, we add the context of when this securing happens: "during cashless transactions" (S). Then we specify what the protection is against: "from identity theft" (R). Finally, we mention the domain/setting where these tools operate: "in online banking systems" (P).

- Subject: Digital safety tools
- Main verb + object: help secure personal information (Q)
- Time/condition phrase: during cashless transactions (S)
- Protection target: from identity theft (R)
- Place/domain phrase: in online banking systems (P)

Thus, the correct sequence is QSRP.

So the correct answer is (d)

Q.88 Rearrange the parts of the sentence in the correct order.

- The stock market
 P. across the country
 Q. fell sharply
 R. due to rumours
 S. amid economic uncertainty

- A. SQPR
- B. PSQR
- C. QSRP
- D. RSPQ

Answer: C

Sol: The correct option is (c).
Option (c) is the correct order of the given parts.

The subject is "The stock market". Immediately after the subject, the main verb phrase should come to complete the sentence's core meaning: "fell sharply" (Q). Then, we add the surrounding situation/condition: "amid economic uncertainty" (S), which explains the broader context. After that, "due to rumours" (R) gives a direct reason contributing to the fall. Finally, "across the country" (P) functions as a place/extent phrase showing the impact was widespread.

- Subject: The stock market
- Main action: fell sharply (Q)
- Context: amid economic uncertainty (S)
- Cause: due to rumours (R)
- Extent/place: across the country (P)

Thus, the correct sequence is QSRP.

So the correct answer is (c)

Q.89 Choose the option that completes the sentence using the correct spelling.

Doctors often treat two types of ____: viral and bacterial.

- A. pneonia
- B. pneumonia
- C. pnumonia
- D. pneumonea

Answer: B

Sol: The correct option is (b).
Option (B) is the correctly spelt word.

Correct spelling is: "pneumonia". It is an infection that inflames the air sacs in one or both lungs, which may fill with fluid, causing cough, fever, and difficulty in breathing (Hindi meaning: निमोनिया). It can be caused by bacteria, viruses, or fungi, and hence "viral and bacterial" are valid classifications.

Example: The doctor diagnosed him with pneumonia and prescribed medicines.

Meanings of all the given options:

- Option A: Pneumonia – incorrect spelling; missing the correct "pneu-" sequence (गलत वर्तनी).
- Option B: Pneumonia – lung infection/inflammation of air sacs (निमोनिया).
- Option C: Pnumonia – incorrect spelling; missing "eu" after "pn" (गलत वर्तनी).
- Option D: Pneumonea – incorrect spelling; wrong ending "-nea" instead of "-nia" (गलत वर्तनी).

So the correct answer is (b)

Q.90 Choose the best one-word substitute for:
"a collection of aircraft."

- A. Squadron
- B. Crowd
- C. Cluster
- D. Pack

Answer: A

Sol: The correct option is (a).
The correct option is (a) Squadron.

The word "squadron" refers to an organized group or unit of aircraft, especially in the air force; it is a standard collective term used for aircraft in military or aviation contexts (Hindi meaning: विमान-दल / स्काड्रन). It precisely matches the idea of "a collection of aircraft" as a formal group.

Example: A squadron of fighter jets flew over the city during the parade.

Meanings of the given other options:

- Option B: Crowd – a large number of people gathered together (भीड़).
- Option C: Cluster – a group of similar things close together, often used for objects like stars, grapes, or flowers (गुच्छा/समूह).
- Option D: Pack – a group of animals (especially wolves/dogs) or a bundle of items (झुंड/पैक).

So the correct answer is (a)

Q.91 Arrange the parts to form a correct sentence:

- (1) The wind rose sharply.
- (2) Leaves began swirling across the road.
- (3) The sky turned grey within minutes.
- (4) I shut the doors tightly.

- A. 1-2-3-4
- B. 1-4-3-2
- C. 2-1-3-4
- D. 1-2-4-3

Answer: A

Sol: The correct option is (a).
Option (a) is the correct order of the given sentences because it presents a natural sequence of events during a sudden weather change.

