Q.1 Choose the most suitable option to replace the highlighted part of the sentence.
The country has at least twenty colleges **of whom only ten are properly maintained.**

A. of whom only ten are properly maintained
B. of whom only ten have been properly maintained
C. of which only ten has proper maintenance
D. of which only ten are properly maintained

Answer: D

Sol: **Explanation:** The noun **colleges** refers to things, not people. Therefore, the relative pronoun must be used for things: **which**, not **whom**. Also, "ten" refers to plural colleges, so the verb must be plural: **are**.
Why option (D) is correct: "**of which only ten are properly maintained**" correctly uses **which** for non-living entities and keeps correct subject–verb agreement (ten colleges **are** maintained).

Grammatical rule used: Use **who/whom** for people; use **which** for things/objects/animals. Maintain correct subject–verb agreement with plural nouns.

Why other options are incorrect:

- **Option A:** "whom" is incorrect because colleges are not persons.
- **Option B:** "whom" is incorrect; additionally, the tense/form changes without need.
- **Option C:** "ten has" is wrong because "ten" is plural; also expression is unnatural.

"So the correct answer is (d)"

Q.2 Choose the correct passive voice transformation of the sentence.
Will the company approve the proposal?

A. The proposal will be approved by the company?
B. Will the proposal be approved by the company?
C. Is the proposal approved by the company?
D. The proposal would be approved by the company?

Answer: B

Sol: **Explanation:** The sentence is an interrogative (question) in active voice: "Will the company approve the proposal?" To change it into passive voice, we make the object "the proposal" the subject, use **be + past participle**, and keep the question format by placing the auxiliary before the subject.
Active structure: Will + Subject + Verb + Object?

Passive structure: Will + Object (as Subject) + be + V3 + by + Agent?

Why option (B) is correct: "**Will the proposal be approved by the company?**" follows the exact passive interrogative structure.

Why other options are incorrect:

- **Option A:** word order is not interrogative; it is like a statement with a question mark.
- **Option C:** changes "will approve" (future) to "is approved" (present), altering tense.
- **Option D:** uses "would," which changes meaning and tense.

"So the correct answer is (b)"

Q.3 Which of the following sentences uses the word "close" with the same meaning as in the following sentence?
"Please close the window before you go out."

A. My house is close to the railway station.
B. The shop is close to my office.

C. Remember to close the gate after entering.
D. She is very close to her best friend.

Answer: C

Sol: **Explanation:** In the sentence "Please close the window," the word **close** is used as a **verb** meaning "to shut" (Hindi meaning: बंद करना). We must find the option where "close" is also used as a verb with the same meaning.
Why option (C) is correct: "Remember to **close** the gate after entering." Here, **close** is also a verb meaning "shut the gate," matching the original meaning.

Why other options are incorrect:

- **Option A:** "close to" is an adjective/preposition phrase meaning "near" (Hindi: पास).
- **Option B:** again means "near," not "shut."
- **Option D:** "close to" means emotionally connected (Hindi: घनिष्ठ), not "shut."

"So the correct answer is (c)"

Q.4 Select the most appropriate antonym of the word: Obsolete

A. Useless
B. Pointless
C. Current
D. Vain

Answer: C

Sol: **Explanation:** The word **obsolete** means no longer used, outdated, or old-fashioned because something new has replaced it (Hindi meaning: पुराना / अप्रचलित). The antonym should convey the idea of being up-to-date and still in use.
Why option (C) is correct: Current means present, modern, or happening/used now (Hindi meaning: वर्तमान / प्रचलित). This is the direct opposite of "obsolete."

Example: Fax machines have become **obsolete** in many offices.

Example: We should follow the **current** guidelines for safety.

Meanings of other options (not antonyms):

- **Option A (Useless):** having no use or value (Hindi: बेकार).
- **Option B (Pointless):** having no purpose (Hindi: निरर्थक).
- **Option D (Vain):** futile or overly proud depending on context (Hindi: व्यर्थ / घमंडी).

"So the correct answer is (c)"

Q.5 Choose the correct one-word substitute for:
A person who strongly favours social or political reform and change

A. Progressive
B. Liberal
C. Reactionary
D. Conservative

Answer: A

Sol: **Explanation:** A person who strongly supports reforms, new ideas, and forward-looking changes in society or politics is called a **progressive** (Hindi meaning: प्रगतिशील). Such a person believes in improvement and modernization rather than sticking to old traditions.
Example: As a **progressive** leader, she promoted education reforms and equal rights.

Meanings of other options:

- **Option B (Liberal):** open to new ideas and tolerant; can support reform but is broader (Hindi: उदारवादी).
- **Option C (Reactionary):** strongly opposed to political or social change; wants old system (Hindi: प्रतिगामी).

- **Option D (Conservative):** prefers traditional values; resists rapid change (Hindi: रूढ़िवादी).

"So the correct answer is (a)"

Q.6 Select the most appropriate synonym of the word: Abolish

    A. Institute
    B. Enact
    C. Abrogate
    D. Approve

Answer: C

Sol: **Explanation:** The word **abolish** means to formally put an end to a law, system, or practice; to officially stop it from continuing (Hindi meaning: समाप्त करना / रद्द करना). In exam questions, its closest synonym is the word that means "to cancel officially."
Why option (C) is correct: Abrogate means to repeal, cancel, or do away with a law or formal agreement (Hindi meaning: कानूनी रूप से रद्द करना). Therefore, it matches the sense of abolish very precisely.

Example: The government decided to **abolish** the outdated rule to ensure fairness.

Example: The court may **abrogate** a regulation that violates fundamental rights.

Why other options are incorrect:

- **Option A (Institute):** to establish or start something (Hindi: स्थापित करना)—opposite in sense.
- **Option B (Enact):** to make a law officially (Hindi: कानून बनाना)—not "end" a law.
- **Option D (Approve):** to accept or agree to something (Hindi: स्वीकृत करना)—not to cancel.

"So the correct answer is (c)"

Q.7 Change the following sentence into the Active form.
    The proposal is scheduled to be reviewed by the panel tomorrow.

    A. The panel is scheduling to review the proposal tomorrow.
    B. The panel is scheduled to review the proposal tomorrow.
    C. The panel schedules the proposal to be reviewed tomorrow.
    D. The panel will be reviewing the proposal tomorrow.

Answer: B

Sol: **Explanation:** The given sentence is in passive voice: **The proposal** (receiver of action) + **is scheduled to be reviewed** + **by the panel** (doer). To convert into active voice, we make the doer the subject and keep the same meaning and time reference (tomorrow).
Active structure idea: Subject (doer) + verb + object (receiver). Here, the doer is **the panel** and the action is **review**.

Why option (B) is correct: "**The panel is scheduled to review the proposal tomorrow.**" correctly makes **the panel** the subject and keeps the intended meaning that the review is fixed/scheduled for tomorrow.

Why other options are incorrect:

- **Option A:** "is scheduling to review" is awkward and changes meaning; it suggests the panel is arranging the schedule, not that the review itself is scheduled.
- **Option C:** "schedules the proposal to be reviewed" is incorrect structure and unnatural usage.
- **Option D:** "will be reviewing" changes the sense from "scheduled" to merely "future continuous," losing the idea of a fixed schedule.

"So the correct answer is (b)"

Q.8 Choose the correct meaning of the idiom: Beat around the bush

A. To be very decisive about a matter
B. To avoid coming to the main point
C. To carefully choose a position
D. To be in a neutral, relaxed position

Answer: B

Sol: **Explanation:** The idiom **beat around the bush** means to avoid saying what is important directly; to speak indirectly instead of coming to the main point (Hindi idiom sense: बात को घुमा-फिराकर कहना / टालमटोल करना).
Why option (B) is correct: Option (B) exactly expresses the idiom's meaning: avoiding the main point.

Example: Stop **beating around the bush** and tell me what happened.

Other related idioms:

- **Get to the point:** speak directly (Hindi: सीधे मुद्दे पर आना).
- **Hem and haw:** hesitate or be indecisive (Hindi: हिचकिचाना).
- **Talk in circles:** talk without reaching a conclusion (Hindi: बात घुमाते रहना).

"So the correct answer is (b)"

Q.9 Choose the correct one-word substitute for:
A person who studies weather and atmospheric conditions

A. Astrologer
B. Meteorologist
C. Geologist
D. Geographer

Answer: B

Sol: **Explanation:** A person who scientifically studies **weather**, climate, and atmospheric conditions is called a **meteorologist** (Hindi meaning: मौसम वैज्ञानिक). This term is used for experts who forecast weather using data, satellites, and atmospheric models.
Example: The **meteorologist** predicted heavy rainfall for the weekend.

Why other options are incorrect:

- **Option A (Astrologer):** studies stars/horoscopes (Hindi: ज्योतिषी), not weather.
- **Option C (Geologist):** studies rocks and Earth's structure (Hindi: भूविज्ञानी).
- **Option D (Geographer):** studies Earth's places and physical/human geography (Hindi: भूगोलवेत्ता).

"So the correct answer is (b)"

Q.10 Select the option that expresses the given sentence in direct voice.
He told her that the restaurant they had visited the previous day was not as expensive as he had thought it would be.

A. He said to her, "The restaurant we visited yesterday was not as expensive as I thought it would be."
B. He said to her, "The restaurant we had visited yesterday was not as expensive as I had thought it would be."
C. He said to her, "The restaurant we visited the previous day was not as expensive as I thought it would be."
D. He said to her, "The restaurant we had visited the previous day was not as expensive as I had thought it would be."

Answer: A

Sol: **Explanation:** To convert indirect speech to direct speech, we restore the original quoted words. The reporting verb is "told," so in direct speech it becomes "said to." Also, the phrase **the previous day** in indirect speech becomes **yesterday** in direct speech, and the tense generally shifts back to the original natural form in the quotation.
Why option (A) is correct: "He said to her, '**The restaurant we visited yesterday was not as expensive as I thought it would be.**'" correctly changes "previous day" to "yesterday," uses a natural past form "visited," and keeps the meaning accurately.

Key rules used:

- **told + object** in indirect becomes **said to + object** in direct.
- Time expressions change: **the previous day → yesterday**.

Why other options are incorrect:

- **Option B:** unnecessary past perfect "had visited" and "had thought" makes the direct quote less natural here.
- **Option C:** keeps "previous day," which is an indirect-speech time expression, not direct.
- **Option D:** keeps "previous day" and also overuses past perfect, reducing correctness for direct form.

"So the correct answer is (a)"

Q.11 Select the option that expresses the given sentence in indirect voice.

The tour guide said, "We have been wandering for hours, but the ruins we have been searching for are just ahead, and we will reach there in a while."

A. The tour guide said that they had been wandering for hours, but the ruins they had been searching for were just ahead, and they would reach there in a while.

B. The tour guide said that they have been wandering for hours, but the ruins they have been searching for are just ahead, and they will reach there in a while.

C. The tour guide said that they had been wandering for hours, but the ruins they had been searching for are just ahead, and they would reach there in a while.

D. The tour guide said that they were wandering for hours, but the ruins they were searching for were just ahead, and they would reach there in a while.

Answer: A

Sol: **Explanation:** This is direct to indirect speech. The reporting verb is **said** (past), so the tense generally backshifts.

- **Present perfect continuous** "have been wandering" → **past perfect continuous** "had been wandering".
- **Present perfect continuous** "have been searching" → "had been searching".
- **Simple present** "are" → **simple past** "were".
- **Will** → **would**.

Why option (A) is correct: It follows all necessary backshift rules and keeps the meaning intact.

Why other options are incorrect:

- **Option B:** keeps present tenses and "will," so it does not apply backshift after "said."
- **Option C:** mixes backshifted verbs with "are," which is inconsistent.
- **Option D:** incorrectly changes "had been wandering" to "were wandering," reducing accuracy of duration.

"So the correct answer is (a)"

Q.12 Fill in the blank with the most appropriate phrase. Due to severe budget cuts and reduced financial support from stakeholders, the organisation was forced to operate ____ for the next financial year.

A. on a tight budget
B. in a nutshell
C. under the weather
D. with flying colours

Answer: A

Sol: **Explanation:** The sentence indicates financial difficulty: "severe budget cuts" and "reduced financial support." Therefore, the phrase must mean operating with limited money (Hindi meaning: कम पैसों में काम करना).

Why option (A) is correct: On a tight budget means having very little money available and spending carefully (Hindi: कड़े बजट में). It fits the context of an organisation facing budget cuts.

Example: During recession, many families live **on a tight budget**.

Why other options are incorrect:

- **Option B (in a nutshell):** means "in brief" (Hindi: संक्षेप में), not about finances.
- **Option C (under the weather):** means feeling ill (Hindi: अस्वस्थ), unrelated to budget.
- **Option D (with flying colours):** means with great success (Hindi: बहुत अच्छे से सफल), opposite to the situation.

"So the correct answer is (a)"

Q.13 In Sanskrit, what is the meaning of the term "mandala"?

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. Artwork
B. Circle
C. Meditation
D. Universe

Answer: B

Sol: **Explanation:** The passage begins by stating that the term "mandala" comes from Sanskrit and means "circle." Therefore, the correct answer must be the option that gives this meaning exactly as stated.

Why option (B) is correct: Option (B) is "Circle," which is explicitly mentioned in the first line of the passage.

Why other options are incorrect:

- **Option A (Artwork):** Mandalas are artworks, but the question asks the literal Sanskrit meaning.
- **Option C (Meditation):** Mandalas are used in meditation, but that is their use, not meaning.
- **Option D (Universe):** Mandalas represent the cosmos, but the word meaning given is "circle."

"So the correct answer is (b)"

Q.14 Choose the most appropriate synonym of the word: EPISTEMIC

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. Physical
B. Cognitive
C. Symbolic
D. Spatial

Answer: B

Sol: **Explanation:** The word **epistemic** relates to **knowledge**, especially knowledge that comes from reasoning, understanding, or evidence (Hindi meaning: ज्ञान-संबंधी / बौद्धिक). Therefore, the closest synonym will be the option connected with the mind and knowledge.

Why option (B) is correct: Cognitive means related to mental processes like thinking, knowing, understanding, and learning (Hindi meaning: मानसिक / संज्ञानात्मक). This matches "epistemic" most appropriately.

Why other options are incorrect:

- **Option A (Physical):** related to the body (Hindi: शारीरिक), not knowledge.
- **Option C (Symbolic):** related to symbols (Hindi: प्रतीकात्मक), not knowledge directly.
- **Option D (Spatial):** related to space and position (Hindi: स्थानिक), not knowledge.

"So the correct answer is (b)"

Q.15 What is symbolised by the central point of a mandala?

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. The entire cosmos
B. One's identity or a divine essence
C. Material wealth and possessions
D. The ongoing cycle of life

Answer: B

Sol: **Explanation:** The passage describes the centre of a mandala as the origin of everything. It symbolises one's identity, the genesis of life, or a divine essence. Hence, the correct option must contain this idea of origin/self/divinity.

Why option (B) is correct: Option (B) states "One's identity or a divine essence," which is exactly what the passage mentions about the central point.

Why other options are incorrect:

- **Option A:** The whole mandala represents the cosmos, but the question asks specifically about the central point.
- **Option C:** Material wealth is rejected; it is not symbolised by the centre.
- **Option D:** The continuous flow of life is reflected by patterns expanding outward, not the central point.

"So the correct answer is (b)"

Q.16 As stated in the passage, what is the purpose of monks making mandalas using coloured sand?

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. To preserve the artwork
B. To represent the temporary nature of life
C. To attract good fortune
D. To showcase their artistic skills

Answer: B

Sol: **Explanation:** The passage explains that monks create mandalas using coloured sand and then brush them away after completion. This act is symbolic, showing a spiritual lesson rather than preserving art.

Why option (B) is correct: The passage states that brushing away the sand mandala symbolises **the fleeting nature of life** and rejection of worldly attachment. This directly supports option (B): to represent the temporary nature of life.

Why other options are incorrect:

- **Option A:** They do not preserve the artwork; they intentionally remove it.
- **Option C:** Attracting good fortune is not stated in the passage.
- **Option D:** Showcasing artistic skill is not the purpose described; symbolism and spirituality are.

"So the correct answer is (b)"

Q.17 . According to the passage, what therapeutic benefits does creating a mandala provide?

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. It increases artistic creativity
B. It improves physical health
C. It helps reduce tension and calm the mind
D. It helps in building wealth

Answer: C

Sol: **Explanation:** The passage clearly states that creating a mandala has **therapeutic benefits**. It mentions that drawing geometric patterns in a systematic and repetitive way can **reduce stress**, **improve focus**, and **calm the mind**. Hence, the correct choice is the option that reflects relaxation and mental calmness.

Why option (C) is correct: Option (C) states that it helps reduce tension and calm the mind, which directly matches the passage's idea of stress reduction and mental peace.

Why other options are incorrect:

- **Option A:** Creativity may improve, but it is not stated as the main therapeutic benefit.
- **Option B:** Physical health improvement is not mentioned in the passage.
- **Option D:** Wealth building is unrelated to the passage.

"So the correct answer is (c)"

Q.18 In Buddhist and Hindu traditions, what is the main purpose of mandalas?

Read the following passage and answer the question based on it.

Mandala art, a term that comes from the Sanskrit word meaning "circle," refers to intricate circular designs that have fascinated people for centuries. Mandalas are both mathematical and metaphorical works of art, and at their core, a mandala is a circle pattern that represents the cosmos as well as an individual's journey. The centre of the design symbolises the origin of everything—one's identity, the genesis of life, or a divine essence. From this central point, complex and often symmetrical patterns expand outward, reflecting the universe's growth and the continuous flow of life.

With deep roots in Buddhism and Hinduism, mandalas are widely used as powerful tools for spiritual ritual and meditation. Monks carefully create these elaborate patterns using coloured sand, and once completed, they brush them away to symbolise the fleeting nature of life and the rejection of earthly possessions. Beyond religious meaning, making a mandala also offers therapeutic benefits. Drawing its geometric patterns in a systematic and repetitive way can reduce stress, improve focus, and calm the mind. This creative process becomes a form of active meditation, helping the artist concentrate, connect inward, and experience inner peace.

A. To represent artistic expression

B. To represent the cosmos and an individual's journey
C. To depict daily life
D. To showcase geometric patterns

Answer: B

Sol: Why Option (b) Is Correct:
The passage explicitly states that mandalas symbolize the cosmos and an individual's journey.

This aligns perfectly with their traditional spiritual role in Hinduism and Buddhism, where they serve as metaphors for the universe and personal spiritual path.

Mandalas in these traditions are not merely decorative; they are sacred symbols used in meditation, rituals, and teaching.

Why Other Options Are Incorrect:
(a) To represent artistic expression

Although mandalas are artistic, the passage emphasizes their spiritual and symbolic purpose more than art for art's sake.

The passage never says that artistic expression is their main purpose in these traditions.

(c) To depict daily life

The passage never mentions mandalas depicting everyday scenes. Instead, they represent cosmic order and spiritual journeys, not mundane life.

(d) To showcase geometric patterns

While mandalas contain intricate geometry, this is their form, not their main purpose in religious contexts. The geometry serves as a vehicle for spiritual symbolism and meditation.

Q.19 Choose the correctly spelt word.

A. Psychiatrist
B. Pyschiatrist
C. Psychaitrist
D. Psychiatryst

Answer: A

Sol: Explanation: The correctly spelt word is the one that follows standard English spelling. A **psychiatrist** is a medical doctor who diagnoses and treats mental illnesses, often with therapy and medicines (Hindi meaning: मनोचिकित्सक).
Why option (A) is correct: "**Psychiatrist**" is the standard correct spelling.

Example: She consulted a **psychiatrist** for anxiety management.

Meanings/Status of other options:

- **Option B (Pyschiatrist):** incorrect spelling (intended meaning: मनोचिकित्सक).
- **Option C (Psychaitrist):** incorrect spelling (intended meaning: मनोचिकित्सक).
- **Option D (Psychiatryst):** incorrect spelling (intended meaning: मनोचिकित्सक).

"So the correct answer is (a)"

Q.20 Fill in the blank with the most appropriate phrasal verb. Due to mounting pressure at work and multiple deadlines to meet, she felt completely overwhelmed and finally decided to ____ some of her responsibilities to her assistant.

A. take up
B. hand down
C. hand over
D. give in

Answer: C

Sol: Explanation: The context shows she is overwhelmed and wants to transfer duties to her assistant. Therefore, the phrasal verb must mean "to transfer/entrust responsibility to someone else" (Hindi meaning: सौंप देना / जिम्मेदारी देना).

Why option (C) is correct: Hand over means to give control, responsibility, or possession to another person (Hindi: हस्तांतरित करना). It perfectly fits "hand over responsibilities."

Example: The manager decided to **hand over** the file to the assistant.

Why other options are incorrect:

- **Option A (take up):** to begin an activity or accept a task (Hindi: शुरू करना / अपनाना)—opposite meaning here.
- **Option B (hand down):** to pass something from older generation to younger or to announce an official decision (Hindi: पीढ़ी दर पीढ़ी देना)—not suitable.
- **Option D (give in):** to surrender or yield (Hindi: हार मान लेना)—does not mean transfer responsibilities.

"So the correct answer is (c)"

Q.21 Choose the most suitable option to replace the highlighted part of the sentence.
The manager was instructed to prepare the project summary in a clear, correct and in a concise manner.

A. in a clear, correct, and concise manner
B. in a clear, correct and in concise manner
C. in a clear, correctly and concise manner
D. clearly, correct and concisely

Answer: A

Sol: **Explanation:** The highlighted part has faulty parallelism and unnecessary repetition of the preposition **in**. When multiple adjectives modify the same noun "manner," they should follow a parallel structure and should not repeat "in a" again and again.
Why option (A) is correct: "**in a clear, correct, and concise manner**" maintains parallel adjectives (clear, correct, concise) modifying "manner" and removes the redundant "in a" before concise.

Grammatical rule used: Maintain **parallelism** in a series of adjectives/phrases; avoid redundant repetition when the same structure applies to all items in the list.

Why other options are incorrect:

- **Option B:** still repeats "in" and misses the article "a" before "concise manner," making it grammatically inconsistent.
- **Option C:** "correctly" is an adverb while "clear" and "concise" are adjectives; this breaks parallel structure.
- **Option D:** mixes adverbs and adjective ("correct") and also changes the original construction without proper parallel adverbs (should be clearly, correctly, concisely).

"So the correct answer is (a)"

Q.22 Choose the correctly spelt word.

A. Accommodate
B. Acommodate
C. Accomodate
D. Accommadate

Answer: A

Sol: **Explanation:** The correctly spelt word is **accommodate**. It means to provide space or room for someone/something, or to adjust to meet needs (Hindi meaning: ठहराना / समायोजित करना). This word is commonly tested because it has double "c" and double "m."
Why option (A) is correct: "**Accommodate**" is the correct spelling.