- (1) "The wind rose sharply" should come first as it is the primary cause that triggers the other visible effects.
- (2) Due to strong wind, "Leaves began swirling across the road" logically follows as an immediate consequence.
- (3) "The sky turned grey within minutes" then indicates the worsening weather condition, building towards a storm-like situation.
- (4) Finally, the speaker reacts to the threatening environment: "I shut the doors tightly," which is a protective action that fits best at the end.
- The sequence shows cause → effect → further development → human response, making it coherent and meaningful.

So the correct answer is (a)

Q.92 What does the idiom "Barking up the wrong tree" mean?

- A. Accusing the wrong person
- B. Solving a problem quickly
- C. Refusing to accept facts
- D. Taking a risky shortcut

Answer: A

Sol: The correct option is (a).

Option (a) is the correct meaning of the given idiom.

Barking up the wrong tree: This idiom means to make a wrong assumption about someone or something; to blame or accuse the wrong person or to pursue a mistaken course of action (Hindi idiom meaning: गलत व्यक्ति पर आरोप लगाना / गलत दिशा में प्रयास करना). It suggests that one is looking in the wrong place for the answer or culprit.

Example: If you think I broke the vase, you are barking up the wrong tree; I was not even at home.

Other related idioms and their meanings:

- Jumping to conclusions – forming an opinion without sufficient evidence.
- Miss the mark – to be incorrect or fail to achieve the intended result.
- On the wrong track – following an incorrect plan or idea.
- Point the finger at – to blame someone (sometimes incorrectly).

So the correct answer is (a)

Q.93 Convert the following indirect sentence into direct speech. Choose the most accurate option.

The player exclaimed with delight that he had scored the winning goal.

- A. The player said, "I have scored the winning goal!"
- B. The player exclaimed, "I have scored the winning goal!"
- C. The player said, "Alas! I have scored the winning goal!"
- D. The player shouted, "Scoring the winning goal!"

Answer: B

Sol: The correct option is (b).

To convert indirect to direct speech, we restore the exact words within quotation marks and choose the correct reporting verb based on the mood/emotion. The sentence says "exclaimed with delight", which indicates a joyful exclamation. Therefore, we must use "exclaimed" in direct speech. Also, the reported clause uses Past Perfect "had scored", which is typically a backshift from Present Perfect "have scored" in direct speech.

Rule-based conversion:

- Remove the conjunction "that".
- Use quotation marks for the spoken words.
- Change pronoun: "he" becomes "I" because the player is speaking about himself.
- Tense restoration: "had scored" becomes "have scored" in direct speech (common backshift reversal).
- Use an exclamation mark to reflect "delight".

Thus, the best direct form is: The player exclaimed, "I have scored the winning goal!"

Why other options are incorrect:

- Option A: Uses "said" which does not convey the emotion "with delight".

- Option C: "Alas!" expresses sorrow, not delight, so it contradicts the context.
- Option D: Incorrect structure; it does not form a complete spoken sentence and changes meaning.

So the correct answer is (b)

Q.94 Choose the option which best completes the sentence.

When her son failed to return from the camp with the other boys, Mrs Sharma was ____, fearing something terrible had happened.

- A. at her wits' end
- B. on cloud nine
- C. in seventh heaven
- D. on the same page

Answer: A

Sol: The correct option is (a).

The correct option to fill in the blank is (a) at her wits' end.

Explanation: "At one's wits' end" means being extremely worried, confused, or distressed and not knowing what to do next (Hindi meaning: अत्यधिक परेशान/हैरान होना, उपाय न सूझना). In the sentence, Mrs Sharma fears something terrible, which clearly indicates anxiety and helplessness. Therefore, this idiomatic expression fits perfectly.

Example: After searching for hours without any clue, she was at her wits' end.