Example: The hotel can **accommodate** 200 guests comfortably.

Meanings/Status of all options:

- **Option A:** correct spelling; meaning: provide room/adjust (Hindi: समायोजित करना).
- **Option B:** incorrect spelling (missing "c").
- **Option C:** incorrect spelling (missing one "m").
- **Option D:** incorrect spelling (wrong vowel).

"So the correct answer is (a)"

Q.23 Select the most appropriate antonym of the word: Benevolent

  A. Talkative
  B. Loquacious
  C. Malicious
  D. Chatty

Answer: C

Sol: **Explanation: Benevolent** means kind, charitable, and well-meaning; showing goodwill towards others (Hindi meaning: दयालु / परोपकारी). The antonym must express the opposite idea: wishing harm or being cruel.
Why option (C) is correct: Malicious means intending to harm others, spiteful, or having ill-will (Hindi meaning: दुष्ट / दुर्भावनापूर्ण). This is the direct opposite of benevolent.

Example: A **benevolent** person helps others without expecting anything in return.

Example: His **malicious** remarks were meant to hurt her confidence.

Meanings of other options:

- **Option A (Talkative):** speaking a lot (Hindi: बातूनी).
- **Option B (Loquacious):** very talkative (Hindi: अत्यधिक वाचाल).
- **Option D (Chatty):** friendly talkative (Hindi: गप्पी / बातूनी).

"So the correct answer is (c)"

Q.24 Identify the part of the sentence that contains a grammatical error.
    A. The book, B. which you suggested, C. was both interesting D. and entertain.

  A. The book
  B. which you suggested
  C. was both interesting
  D. and entertain.

Answer: D

Sol: **Explanation:** The sentence uses the correlative structure **both … and …** which demands **parallelism**. If "interesting" is an adjective, the second part after "and" should also be an adjective, not a verb.
Why option (D) contains the error: "and **entertain**" is a verb, but it should be the adjective **entertaining**. Correct form: "The book, which you suggested, was both interesting and entertaining."

Grammatical rule used: In **both … and** constructions, the elements joined must be grammatically parallel (adjective + adjective, noun + noun, etc.).

Example: She is both **smart** and **hardworking** (adjective + adjective).

Information booster: Parallelism is commonly tested in SSC/Banking: watch for mixed forms like adjective + verb, noun + clause, etc.

"So the correct answer is (d)"

Q.25 Rearrange the following sentences to form a meaningful and grammatically correct paragraph.
  P. The restoration project was widely praised as a remarkable success of community and expert collaboration.
  Q. The priceless manuscripts and the ornate architecture of the old library were carefully protected during the restoration.
  R. The library soon regained global acclaim as an important cultural landmark.
  S. To ensure the restoration was accurate, local historians and conservationists worked together.

  A. R, Q, P, S

B. S, Q, P, R
C. R, S, P, Q
D. Q, S, P, R

Answer: D

Sol: **Explanation:** We must form a coherent paragraph with logical flow: protection measures and collaboration during restoration should come before the final result (global acclaim). Also, "To ensure the restoration was accurate" (S) naturally introduces the process, and the praise (P) comes after describing the careful work, followed by the final outcome (R).

Correct sequence (Option D): Q → S → P → R

- **Q** introduces what was protected during restoration, setting the context of restoration work.
- **S** explains how accuracy was ensured through collaboration—this supports the restoration process.
- **P** logically follows as appreciation/praise after describing careful protection and collaboration.
- **R** gives the final result: the library regained global acclaim, which is a concluding outcome.

Why other options are incorrect: They either start with the result (R) too early or place the praise (P) before establishing the restoration process clearly.

"So the correct answer is (d)"

Q.26 A rope is 12 meters long. If 3.75 meters are cut off, how much rope remains?

A. 8.0 m
B. 8.25 m
C. 8.5 m
D. 9.0 m

Answer: B

Sol: **Given:**
Total length of rope = 12 m
Length cut off = 3.75 m
Remaining rope:
12 - 3.75 = **8.25 m**
So, **8.25 m** rope remains.
Thus, correct option is (b).

Q.27 Complete the series:
(4, 6), (6, 12), (8, 18), ?, (12, 30)

A. 10, 24
B. 10, 20
C. 9, 22
D. 11, 26

Answer: A

Sol: **Given**: (4, 6), (6, 12), (8, 18), ?, (12, 30)
Logic: 1st number + 2 and 2nd number + 6 place.
For, 1st number
4 + 2 = 6, 6 + 2 = 8, 8 + 2 = **10**, 10 + 2 = 12
For, 2nd number
6 + 6 = 12, 12 + 6= 18, 18 + 6 = **24**, 24 + 6 = 30
So, the missing term is **(10, 24)**
Thus, correct option is (a).

Q.28 If: + → ×, - → ÷, × → +, ÷ → -
Evaluate: (10 + 2) × 5 - (9 ÷ 4)

A. 25
B. 22
C. 19
D. 21

Answer: D

Sol: Given: (10 + 2) × 5 - (9 ÷ 4)

Given Sign + - × ÷

New Sign × ÷ + -

Using **BODMAS** rule.

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

New equation: (10 × 2) + 5 ÷ (9 - 4) = ?

20 + 5 ÷ 5 = ?

20 + 1 = ?

? = **21**

Thus, correct option is (d).

Q.29 A train travels at a speed of 54 km/hr. How much distance will it cover in 40 minutes?

A. 30 km
B. 36 km
C. 40 km
D. 45 km

Answer: B

Sol: Given:

Speed = 54 km/hr

Time = 40 minutes = ($\frac{40}{60} = \frac{2}{3}$) hour

Distance covered:

Distance = Speed × Time

= 54 × $\frac{2}{3}$

= **36 km**

So, **36 km** distance will it cover in 40 minutes.

Thus, correct option is (b).

Q.30 **Statement**:

A factory reduced production due to declining demand.

Inference:

I. The factory is facing reduced sales.

II. Workers will permanently lose jobs.

III. Demand in the market has fallen.

A. Only I
B. Only III
C. Both I and III
D. I, II and III

Answer: C

Sol: Statement:

A factory reduced production due to declining demand.

Inference:

I. The factory is facing reduced sales.

If demand is declining, sales are likely reduced. This inference is reasonable.

II. Workers will permanently lose jobs.

This cannot be concluded. Reduction in production does not necessarily mean permanent job loss.

III. Demand in the market has fallen.
This is directly stated ("declining demand").
So, **both I and III** follows.
Thus, correct option is (c).

Q.31 If: + → -, - → ×, × → ÷, ÷ → +
Evaluate: **(18 - 6) × 4 + 8 ÷ 2**

A. 21
B. 22
C. 24
D. 26

Answer: A

Sol: **Given**: (18 - 6) × 4 + 8 ÷ 2

Given Sign+ - × ÷

New Sign - × ÷ +

Using **BODMAS** rule.

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

New equation: (18 × 6) ÷ 4 - 8 + 2 = ?
108 ÷ 4 - 8 + 2 = ?
27 - 8 + 2 = ?
29 - 8 = ?
? = **21**
Thus, correct option is (a).

Q.32 If the letters of CONVERSATION are arranged alphabetically, which letter is 5th to the right of the 6th letter from the left?

A. N
B. O
C. S
D. T

Answer: D

Sol: **Given**: CONVERSATION

Given Letters   C O N V E R S A T I O N

Alphabetical OrderA C E I N N O O R S T V

New letters: A, C, E, I, N, N, O, O, R, S, T, V
6th letter from the left: N
The 5th letter to the right of N
Counting 5 to the right from position 6:
1 → O (7)
2 → O (8)
3 → R (9)
4 → S (10)
5 → T (11)
So, **T** is 5th to the right of the 6th letter from the left.
Thus, correct option is (d).

Q.33 Find the next number:

3, 12, 60, 360, ?

A. 1800
B. 2160
C. 2520
D. 2880

Answer: C

Sol: **Given**: 3, 12, 60, 360, ?

Logic: Numbers are multiply by natural number from 4.

$3 \times 4 = 12$

$12 \times 5 = 60$

$60 \times 6 = 360$

$360 \times 7 = \mathbf{2520}$

So, the missing term is **2520**.

Thus, correct option is (c).

Q.34 In a code language: apple mango orange → ka, li, tu orange grape banana → tu, zo, pe apple banana lemon → ka, pe, si. How is grape written?

A. zo
B. tu
C. li
D. si

Answer: A

Sol: **Given**:

In a code language: apple mango orange → ka, li, tu orange grape banana → tu, zo, pe apple banana lemon → ka, pe, si.

apple mango orange → ka li tu

orange grape banana → tu zo pe

apple banana lemon → ka pe si

So, the code of **grape** is **zo**.

Thus, correct option is (a).

Q.35 Find the next number:

5, 7.5, 11.5, 17, ?

A. 21
B. 22.5
C. 23.5
D. 24

Answer: D

Sol: **Given**: 5, 7.5, 11.5, 17, ?

Logic: Differences are increasing by 1.5 each time.

$7.5 - 5 = 2.5$

$11.5 - 7.5 = 4$

$17 - 11.5 = 5.5$

The differences are:

2.5, 4, 5.5

Next difference: $5.5 + 1.5 = 7$

Next term = $17 + 7 = \mathbf{24}$

So, the missing term is **24**.

Thus, correct option is (d).

Q.36 Fill the blanks:

b _ d g a _ c _ _ a b c d g _

A. cabgd
B. cbdga
C. cadga
D. badgd

Answer: B

Sol: Given: b _ d g a _ c _ _ a b c d g _
Now, we check each options.
Option (a): cabgd
b **c** d g a / **a** c **b g** a / b c d g **d**
Option (b): cbdga
b **c** d g a / **b** c **d g** a / b c d g **a**
(It is logical pattern).
Option (c): cadga
b **c** d g a / **a** c **d g** a / b c d g **a**
Option (d): badgd
b **b** d g a / **a** c **d g** a / b c d g **d**
So, the following pattern is: **b c d g a**
Thus, correct option is (b).

Q.37 Engine : Car :: Keyboard : ?

A. Monitor
B. Computer
C. Printer
D. Internet

Answer: B

Sol: Given: Engine : Car :: Keyboard : ?
An **engine** is a part of a **car** and is used to operate it.
Similarly,
Keyboard : ?
A **keyboard** is a part of a **computer** and is used to operate it.
Thus, correct option is (b).

Q.38 6 : 216 :: 5 : ?

A. 100
B. 125
C. 150
D. 175

Answer: B

Sol: Given: 6 : 216 :: 5 : ?
Logic: 1st number^3= 2nd number
For, 6 : 216
6^3= 216
Similarly,
5 : ?
5^3= 125
So, 5 : **125**
Thus, correct option is (b).

Q.39 Find the odd one out.

A. 16
B. 49
C. 81
D. 72

Answer: D

Sol: Now, we check each options.

Option (a): $16 = 4^2$ (perfect square)

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

Option (c): $81 = 9^2$ (perfect square)

Option (d): 72 is not a perfect square

So, **72** is the odd one out because the other three numbers are perfect squares.

Thus, correct option is (d).

Q.40 Find the LCM of 8, 12 and 18.

A. 36

B. 48

C. 72

D. 144

Answer: C

Sol: **Given**: 8, 12, 18

$8 = 2^3$

$12 = 2^2 \times 3$

$18 = 2 \times 3^2$

Take the highest powers of each prime:

2^3 and 3^2

LCM $= 2^3 \times 3^2 = 8 \times 9 = $ **72**

Thus, correct option is (c).

Q.41 Find the wrong number in the series:

120, 99, 80, 65, 48, 35

A. 80

B. 65

C. 48

D. 35

Answer: B

Sol: **Given**: 120, 99, 80, 65, 48, 35

Logic: Numbers are perfect square of natural number in decreasing order from 11 and - 1 = Number

$11^2 - 1 = 121 - 1 = 120$

$10^2 - 1 = 100 - 1 = 99$

$9^2 - 1 = 81 - 1 = 80$

$8^2 - 1 = 64 - 1 = 63 \neq 65$

$7^2 - 1 = 49 - 1 = 48$

$6^2 - 1 = 36 - 1 = 35$

So, **65** is wrong term in the series.

Thus, correct option is (b).

Q.42 Complete the series:

xyzyxzyxyzx ?

A. yxzy

B. zyxz

C. yxyz

D. xyzy

Answer: D

Sol: **Given**: xyzyxzyxyzx ?

Now, we check each options.

Option (a): yxzy

xyzyx/zyxyz/x**yxzy**

Option (b): zyxz

xyzyx/zyxyz/x**zyxz**
Option (c): yxyz
xyzyx/zyxyz/x**yxyz**
Option (d): xyzy
xyzyx/zyxyz/x**xyzy**
(It is logical pattern)
Thus, correct option is (d).

Q.43 Find the next term:
A1, C4, E9, G16, I25, ?

A. K36
B. J36
C. K49
D. J49

Answer: A

Sol: **Given**: A1, C4, E9, G16, I25, ?

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

Logic: Letters are increasing + 2 and number is increasing perfect square of natural number.
For, letter
A + 2 = C, C + 2 = E, E + 2 = G, G + 2 = I, I + 2 = K
For, number
1^2 = 1, 2^2 = 4, 3^2 = 9, 4^2 = 16, 5^2 = 25, 6^2 = 36
So, the missing term is **K36**.
Thus, correct option is (a).

Q.44 Choose the odd one out.

A. Scanner
B. Mouse
C. Keyboard
D. Printer

Answer: D

Sol: **Scanner**, **Mouse** and **Keyboard** are input devices.
Printer is an output device.
So, **printer** is odd one out.
Thus, correct option is (d).

Q.45 Find the odd one out.

A. Assam
B. Odisha
C. Kerala
D. Japan

Answer: D

Sol: **Assam**, **Odisha** and **Kerala** are states of India.
Japan is a country, not a state of India.
So, **Japan** is odd one out.
Thus, correct option is (d).

Q.46 Find the missing term:

C, F, J, O, U, ?

A. B
B. A
C. C
D. D

Answer: A

Sol: Given: C, F, J, O, U, ?

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

Logic: Letters are increasing natural number from 3.
C + 3 = F
F + 4 = J
J + 5 = O
O + 6 = U
U + 7 = B
So, the missing term is **B**.
Thus, correct option is (a).

Q.47 Find the missing number in the series:
3, 15, 39, ?, 123

A. 105
B. 90
C. 75
D. 120

Answer: C

Sol: Information Given:
Series: 3, 15, 39, ?, 123

Logic:
Look at the difference between consecutive terms.

Explanation:
Logic: Differences increase by a fixed number.

Step-by-step:
15 − 3 = 12
39 − 15 = 24
? − 39 = 36
123 − ? = 48
Differences follow: +12, +24, +36, +48
So,
? = 39 + 36 = 75

Final Answer:
75

Final Correct Option:
C

Q.48 **Statements**:
1. All pens are tools.
2. Some tools are expensive.
Which must be true?

A. Some pens are expensive
B. All tools are pens
C. Some tools are pens
D. All expensive things are pens

Answer: C

Sol: Statements:
1. All pens are tools.
2. Some tools are expensive.
From the given statements possible Venn diagram will be.

Now, we check each options.
Option (a): Some pens are expensive.
False, there is no relation between pens and expensive.
Option (b): All tools are pens.
False, all pens are tools, so that means all tools are not pens.
Option (c): Some tools are pens.
True, all pens are tools, so that means some tools are pens.
Option (d): All expensive things are pens.
False, there is no relation between expensive and pens.
So, **Some tools are pens** is true.
Thus, correct option is (c).

Q.49 Find the next number in the series:
199, 499, 899, 1399, 1999, ?

A. 2699
B. 2599
C. 2899
D. 2999

Answer: A

Sol: Given: 199, 499, 899, 1399, 1999, ?
Logic: Differences increase by + 100 each time.
499 - 199 = 300
899 - 499 = 400
1399 - 899 = 500
1999 - 1399 = 600
Next difference = 700
Next term = 1999 + 700 = **2699**
So, the missing term is **2699**.
Thus, correct option is (a).

Q.50 A bike goes from city X to city Y at 45 km/hr and returns at 30 km/hr. What is the average speed for the whole journey?

A. 36 km/hr
B. 34 km/hr
C. 38 km/hr
D. 40 km/hr

Answer: A

Sol: Given:
Speed from X to Y = 45 km/hr
Speed from Y to X = 30 km/hr
For equal distances, average speed is the harmonic mean:
Average speed = $\dfrac{2ab}{a+b}$

$= \dfrac{2 \times 45 \times 30}{45 + 30}$

$= \dfrac{2700}{75}$

= **36 km/hr**
So, **36 km/hr** is the average speed for the whole journey.
Thus, correct option is (a).

Q.51 If x = √3 + √5, find the value of x³ − 3x.

A. 15√3 + 11√5
B. 6√3 + 8√5
C. 2√3 + 5√5
D. 4√3 + 6√5

Answer: A

Sol: **Given:**
$x = \sqrt{3} + \sqrt{5}$

Formula Used:
$(a+b)^3 = a^3 + b^3 + 3ab(a+b)$

Solution:
$x^3 - 3x = (\sqrt{3}+\sqrt{5})^3 - 3(\sqrt{3}+\sqrt{5})$
$(\sqrt{3}+\sqrt{5})^3 = (\sqrt{3})^3 + (\sqrt{5})^3 + 3\sqrt{3}\sqrt{5}(\sqrt{3}+\sqrt{5})$
$= 3\sqrt{3} + 5\sqrt{5} + 3\sqrt{15}(\sqrt{3}+\sqrt{5})$
$= 3\sqrt{3} + 5\sqrt{5} + 9\sqrt{5} + 15\sqrt{3}$
$= 18\sqrt{3} + 14\sqrt{5}$
$x^3 - 3x = (18\sqrt{3} + 14\sqrt{5}) - 3(\sqrt{3}+\sqrt{5})$
$= 15\sqrt{3} + 11\sqrt{5}$

Final Answer:
$x^3 - 3x = 15\sqrt{3} + 11\sqrt{5}$

Q.52 A set of 10 chairs, each marked at Rs. 500, is sold for Rs. 4200. What is the percentage discount allowed?

A. 14%
B. 15%
C. 16%
D. 18%

Answer: C

Sol: **Given:**
Number of chairs $= 10$
Marked price per chair $= 500$
Selling price of 10 chairs $= 4200$

Formula Used:
Discount $=$ MP $-$ SP
Discount % $= \dfrac{\text{Discount}}{\text{MP}} \times 100$

Solution:
Marked price of 10 chairs
$= 10 \times 500$
$= 5000$

Discount
$= 5000 - 4200$
$= 800$

Percentage discount
$= \dfrac{800}{5000} \times 100$
$= 16\%$

Final Answer:
Percentage discount allowed $= 16\%$

Q.53 A regular right pyramid with an equilateral triangular base of side 16 cm is fully immersed in a cylindrical tank of radius 8 cm. Initially, the water level in the tank is 20 cm. After immersion, the water level rises to 22.5 cm. Find the perpendicular height of the pyramid.

A. $\dfrac{5\pi\sqrt{3}}{2}$cm

B. $\dfrac{6\pi\sqrt{3}}{2}$ cm

C. $\dfrac{7\pi\sqrt{3}}{2}$ cm

D. $\dfrac{9\pi\sqrt{3}}{2}$ cm

Answer: A

Sol: **Given:**

Side of triangular base $= 16$

Radius of cylindrical tank $= 8$

Initial water level $= 20$

Final water level $= 22.5$

Formula Used:

Volume of cylinder $= \pi r^2 h$

Area of equilateral triangle $= \dfrac{\sqrt{3}}{4} a^2$

Volume of pyramid $= \dfrac{1}{3} \times$ Base area $\times$ Height

Solution:

Rise in water level $= 22.5 - 20 = 2.5$

Volume of water displaced $= \pi \times 8^2 \times 2.5 = 160\pi$

Area of triangular base $= \dfrac{\sqrt{3}}{4} \times 16^2 = 64\sqrt{3}$

Let height of pyramid $= h$

$\dfrac{1}{3} \times 64\sqrt{3} \times h = 160\pi$

$h = \dfrac{480\pi}{64\sqrt{3}} = \dfrac{15\pi}{2\sqrt{3}} = \dfrac{5\pi\sqrt{3}}{2}$

Final Answer:

Perpendicular height of the pyramid $= \dfrac{5\pi\sqrt{3}}{2}$ cm

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Q.54 A regular right pyramid has a square base of side 14 cm and a vertical height of 24 cm. Find the slant height and the total surface area of the pyramid (approximately).

A. 25.0 cm, 896 cm²

B. 26.3 cm, 1098 cm²

C. 24.2 cm, 980 cm²

D. 28.5 cm, 1125 cm²

Answer: A

Sol: **Given:**

Side of square base $= 14$

Vertical height of pyramid $= 24$

Concept Used:

Right square pyramid geometry

Formula Used:

$l = \sqrt{h^2 + \left(\dfrac{a}{2}\right)^2}$

Lateral surface area $= 2al$

Base area $= a^2$

Total surface area $=$ Lateral area $+$ Base area

Solution:

$\dfrac{a}{2} = \dfrac{14}{2} = 7$

$l = \sqrt{24^2 + 7^2}$

$= \sqrt{576 + 49}$

$= \sqrt{625}$

$= 25$

Lateral surface area $= 2 \times 14 \times 25 = 700$

Base area $= 14^2 = 196$

Total surface area $= 700 + 196 = 896$

Final Answer:

Slant height $= 25$ cm
Total surface area ≈ 896 cm^2

Q.55 The decimal representation of an irrational number is:

A. Terminating
B. Non-terminating and non-repeating
C. Repeating
D. Either terminating or repeating

Answer: B

Sol: Solution:
A terminating decimal represents a rational number.
A repeating decimal also represents a rational number.
An irrational number has a decimal expansion that is non-terminating and non-repeating.

Q.56 A trader purchased two electronic gadgets. He earned 20% profit on the first gadget and incurred 15% loss on the second gadget. The cost price of the first gadget was 50% more than that of the second. If the net gain on the transaction was Rs. 75, find the cost price of each gadget.

A. Rs. 800 and Rs. 520
B. Rs. 700 and Rs. 480
C. Rs. 750 and Rs. 500
D. Rs. 900 and Rs. 600

Answer: C

Sol: Given:
Profit on first gadget $= 20\%$
Loss on second gadget $= 15\%$
Cost price of first gadget is 50% more than second gadget
Net gain $= 75$

Formula Used:
$$\text{Profit} = \text{CP} \times \frac{\text{Profit \%}}{100}$$
$$\text{Loss} = \text{CP} \times \frac{\text{Loss \%}}{100}$$

Solution:
Let cost price of second gadget $= x$
Cost price of first gadget $= 1.5x$

Profit on first gadget
$= 20\%$ of $1.5x$
$= \frac{20}{100} \times 1.5x$
$= 0.3x$

Loss on second gadget
$= 15\%$ of x
$= \frac{15}{100} \times x$
$= 0.15x$

Net gain
$= 0.3x - 0.15x$
$= 0.15x$

$0.15x = 75$
$x = 500$

Final Answer:
Cost price of first gadget $= Rs.\,750$
Cost price of second gadget $= Rs.\,500$

Q.57 Two containers have mixtures of milk and water in the ratios 5 : 4 and 9 : 5 respectively. In what ratio should these mixtures be mixed to obtain a final mixture with milk and water in the ratio 7 : 5?