Why other options are incorrect:

- Option B: On cloud nine – extremely happy (बहुत खुश); opposite of the worried context.
- Option C: In seventh heaven – extremely delighted (अत्यंत प्रसन्न); does not match fear and anxiety.
- Option D: On the same page – in agreement or understanding (एक ही विचार पर); not related to distress.

So the correct answer is (a)

Q.95 Which of the given options is the most logical sequencing of the following sentences to form a meaningful paragraph?

1. Therefore, we must adopt sustainable practices immediately.
2. Climate change poses a grave danger to the earth.
3. Rising heat intensifies droughts, floods, and storms.
4. Human actions like pollution and deforestation fuel it.

- A. 1-2-4-3
- B. 4-3-2-1
- C. 2-4-3-1
- D. 3-2-1-4

Answer: C

Sol: The correct option is (c).

The correct sequence is 2-4-3-1.

Explanation of the correct sequence of each sentence:

- Sentence 2 introduces the topic and gives the main idea: climate change is a serious danger. A paragraph should start with a clear theme statement.
- Sentence 4 logically follows because it explains the cause of climate change by stating that human actions fuel it. After introducing a problem, we typically explain its reasons.
- Sentence 3 then provides the effects/impacts of climate change, describing how rising heat worsens droughts, floods, and storms. This develops the paragraph with consequences.
- Sentence 1 concludes with a result and call to action using "Therefore", which must come after causes and effects have been stated. It provides the logical conclusion of the paragraph.

How to identify ordering (parts of speech/connectors): The connector "Therefore" is a concluding discourse marker, so it should appear at the end after the problem and supporting details. Cause-and-effect progression (cause → impact → conclusion) creates a meaningful paragraph.

So the correct answer is (c)

Q.96 Find the part of the sentence that contains an error:

The complaint letters that were received through email (1)/ and verified by the clerk (2)/ are being files systematically (3)/ in separate folders. (4)

- A. The complaint letters that were received through email (1)
- B. and verified by the clerk (2)
- C. are being files systematically (3)
- D. in separate folders (4)

Answer: C

Sol: The correct option is (c).
Option (c) contains an error.

Detailed explanation of error: The phrase "are being files" is grammatically incorrect because after "are being" (present continuous passive structure), we must use the past participle (V3) form of the main verb. The verb intended here is "file" (to arrange documents in folders). The correct past participle is "filed", not "files". Hence, the correct phrase should be "are being filed systematically".

Correct sentence: The complaint letters that were received through email and verified by the clerk are being filed systematically in separate folders.

Grammatical rule used: Present Continuous Passive = am/is/are + being + V3.

Example: The reports are being checked by the manager.

Information booster: In passive voice, always ensure the main verb appears in V3 (past participle). Using the base form or present form after "being" leads to a direct grammar error.

So the correct answer is (c)

Q.97 Rearrange the parts of the sentence in the correct order.

Industrial expansion
P. weakens heritage
Q. in old city quarters
R. and traffic overcrowding
S. by cultural erosion

- A. QRPS
- B. PSRQ
- C. QSPR
- D. RQPS

Answer: D

Sol: The correct option is (d).
Option (d) is the correct order of the given parts.

The subject is "Industrial expansion", and it is being joined with another subject-like phrase "and traffic overcrowding" (R), forming a compound subject. After stating the setting "in old city quarters" (Q), the sentence must include the main verb and object idea "weakens heritage" (P). Finally, "by cultural erosion" (S) gives the manner/cause through which heritage is weakened.

- Start with R to add the second linked factor: "and traffic overcrowding".
- Place Q next to specify the location/setting: "in old city quarters".
- Then use P to complete the main clause: "weakens heritage".
- End with S to explain the mechanism: "by cultural erosion".

Thus, the correct sequence is RQPS.

So the correct answer is (d)

Q.98 Choose the correct indirect speech form of the following sentence.

Ritu said to Neha, "What will you buy for me on my birthday next year?"