A. 2 : 3
B. 3 : 2
C. 15 : 7
D. 5 : 3

Answer: C

Sol: **Given:**
Milk : Water in first container $= 5 : 4$
Milk : Water in second container $= 9 : 5$
Required Milk : Water $= 7 : 5$

Concept Used:
Alligation (Mixture Rule)

Formula Used:
Required ratio $=$ (Higher $-$ Mean) : (Mean $-$ Lower)

Solution:
Milk fraction in first mixture $= \dfrac{5}{5+4} = \dfrac{5}{9}$
Milk fraction in second mixture $= \dfrac{9}{9+5} = \dfrac{9}{14}$
Required milk fraction $= \dfrac{7}{7+5} = \dfrac{7}{12}$

By alligation:
$\left(\dfrac{9}{14} - \dfrac{7}{12} \right) : \left(\dfrac{7}{12} - \dfrac{5}{9} \right)$
$= \left(\dfrac{54 - 49}{84} \right) : \left(\dfrac{21 - 20}{36} \right)$
$= \dfrac{5}{84} : \dfrac{1}{36}$
$= \dfrac{180}{84}$
$= 30 : 14$
$= 15 : 7$

Final Answer:
Required mixing ratio $= 15 : 7$

Q.58 If 4cos A + 2sec A = 4√2, where 0° < A < 90°, then find the value of angle A.

A. 30°
B. 45°
C. 60°
D. 15°

Answer: B

Sol: **Given:**
$4\cos A + 2\sec A = 4\sqrt{2}$
$0° < A < 90°$

Concept Used:
Trigonometric identities and simplification

Formula Used:
$\sec A = \dfrac{1}{\cos A}$

Solution:
Let $\cos A = x \Rightarrow \sec A = \dfrac{1}{x}$
$4x + \dfrac{2}{x} = 4\sqrt{2}$
Multiplying by x :
$4x^2 + 2 = 4\sqrt{2}\,x$
$4x^2 - 4\sqrt{2}\,x + 2 = 0$
$2x^2 - 2\sqrt{2}\,x + 1 = 0$
$(\sqrt{2}x - 1)^2 = 0$
$x = \dfrac{1}{\sqrt{2}}$

$$\cos A = \frac{1}{\sqrt{2}}$$
$$A = 45°$$

Final Answer:
$A = 45°$

Q.59 Which one of the following statements is INCORRECT?

    A. Every whole number is an integer
    B. Every integer can be represented on the number line
    C. Every rational number is an irrational number
    D. All integers are real numbers

Answer: C

Sol: Solution:
Option A: Every whole number (0,1,2,...) is an integer — True
Option B: Every integer can be represented on the number line — True
Option C: Every rational number is an irrational number — False, because rational and irrational numbers are distinct sets
Option D: All integers are real numbers — True

Q.60 A man and a boy together earn Rs. 960 as wages for 6 days of work. The efficiency of the man is three times that of the boy. What are the daily wages of the boy?

    A. Rs. 30
    B. Rs. 35
    C. Rs. 40
    D. Rs. 45

Answer: C

Sol: Given:
Total wages for 6 days $= 960$
Efficiency of man : efficiency of boy $= 3 : 1$

Formula Used:
Total wages $=$ (Man's daily wage $+$ Boy's daily wage) $\times$ Days

Solution:
Let efficiency of boy $= 1$
Efficiency of man $= 3$

Let daily wage of boy $= x$
Daily wage of man $= 3x$

Total daily wages $= 3x + x = 4x$

Total wages for 6 days $= 6 \times 4x = 24x$

$24x = 960$
$x = 40$

Final Answer:
Daily wages of the boy $= Rs.\,40$

Q.61 If 2sin²A + √3 cos A − 2 = 0, then find the value of tan A.

    A. √3
    B. 1/√3
    C. 1
    D. 0

Answer: B

Sol: Given:
$2\sin^2 A + \sqrt{3}\cos A - 2 = 0$

Concept Used:

Trigonometric identity and quadratic equation

Formula Used:
$\sin^2 A = 1 - \cos^2 A$
$\tan A = \dfrac{\sin A}{\cos A}$

Solution:
$2(1 - \cos^2 A) + \sqrt{3}\cos A - 2 = 0$
$2 - 2\cos^2 A + \sqrt{3}\cos A - 2 = 0$
$-2\cos^2 A + \sqrt{3}\cos A = 0$
$\cos A(-2\cos A + \sqrt{3}) = 0$
$\cos A = 0 \quad \text{or} \quad \cos A = \dfrac{\sqrt{3}}{2}$
$\cos A = \dfrac{\sqrt{3}}{2}$
$A = 30°$
$\tan A = \tan 30° = \dfrac{1}{\sqrt{3}}$

Final Answer:
$\tan A = \dfrac{1}{\sqrt{3}}$

Q.62 X, Y, and Z invest Rs. 24,000, Rs. 36,000, and Rs. 60,000 respectively in a business. If the total profit after one year is Rs. 60,000, what is Y's share of the profit?

A. Rs. 18,000
B. Rs. 20,000
C. Rs. 22,000
D. Rs. 24,000

Answer: A

Sol: **Given:**
Investment of X = 24000
Investment of Y = 36000
Investment of Z = 60000
Total profit = 60000
Concept Used:
Profit ∝ Investment (time same)
Formula Used:
Profit Share $= \dfrac{\text{Individual Investment}}{\text{Total Investment}} \times \text{Total Profit}$
Solution:
$X : Y : Z = 24000 : 36000 : 60000$
$= 2 : 3 : 5$
Total ratio $= 2 + 3 + 5 = 10$
Y's share $= \dfrac{3}{10} \times 60000 = 18000$
Final Answer:
18000

Q.63 The curved surface area of a right circular cylinder is equal to its volume. Which of the following conditions is true?

A. r = 2
B. h = 2r
C. r = 0
D. h = 3r

Answer: A

Sol: **Given:**
Curved surface area of a cylinder = Volume
Formula Used:
Curved Surface Area $= 2\pi r h$
Volume $= \pi r^2 h$
Solution:

$$2\pi rh = \pi r^2 h$$
$$\frac{2\pi rh}{\pi h} = \frac{\pi r^2 h}{\pi h}$$
$$2r = r^2$$
$$r^2 - 2r = 0$$
$$r(r - 2) = 0$$
$$r = 0 \text{ or } r = 2$$
Since $r \neq 0$,
$$r = 2$$
Final Answer:
Option A

Q.64 A circle is inscribed in a square whose side is 14 cm. Find the area of the portion of the square that lies outside the circle.

A. 42.0 cm²
B. 43.9 cm²
C. 47.8 cm²
D. 50.2 cm²

Answer: A

Sol: **Given:**
Side of square $= 14$
Concept Used:
Diameter of inscribed circle equals side of square
Formula Used:
Area of square $= a^2$
Area of circle $= \pi r^2$
Solution:
$$r = \frac{14}{2} = 7$$
Area of square $= 14^2 = 196$
Area of circle $= \frac{22}{7} \times 7^2 = 154$
Required area $= 196 - 154 = 42$
Final Answer:
42

Q.65 If a² + b² + c² = 180 and ab + bc − ca = 44, then find the value of (a − b + c)².

A. 68
B. 24
C. 56
D. 92

Answer: D

Sol: **Given:**
$$a^2 + b^2 + c^2 = 180$$
$$ab + bc - ca = 44$$
Formula Used:
$$(a - b + c)^2 = a^2 + b^2 + c^2 - 2ab + 2ac - 2bc$$
Solution:
$$(a - b + c)^2 = a^2 + b^2 + c^2 - 2(ab + bc - ca)$$
$$= 180 - 2(44)$$
$$= 180 - 88$$
$$= 92$$
Final Answer:
92

Q.66 A cone and a hemisphere have equal curved surface areas and the same radius r. Find the slant height of the cone.

A. l = r
B. l = 3r

C. l = 2r

D. l = 4r

Answer: C

Sol: **Given:**

Radius of cone and hemisphere $= r$

Curved surface areas are equal

Formula Used:

CSA of cone $= \pi r l$

CSA of hemisphere $= 2\pi r^2$

Solution:

$\pi r l = 2\pi r^2$

$\dfrac{\pi r l}{\pi r} = \dfrac{2\pi r^2}{\pi r}$

$l = 2r$

Final Answer:

$\boxed{l = 2r}$

Q.67 A certain sum is invested at compound interest, compounded annually. The interest earned in the first year is Rs. 1,800 and in the second year is Rs. 2,160. Find 50% of the principal amount.

A. Rs. 4,500

B. Rs. 6,000

C. Rs. 5,000

D. Rs. 7,000

Answer: A

Sol: **Given:**

Interest in first year $= 1800$

Interest in second year $= 2160$

Interest is compounded annually

Formula Used:

First year interest $= P \times \dfrac{R}{100}$

Second year interest $= P\left(1 + \dfrac{R}{100}\right) \times \dfrac{R}{100}$

Solution:

Let principal $= P$ and rate $= R\%$

$P \times \dfrac{R}{100} = 1800$ (1)

$P\left(1 + \dfrac{R}{100}\right) \times \dfrac{R}{100} = 2160$ (2)

Dividing (2) by (1):

$1 + \dfrac{R}{100} = \dfrac{2160}{1800}$

$1 + \dfrac{R}{100} = 1.2$

$\dfrac{R}{100} = 0.2$

$R = 20\%$

Substituting $R = 20\%$ in (1):

$P \times \dfrac{20}{100} = 1800$

$0.2P = 1800$

$P = 9000$

Required:

50% of $P = \dfrac{50}{100} \times 9000 = 4500$

Final Answer:

50% of the principal amount $= Rs.\,4500$

Q.68 A rectangular solid has a base diagonal of 13 cm and a height of 12 cm. If the area of its base is 54 cm², find the volume of the solid.

A. 612 cubic cm

B. 648 cubic cm
C. 720 cubic cm
D. 684 cubic cm

Answer: B

Sol: Given:
Base diagonal $= 13$
Height of solid $= 12$
Area of base $= 54$

Formula Used:
Volume $=$ Area of base $\times$ Height

Solution:
Volume $= 54 \times 12$
$= 648$

Final Answer:
Volume of the solid $= 648 \text{cm}^3$

Q.69 A painting was purchased for Rs. 12,500. It was marked at a price 32% higher than its cost price and then sold at a discount of 15% on the marked price. What was the percentage profit or loss in the transaction?