- A. Ritu asked Neha what she would buy for her on her birthday the following year.
- B. Ritu asked Neha what she would buy for her on her birthday the previous year.
- C. Ritu asked Neha what she should buy for her on her birthday next year.
- D. Ritu requested Neha what she should buy for her on her birthday the coming year.

Answer: A

Sol: The correct option is (a).

To change direct to indirect speech for a question, we use the reporting verb "asked" and remove the question form by using statement order (subject + verb). We also apply tense backshift when the reporting verb is in the past ("said"), and we change pronouns and time expressions appropriately.

Step-by-step rules applied:

- Reporting verb change: "said to" becomes "asked" because it is an interrogative sentence.
- Remove quotation marks and question mark; use indirect question form.
- Change word order: "What will you buy" becomes "what she would buy" (no auxiliary inversion in indirect questions).
- Tense backshift: "will" changes to "would" because the reporting verb is in the past.
- Pronoun changes: "you" (addressing Neha) becomes "she"; "me" (Ritu) becomes "her".
- Time expression change: "next year" becomes "the following year" in indirect speech.
- Possessive/time reference: "on my birthday" becomes "on her birthday" referring to Ritu.

Therefore, option (A) correctly follows all conversion rules.

So the correct answer is (a)

Q.99 Change the following from active to passive:

The committee had approved the proposal after a lengthy discussion.

- A. The proposal was being approved after a lengthy discussion.
- B. The proposal had been approved by the committee after a lengthy discussion.
- C. The proposal is approved after a lengthy discussion.
- D. The proposal was approved after a lengthy discussion.

Answer: B

Sol: The correct option is (b).

To convert active to passive, we make the object the subject and use the appropriate passive verb form. The active sentence is in Past Perfect tense: "had approved". Therefore, the passive must be Past Perfect passive: "had been approved".

Structure used:

Active voice (Past Perfect): Subject + had + V3 + Object + other words.

Passive voice (Past Perfect): Object (as Subject) + had been + V3 + by + Subject + other words.

Step-by-step conversion:

- Object in active: "the proposal" becomes the subject in passive.
- Verb phrase: "had approved" becomes "had been approved".
- Agent: "the committee" is added using "by the committee".
- Remaining phrase: "after a lengthy discussion" stays as it is.

Thus, the correct passive sentence is: "The proposal had been approved by the committee after a lengthy discussion."

Why other options are incorrect:

- Option A: "was being approved" is Past Continuous passive; tense is wrong.
- Option C: "is approved" is Present Simple passive; tense is wrong.
- Option D: "was approved" is Simple Past passive; it changes Past Perfect to Simple Past.

So the correct answer is (b)

Q.100 Transform the following sentence into active voice.
The meals have been prepared carefully by the chef.

- A. The chef have prepared the meals carefully.
- B. The chef has prepared the meals carefully.
- C. The chef has prepared the meals by carefully.
- D. The chef has prepared the meal carefully.

Answer: B

Sol: The correct option is (b).

To convert passive to active voice, we make the agent (introduced by "by") the subject and change the verb to match the tense. The passive sentence is in Present Perfect passive: "have been prepared". The corresponding active voice is Present Perfect active: "has/have prepared".

Structure used:

Passive voice (Present Perfect): Object + have/has been + V3 + by + Subject.

Active voice (Present Perfect): Subject + have/has + V3 + Object.

Step-by-step conversion:

- Agent: "by the chef" becomes the subject "The chef".
- Object: "The meals" becomes the object in active voice.
- Verb: "have been prepared" becomes "has prepared" because "chef" is singular, so we use "has".
- Adverb: "carefully" remains in the same sense and is placed after the object for clarity.

Thus, the correct active sentence is: "The chef has prepared the meals carefully."

Why other options are incorrect:

- Option A: Incorrect subject-verb agreement ("chef have").
- Option C: Incorrect placement and form ("by carefully" is ungrammatical here).
- Option D: Changes meaning by making "meals" singular ("meal").

So the correct answer is (b)