A. 10% Profit
B. 12.2 % Profit
C. 8.8% Loss
D. 6% Profit

Answer: B

Sol: Given:
Cost price $= 12500$
Marked price is 32% above cost price
Discount $= 15\%$

Formula Used:
$$\text{MP} = \text{CP}\left(1 + \frac{\text{Mark-up }\%}{100}\right)$$
$$\text{SP} = \text{MP}\left(1 - \frac{\text{Discount }\%}{100}\right)$$
$$\text{Profit }\% = \frac{\text{Profit}}{\text{CP}} \times 100$$

Solution:
Marked price $= 12500 \times \left(1 + \dfrac{32}{100}\right) = 12500 \times 1.32 = 16500$

Selling price $= 16500 \times \left(1 - \dfrac{15}{100}\right) = 16500 \times 0.85 = 14025$

Profit $= 14025 - 12500 = 1525$

Profit percentage $= \dfrac{1525}{12500} \times 100 = 12.2\%$

Final Answer:
Profit $= 12.2\%$

Q.70 In a competitive examination, 55% of the candidates qualified in Reasoning, 65% qualified in Quantitative Aptitude, and 40% qualified in both subjects. What percentage of candidates qualified in at least one of the two subjects?

A. 80%
B. 75%
C. 85%
D. 90%

Answer: A

Sol: Given:
Qualified in Reasoning $= 55\%$
Qualified in Quantitative Aptitude $= 65\%$
Qualified in both subjects $= 40\%$

]**Formula Used:**

At least one $= A + B - (A \cap B)$

Solution:

Percentage qualified in at least one subject

$= 55 + 65 - 40$

$= 80$

Final Answer:

Percentage qualified in at least one subject $= 80\%$

Q.71 A student scored 25% higher marks in English than in History. If the average marks obtained in the two subjects is 90, what are his marks in History?

A. 56

B. 80

C. 64

D. 72

Answer: B

Sol: **Given:**

English marks are 25% higher than History marks

Average marks $= 90$

Formula Used:

$\text{Average} = \dfrac{\text{Sum of marks}}{2}$

$\text{Increased value} = \text{Original value} \left(1 + \dfrac{25}{100}\right)$

Solution:

Let History marks $= x$

English marks $= 1.25x$

$\dfrac{x + 1.25x}{2} = 90$

$\dfrac{2.25x}{2} = 90$

$2.25x = 180$

$x = 80$

Final Answer:

Marks in History $= 80$

Q.72 P and Q invested Rs. 40,000 and Rs. 60,000 respectively in a business. After 4 months, R joined them with an investment of Rs. 80,000. What will be the ratio of their profits at the end of one year?

A. 4 : 6 : 5

B. 5 : 6 : 8

C. 6 : 9 : 8

D. 3 : 4 : 4

Answer: C

Sol: **Given:**

Investment of P $= 40000$

Investment of Q $= 60000$

Investment of R $= 80000$

Total time $= 12$ months

R joins after $= 4$ months

Concept Used:

Profit $\propto$ Capital $\times$ Time

Solution:

Time invested by P $= 12$

Time invested by Q $= 12$

Time invested by R $= 12 - 4 = 8$

$P : Q : R = (40000 \times 12) : (60000 \times 12) : (80000 \times 8)$

$= 480000 : 720000 : 640000$

$= 6 : 9 : 8$

Final Answer:
6 : 9 : 8

Q.73 The average score of 20 students in a class test was calculated as 64.5. Later, it was discovered that the marks of one student were mistakenly recorded as 55 instead of 75. What is the correct average score of the class after correction?

A. 65.3
B. 65.5
C. 66.0
D. 64.8

Answer: B

Sol: Given:
Number of students $= 20$
Incorrect average $= 64.5$
Wrongly recorded marks $= 55$
Correct marks $= 75$

Formula Used:
Total $=$ Average $\times$ Number of students
Correct total $=$ Wrong total $-$ Wrong marks $+$ Correct marks
Correct average $= \dfrac{\text{Correct total}}{\text{Number of students}}$

Solution:
Wrong total marks $= 64.5 \times 20 = 1290$

Correction in marks $= 75 - 55 = 20$

Correct total marks $= 1290 + 20 = 1310$

Correct average $= \dfrac{1310}{20} = 65.5$

Final Answer:
Correct average score $= 65.5$

Q.74 A solid cube is cut into two equal cuboids by a plane passing through its mid-height. By what percentage does the total surface area increase?

A. 25%
B. 33.33%
C. 50%
D. 66.66%

Answer: B

Sol: **Given:**
A cube is cut into two equal cuboids at mid-height

Concept Used:
Change in total surface area after cutting a solid

Formula Used:
Total surface area of cube $= 6a^2$
$$\text{Percentage increase} = \frac{\text{Increase in TSA}}{\text{Original TSA}} \times 100$$

Solution:
Let side of cube $= a$

Original TSA $= 6a^2$

After cutting, two new faces are formed
Area of each new face $= a^2$

Increase in TSA $= 2a^2$

$$\text{Percentage increase} = \frac{2a^2}{6a^2} \times 100$$
$$= \frac{1}{3} \times 100$$
$$= 33\frac{1}{3}\%$$

Final Answer:
Increase in total surface area $= 33\frac{1}{3}\%$

Q.75 A shopkeeper buys 40 bags of rice at Rs. 600 per bag. He sells 25 bags at a profit of 12% and the remaining bags at a loss of 8%. Find the overall percentage profit or loss.

A. 4.5% Profit
B. 5% Loss
C. 6% Profit
D. 8% Profit

Answer: A

Sol: **Given:**
Number of bags $= 40$
Cost price per bag $= 600$
Bags sold at profit $= 25$
Profit percentage $= 12\%$
Remaining bags $= 15$
Loss percentage $= 8\%$

Concept Used:
Overall Profit or Loss

Formula Used:
$$\text{Profit} = \text{CP} \times \frac{\text{Profit \%}}{100}$$
$$\text{Loss} = \text{CP} \times \frac{\text{Loss \%}}{100}$$
$$\text{Overall \%} = \frac{\text{Net Profit or Loss}}{\text{Total CP}} \times 100$$

Solution:
Total cost price $= 40 \times 600 = 24000$

Cost price of 25 bags $= 25 \times 600 = 15000$

Profit on 25 bags $= 12\%$ of $15000 = \frac{12}{100} \times 15000 = 1800$

Cost price of 15 bags $= 15 \times 600 = 9000$

Loss on 15 bags $= 8\%$ of $9000 = \frac{8}{100} \times 9000 = 720$

Net profit $= 1800 - 720 = 1080$

Overall profit percentage $= \frac{1080}{24000} \times 100 = 4.5\%$

Q.76 The Rabari pastoral community is mainly associated with which region?

A. Western Ghats
B. Thar Desert
C. Eastern Himalayas
D. Deccan Plateau

Answer: B

Sol: The correct answer is **(b) Thar Desert**

Explaination:

· The Rabari (also known as Rewari or Raika) is a semi-nomadic pastoral community primarily found in the **Thar Desert** regions of Rajasthan and Gujarat.

· They are traditionally camel and sheep herders who migrate seasonally in search of grazing lands.

· Their lifestyle is deeply intertwined with the arid ecosystem of North-Western India.

Information Booster:

· The Rabaris are famous for their unique **Rabari embroidery**, which features mirrors and bold geometric patterns, and is highly valued in Indian handicrafts.

· In Rajasthan, they are often referred to as 'Gopalaks' or 'Raika' and are considered the traditional guardians of camels.

Additional Knowledge:

· **(a) Western Ghats:** Home to pastoralists like the **Dhangars** of Maharashtra and the **Todas** of the Nilgiris.

· **(c) Eastern Himalayas:** Associated with high-altitude nomadic groups like the **Bhutias** or the **Monpas**.

· **(d) Deccan Plateau:** Inhabited by pastoral groups like the **Kurubas** (Karnataka) and **Gollas** (Andhra Pradesh/Telangana).

Q.77 Which of the following is NOT a member of BRICS?

A. Brazil
B. Russia
C. Mexico
D. China

Answer: C

Sol: The correct answer is **(c) Mexico**

Explaination:

· Mexico is not a member of the BRICS bloc.

· The original BRIC was formed in 2006, and with the addition of South Africa in 2010, it became **BRICS**.

· As of early 2024, the group expanded to include new members (BRICS+), but Mexico has not joined the alliance.

Information Booster:

· On January 1, 2024, BRICS officially welcomed five new members: **Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates (UAE)**.

· The group was originally conceived to represent the world's leading emerging economies and challenge the dominance of G7 nations.

Additional Knowledge:

· **(a) Brazil:** A founding member, representing the largest economy in South America.

· **(b) Russia:** A founding member and the host of the first BRIC summit in 2009.

· **(d) China:** A founding member and the largest economy within the group.

Q.78 The 2026 Commonwealth Games will be hosted by which country?

A. Canada
B. Australia
C. England
D. New Zealand

Answer: B

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

Explaination:

· The 2026 Commonwealth Games were originally awarded to the state of Victoria in **Australia**.

· Despite some logistical and funding debates in the preceding years, Australia remains the primary host nation associated with the 2026 cycle.

· This marks another chapter in Australia's long history of hosting the games, following the successful 2018 Gold Coast edition.

Information Booster:

· The Commonwealth Games is a quadrennial international multi-sport event involving athletes from the Commonwealth of Nations.

· The first-ever British Empire Games (now Commonwealth Games) were held in 1930 in Hamilton, Canada.

Note : After **Australia's withdrawal**, the **2026 Commonwealth Games** will be held from **23 July to 2 August 2026** in **Glasgow, Scotland**, with athletes from **Commonwealth countries** competing in multiple sports

Additional Knowledge:

· **(a) Canada:** Hosted the first games in 1930 and most recently in 1994 (Victoria).

· **(c) England:** Hosted the highly successful 2022 edition in Birmingham.

· **(d) New Zealand:** A frequent host, with the last games held there in 1990 (Auckland).

Q.79 Pentathlon is associated with which sporting category?

A. Aquatic sports
B. Combat sports
C. Multi-event athletics
D. Gymnastics

Answer: C

Sol: **Correct Answer:** (c) Multi-event athletics
Explanation:
· A **Pentathlon** is a contest featuring **five different events**. In modern sports, it usually refers to the **Modern Pentathlon**, which includes fencing, freestyle swimming, equestrian show jumping, pistol shooting, and cross-country running.
· The term originates from the ancient Greek Olympic Games, where it consisted of long jump, javelin throw, discus throw, foot race, and wrestling.
· It is designed to test the overall versatility and endurance of an athlete rather than specialization in a single discipline.
Information Booster:
· In women's indoor track and field, the Pentathlon specifically consists of 60m hurdles, high jump, shot put, long jump, and 800m run.
· The winner is decided by a points system based on performance in each of the five segments.
Additional Knowledge:
· **(a) Aquatic sports:** While swimming is a part of the modern pentathlon, the category itself focuses solely on water-based events like diving and water polo.
· **(b) Combat sports:** Includes boxing, wrestling, and judo; though fencing/wrestling have been parts of pentathlons, they don't define the category.
· **(d) Gymnastics:** Focuses on events like vault, uneven bars, and floor exercises, which are not part of a standard pentathlon.

Q.80 As of 2025, which Indian state has the maximum Ramsar sites?

A. Odisha
B. Gujarat
C. Tamil Nadu
D. West Bengal

Answer: C

Sol: **Correct Answer:** (c) Tamil Nadu
Explanation:
· As of 2025, **Tamil Nadu** leads India with the highest number of **Ramsar sites** (wetlands of international importance), currently totaling **18**.
· The state has seen a rapid increase in designations due to proactive conservation efforts and the identification of vital coastal and inland wetlands.
· Notable sites in the state include the Pallikaranai Marsh Reserve Forest, Karikili Bird Sanctuary, and the Gulf of Mannar Biosphere Reserve.
Information Booster:
· **Uttar Pradesh** holds the second position with 10 Ramsar sites.
· The **Ramsar Convention** is an international treaty for the conservation and sustainable use of wetlands, signed in 1971 in Ramsar, Iran.
Additional Knowledge:
· **(a) Odisha:** Home to the first Ramsar site in India (Chilika Lake), but has fewer total sites than Tamil Nadu.
· **(b) Gujarat:** Has significant sites like Nalsarovar and Thol, but trails in the total count.
· **(d) West Bengal:** Known for the Sundarbans (the largest Ramsar site in India), but the total number of distinct sites is lower.

Q.81 'Hornbill Festival' is celebrated in which state?

A. Manipur
B. Mizoram
C. Nagaland
D. Arunachal Pradesh

Answer: C

Sol: The correct answer is **(c) Nagaland**
Explaination:
· The **Hornbill Festival** is celebrated annually from December 1st to 10th in **Nagaland**, Northeast India.
· It is often called the "Festival of Festivals" and is held at the Naga Heritage Village, Kisama (near Kohima).
· The festival aims to protect and revive the rich culture of Nagaland and display its traditional extravaganzas.
Information Booster:

· The festival is named after the **Indian Hornbill**, a bird that is deeply respected and featured in the folklore of most of the state's tribes.

· It brings together all 17 major tribes of Nagaland to showcase their unique dances, food, and handicrafts.

Additional Knowledge:

· **(a) Manipur:** Famous for the **Sangai Festival**, named after the state's brow-antlered deer.

· **(b) Mizoram:** Known for the **Chapchar Kut** festival, celebrated after the completion of Jhum cultivation.

· **(d) Arunachal Pradesh:** Celebrates festivals like **Losar** (Monpa tribe) and **Solung** (Adi tribe).

Q.82 The National Youth Festival 2025 was held in which city?

A. Jaipur
B. Varanasi
C. New Delhi
D. Indore

Answer: C

Sol: The correct answer is **(c) New Delhi**

Explanation:

- The **National Youth Festival 2025** was held from **January 11 to 12, 2025**, at the iconic **Bharat Mandapam** in **New Delhi**.

- For 2025, the festival was reimagined as the **"Viksit Bharat Young Leaders Dialogue"**, representing a significant shift from the conventional format of previous years.

- The event was formally inaugurated by the Union Minister for Youth Affairs and Sports, **Dr. Mansukh Mandaviya**, on January 11.

- A total of **3,000 young leaders** were selected from a nationwide pool through a merit-based process to engage directly with the Prime Minister.

- The core objective was to empower youth to share their vision for a **"Developed India" (Viksit Bharat)** with top decision-makers.

Information Booster:

- **National Youth Day:** Celebrated annually on **January 12** to commemorate the birth anniversary of **Swami Vivekananda**.

- **Viksit Bharat Vision:** Participants made presentations to Prime Minister Narendra Modi on key sectors like **Technology, Sustainability, Manufacturing, and Agriculture**.

- **Selection Process:** Over **30 lakh youth** across India participated in various qualifying rounds through the **MyBharat** platform before the final 3,000 were selected for the festival.

Additional Knowledge:

- **Jaipur (Option A):** While Jaipur is a frequent host of cultural events (like the Jaipur Literature Festival), it was not the venue for the 2025 Youth Festival.

- **Varanasi (Option B):** Varanasi hosted the **Kashi Tamil Sangamam**, but the 2025 National Youth Festival was centralized at the national capital to facilitate the "Young Leaders Dialogue."

- **Indore (Option D):** Indore was the host city for the **17th Pravasi Bharatiya Divas** in 2023, known for its status as India's cleanest city.

Q.83 Women's boxing was introduced in the Olympics in which year?

A. 2000
B. 2004
C. 2008
D. 2012

Answer: D

Sol: The correct answer is **(d) 2012**.

Explaination:

· Women's boxing made its official Olympic debut at the **2012 London Games**.

· It was the only sport in the Olympic program that did not have a female equivalent until that year.

· Initially, it featured three weight categories: Flyweight (51kg), Lightweight (60kg), and Middleweight (75kg).

Information Booster:

· **First Gold Medalist:** Nicola Adams of Great Britain became the first-ever female Olympic boxing champion by winning the flyweight gold.

· **Indian Success:** Legendary Indian boxer **Mary Kom** won a bronze medal in the flyweight category at the 2012 London Olympics.

· **Expansion:** The number of weight categories for women was increased to five for the 2020 Tokyo Olympics and further expanded for Paris 2024 to promote gender parity.

Additional Knowledge:

· **2000 (Sydney):** This year saw the introduction of women's **weightlifting** and **water polo** into the Olympic program.

· **2004 (Athens):** Women's **freestyle wrestling** was introduced for the first time during these games.

· **2008 (Beijing):** Significant additions included **BMX cycling** and the **10km marathon swimming** event, but not women's boxing.

Q.84 The Sikh Empire reached its greatest extent under which ruler?

A. Banda Bahadur

B. Ranjit Singh

C. Dalip Singh

D. Hari Singh Nalwa

Answer: B

Sol: The correct answer is **(b) Ranjit Singh**

Explanation:

· **Maharaja Ranjit Singh**, known as the "Lion of Punjab," founded the Sikh Empire and ruled it from 1799 to 1839.

· Under his leadership, the empire extended from the Khyber Pass in the west to western Tibet in the east, and from Kashmir in the north to Mithankot in the south.

· He modernized the Sikh army (Khalsa Army) with the help of European officers, making it one of the most powerful military forces in Asia at the time.

Information Booster:

· Ranjit Singh captured **Lahore** in 1799 and made it his capital, while Amritsar remained the spiritual capital.

· He was famous for his secular administration and for acquiring the world-famous **Koh-i-Noor diamond** from Shah Shuja of Afghanistan.

Additional Knowledge:

· **(a) Banda Bahadur:** A Sikh warrior who led the rebellion against the Mughals after Guru Gobind Singh; he established the first Sikh state but did not form an expansive empire.

· **(c) Dalip Singh:** The last Maharaja of the Sikh Empire; he was a minor when the British annexed Punjab in 1849.

· **(d) Hari Singh Nalwa:** The Commander-in-Chief of the Sikh Khalsa Army and a legendary general under Ranjit Singh, famous for his conquests in the North-West

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Q.85 Who was the first recipient of the Dadasaheb Phalke Award?

A. Satyajit Ray

B. Devika Rani

C. Prithviraj Kapoor

D. B.N. Sircar

Answer: B

Sol: The correct answer is **(b) Devika Rani**

Explaination:

· Devika Rani, often called the "First Lady of Indian Cinema," was the first recipient of the Dadasaheb Phalke Award in **1969**.

· She was a legendary actress and co-founder of the famous studio **Bombay Talkies**.

· The award was introduced by the Government of India to commemorate the contribution of Dadasaheb Phalke, the father of Indian cinema.

Information Booster:

· The Dadasaheb Phalke Award is India's highest award in the field of cinema, presented annually at the National Film Awards ceremony.

· Recent recipients include Waheeda Rehman (2021) and Mithun Chakraborty (2022, awarded in 2024).

Additional Knowledge:

· **(a) Satyajit Ray:** The world-renowned filmmaker received the award in 1984.

· **(c) Prithviraj Kapoor:** He was awarded posthumously in 1971.

· **(d) B.N. Sircar:** The founder of New Theatres in Calcutta, he received the award in 1970.

Q.86 'Mitra Shakti' is a joint military exercise between India and which country?

A. Sri Lanka
B. Nepal
C. Japan
D. France

Answer: A

Sol: The correct answer is **(a) Sri Lanka**

Explaination:

· **Mitra Shakti** is an annual joint military exercise conducted between the Indian Army and the **Sri Lankan Army**.
· The primary objective is to enhance interoperability and cooperation in counter-insurgency and counter-terrorism operations.
· It also focuses on humanitarian assistance and disaster relief (HADR) operations.

Information Booster:

· Apart from 'Mitra Shakti' (Army), India and Sri Lanka also conduct a joint naval exercise called **SLINEX**.
· These exercises are crucial for regional security in the Indian Ocean under India's 'Neighborhood First' policy.

Additional Knowledge:

· **(b) Nepal:** Conducts the joint military exercise **Surya Kiran** with India.
· **(c) Japan:** Participates in exercises like **Dharma Guardian** (Army), JIMEX (Navy), and Veer Guardian (Air Force) with India.
· **(d) France:** Conducts **Shakti** (Army), Varuna (Navy), and Garuda (Air Force) exercises with India.

Q.87 Who among the following was called the 'Grand Old Man of India'?

A. Dadabhai Naoroji
B. Gopal Krishna Gokhale
C. Lala Lajpat Rai
D. Surendranath Banerjee

Answer: A

Sol: The correct answer is **(a) Dadabhai Naoroji**

Explaination:

· Dadabhai Naoroji is known as the **'Grand Old Man of India'** for his lifelong contribution to the Indian national movement.
· He was the first Indian to be elected to the **British House of Commons** (1892).
· He was a founding member of the Indian National Congress and served as its President three times (1886, 1893, 1906).

Information Booster:

· He authored the famous book *Poverty and Un-British Rule in India*, where he proposed the **'Drain Theory'**.
· The Drain Theory argued that Britain was systematically draining India's wealth, leading to widespread poverty and famines.

Additional Knowledge:

· **(b) Gopal Krishna Gokhale:** Known as the political mentor of Mahatma Gandhi and founder of the 'Servants of India Society'.
· **(c) Lala Lajpat Rai:** Known as 'Punjab Kesari' and a prominent leader of the Extremist faction (Lal-Bal-Pal).
· **(d) Surendranath Banerjee:** Often called the 'Indian Burke', he founded the Indian National Association and was a key Moderate leader.

Q.88 The earliest rock-cut caves in India belong to which period?

A. Mauryan
B. Gupta
C. Kushana
D. Pallava

Answer: A

Sol: The correct answer is **(a) Mauryan**

Explaination:

· The earliest examples of rock-cut architecture in India date back to the **Mauryan period** (3rd Century BCE).

· The **Barabar Caves** and Nagarjuni Caves in Bihar, built during the reign of Emperor Ashoka and his grandson Dasharatha, are the oldest surviving rock-cut caves.

· These caves were primarily dedicated to the Ajivika sect.

Information Booster:

· Mauryan caves are characterized by a unique "Mauryan Polish" on the inner walls, which gives them a glass-like mirror finish.

· This tradition of rock-cut architecture later evolved into the magnificent Ajanta and Ellora caves in Western India.

Additional Knowledge:

· **(b) Gupta:** Known for the Udayagiri Caves (Madhya Pradesh) and the peak of the Ajanta cave paintings.

· **(c) Kushana:** Focused more on Gandhara and Mathura schools of art (statues) rather than extensive rock-cut cave complexes.

· **(d) Pallava:** Famous for the rock-cut "Rathas" and shore temples at Mahabalipuram (7th–8th Century CE).

Q.89 In October 2024, who was appointed as India's Ambassador to Japan?

A. Sanjay Verma

B. Sibi George

C. Rahul Shrivastava

D. Vikram Doraiswami

Answer: A

Sol: The correct answer is **(a) Sanjay Verma**

Explaination:

· **Sanjay Verma**, a 1990-batch Indian Foreign Service (IFS) officer, was appointed as India's Ambassador to Japan in October 2024.

· Before this, he served as the High Commissioner of India to Canada.

· Japan is a key strategic partner for India, especially within the **QUAD** framework and for major infrastructure projects like the Bullet Train.

Information Booster:

· In diplomatic terms, an **Ambassador** is a representative sent to a Republic (like Japan), while a **High Commissioner** is sent to a fellow Commonwealth nation (like Canada).

· India-Japan relations were elevated to a "Special Strategic and Global Partnership" in 2014.

Additional Knowledge:

· **(b) Sibi George:** He served as the Ambassador to Japan prior to the current transitions.

· **(c) Rahul Shrivastava:** An IFS officer who has served as the Ambassador to Romania and Albania.

· **(d) Vikram Doraiswami:** Currently serving as the High Commissioner of India to the United Kingdom.

Q.90 Which of the following games is played on ice?

A. Polo

B. Curling

C. Squash

D. Kabaddi

Answer: B

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

Explaination:

· **Curling** is a winter sport played on an ice rink, where players slide polished heavy granite stones toward a circular target called the "house."

· It is often nicknamed "Chess on Ice" because of the complex strategy involved in placing stones and sweeping the ice to control their path.

· It is a major event in the Winter Olympic Games.

Information Booster:

· Other popular ice-based sports include **Ice Hockey**, **Figure Skating**, and **Speed Skating**.

· India made its debut in the Winter Olympics in 1964; the first Indian to participate was Jeremy Bujakowski.

Additional Knowledge:

· **(a) Polo:** Traditionally played on horseback on a grass field; however, "Snow Polo" is a variant played on compacted snow (not purely ice).

· **(c) Squash:** A racket-and-ball sport played in a four-walled indoor court (usually wooden flooring).

· **(d) Kabaddi:** A contact team sport traditionally played on rectangular clay/mud courts or indoor mats.

Q.91 Which reform was introduced in 1991 to attract foreign investment?

A. Nationalisation

B. Disinvestment

C. Industrial delicensing

D. Import substitution

Answer: C

Sol: The correct answer is **(c) Industrial delicensing**

Explanation:

· As part of the **1991 New Economic Policy (NEP)**, the government abolished industrial licensing for most industries, except for a short list related to security, strategic, or environmental concerns.

· This move was designed to reduce the "License-Permit Raj," allowing private and foreign investors to set up industries without burdensome bureaucratic approvals.

· Along with delicensing, the government allowed **Foreign Direct Investment (FDI)** and scrapped the MRTP (Monopolies and Restrictive Trade Practices) Act to encourage competition.

Information Booster:

· The 1991 reforms are famously known as the **LPG (Liberalisation, Privatisation, and Globalisation)** model.

· These reforms were introduced by the P.V. Narasimha Rao government, with Dr. Manmohan Singh as the Finance Minister, to address a severe Balance of Payments (BoP) crisis.

Additional Knowledge:

· **(a) Nationalisation:** The process of the government taking over private industries (e.g., Banks in 1969); this was the opposite of the 1991 goal.

· **(b) Disinvestment:** The sale of government-owned shares in Public Sector Undertakings (PSUs). While part of the 1991 policy, delicensing was the primary *reform* that opened the door for new foreign investment.

· **(d) Import substitution:** An inward-looking policy practiced before 1991 that discouraged foreign trade to protect local industries.

Q.92 Under Union Budget 2025–26, which sector received the highest capital outlay?

A. Defence
B. Railways
C. Health
D. Education

Answer: A

Sol: The correct answer is **(a) Defence**

Explanation:

· In the Union Budget 2025–26, the **Ministry of Defence** continued to receive the highest allocation among all ministries to strengthen national security.

· A significant portion of this budget is dedicated to **Capital Outlay** for the modernization of the Armed Forces and the indigenous manufacture of weapons (Atmanirbhar Bharat).

· This is followed closely by the Ministry of Road Transport and Highways and the Ministry of Railways.

Information Booster:

· The total budget for Defence in 2025-26 saw an increase of approximately 5-7% over the previous year to counter regional security challenges.

· The "Capital Outlay" specifically refers to money spent on buying new hardware like fighter jets, submarines, and missile systems.

Additional Knowledge:

· **(b) Railways:** Received a massive outlay (over ₹2.5 lakh crore) for the development of Vande Bharat trains and track electrification.

· **(c) Health:** Budget focuses on the 'Mission Indradhanush' and expanding AIIMS-like institutions.

· **(d) Education:** Focused on the implementation of NEP 2020 and the expansion of the PM SHRI scheme.

Q.93 Which document presents the government's borrowing requirements?

A. Economic Survey
B. Annual Financial Statement
C. Finance Bill
D. Demands for Grants

Answer: B

Sol: The correct answer is **(b) Annual Financial Statement**

Explanation:

· The **Annual Financial Statement (AFS)**, commonly known as the **Union Budget**, is mandated under **Article 112** of the Indian Constitution.

· It presents the government's estimated receipts (including borrowings) and expenditures for a specific financial year.

· The difference between total expenditure and total non-debt receipts represents the **Fiscal Deficit**, which is the total borrowing requirement of the government.

Information Booster:

· The budget is divided into two parts: the **Revenue Budget** (recurring income/expenses) and the **Capital Budget** (assets and liabilities, including loans).

· The **Fiscal Responsibility and Budget Management (FRBM) Act** sets targets for the government to reduce these borrowing requirements over time.

Additional Knowledge:

· **(a) Economic Survey:** A document presented by the Ministry of Finance a day before the Budget, reviewing the performance of the economy over

the past year.

· **(b) Finance Bill:** A part of the budget that proposes changes in the tax structure.

· **(d) Demands for Grants:** These are individual requests from various ministries for the funds they need to operate.

Q.94 Why are polar satellites useful for earth observation?

A. They remain stationary

B. They cover entire earth over time

C. They move faster than light

D. They rotate east–west

Answer: B

Sol: The correct answer is **(b) They cover entire earth over time**

Explaination:

· Polar satellites orbit the Earth in a **north-south** direction, passing over the North and South Poles.

· As the satellite moves vertically, the Earth rotates **west-to-east** underneath it.

· This combination allows the satellite to eventually scan and observe every strip of the Earth's surface over several orbits, making it ideal for mapping and environmental monitoring.

Information Booster:

· Polar satellites are placed at a much lower altitude (usually 500–800 km) compared to communication satellites.

· India's **PSLV** (Polar Satellite Launch Vehicle) is specifically designed to place these remote sensing satellites into Sun-synchronous polar orbits.

Additional Knowledge:

· **(a) Stationary:** This describes **Geostationary satellites**, which stay over one fixed spot (used for TV/Weather).

· **(c) Faster than light:** Physically impossible according to the laws of physics.

· **(d) Rotate east–west:** Most satellites orbit in the direction of Earth's rotation to save fuel, but "polar" specifically refers to the north-south inclination.

Q.95 'PM SHRI' scheme is related to which sector?

A. Health

B. Education

C. Agriculture

D. Housing

Answer: B

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

Explaination:

· **PM SHRI** (Pradhan Mantri Schools for Rising India) is a centrally sponsored scheme launched to upgrade and develop more than 14,500 schools across India.

· These schools aim to showcase the implementation of the **National Education Policy (NEP) 2020**.

· The focus is on cognitive development and creating holistic, well-rounded individuals equipped with 21st-century skills.

Information Booster:

· The scheme was approved for a period of five years (2022-23 to 2026-27).

· PM SHRI schools are designed as "Green Schools," incorporating solar panels, LED lights, and water conservation systems.

Additional Knowledge:

· **(a) Health:** Major schemes include **Ayushman Bharat** (PM-JAY) and the National Health Mission.

· **(c) Agriculture:** Key schemes include **PM-KISAN**, PM Fasal Bima Yojana, and the PM Krishi Sinchai Yojana.

· **(d) Housing:** Governed by **PM Awas Yojana** (Urban and Gramin).

Q.96 If a body weighs 24 N on Earth, its weight on Moon will be:

A. 2 N

B. 4 N

C. 6 N

D. 12 N

Answer: B

Sol: The correct answer is **(b) 4 N**

Explaination:

· The weight of an object depends on the gravitational pull of the celestial body it is on.

· The Moon's gravity is approximately **1/6th** of the Earth's gravity ($g_m = \frac{1}{6} g_e$).

· Therefore, the weight on the Moon is calculated as: $W_{moon} = \dfrac{W_{earth}}{6}$.

· Calculation: $\dfrac{24 \text{ N}}{6} = 4 \text{ N}$.

Information Booster:

· While **Weight** changes depending on gravity, **Mass** remains constant everywhere in the universe.

· Weight is a force (W = $m \times g$) and is measured in Newtons (N), while mass is measured in Kilograms (kg).

Q.97 The capital of Magadha during the Nanda period was:

A. Rajgir
B. Vaishali
C. Pataliputra
D. Taxila

Answer: C

Sol: The correct answer is **(c) Pataliputra**

Explaination:

· **Pataliputra** (modern-day Patna) served as the capital of the Magadha Empire during the Nanda Dynasty (c. 345–322 BCE).

· The city was strategically located at the confluence of the Ganga and Son rivers, providing both defensive advantages and trade routes.

· It was under the Nanda rulers (like Mahapadma Nanda and Dhana Nanda) that Magadha became a vast empire, which was later taken over by Chandragupta Maurya.

Information Booster:

· **Udayin**, a ruler of the Haryanka dynasty, was the first to shift the capital from Rajgir to Pataliputra.

· By the time of the Nandas, Pataliputra had grown into one of the largest and most prosperous cities in the ancient world.

Additional Knowledge:

· **(a) Rajgir:** The original capital of Magadha (known as Rajagriha), surrounded by hills.

· **(b) Vaishali:** Served as the capital for a brief period under the Shishunaga dynasty.

· **(d) Taxila:** A great center of learning in the North-West (modern Pakistan), but it was never the capital of the Magadha heartland.

Q.98 Which of the following can be donated by a living person?

A. Heart
B. Pancreas
C. One kidney
D. Cornea only

Answer: C

Sol: The correct answer is **(c) One kidney**

Explaination:

· A living person can donate certain organs or parts of organs because the human body can still function effectively afterward.

· **One kidney** is the most common living donation because a person can live a full, healthy life with just one functional kidney.

· Other living donations include a portion of the **liver** (which regenerates), a portion of a lung, or a part of the pancreas.

Information Booster:

· Organ donation in India is regulated by the **Transplantation of Human Organs Act (THOA), 1994**.

· Living donors must generally be "near relatives" (parents, siblings, spouse) or act out of special affection for the recipient to prevent illegal organ trading.

Additional Knowledge:

· **(a) Heart:** Can only be donated by a "cadaveric donor" (a person who is brain dead) because removal results in immediate death.

· **(b) Pancreas:** While a portion can be donated by a living person, a full pancreas transplant usually comes from a deceased donor.

· **(d) Cornea only:** Corneas are harvested only after death; they cannot be donated by a living person as it would cause permanent blindness.

Q.99 'Bihu' dance is associated with which Indian state?

A. Tripura
B. Assam
C. Meghalaya
D. Sikkim

Answer: B

Sol: The correct answer is **B (Assam)**.

Explanation:

- Bihu is the most popular folk dance of **Assam**, performed by both young men and women characterized by brisk steps and rapid hand movements.
- The dance is an integral part of the Bihu festival, which marks the change of seasons and the different stages of the agricultural cycle in the state.
- Dancers wear traditional Assamese attire, such as **Muga Silk** Mekhela Chador for women and Dhoti-Gamosa for men.

Information Booster:

- **Types of Bihu:** There are three main Bihu festivals: **Rongali (Bohag Bihu)** in April, **Kongali (Kati Bihu)** in October, and **Bhogali (Magh Bihu)** in January.
- **Instruments:** Traditional instruments used include the **Dhol** (drum), **Pepa** (horn pipe made from buffalo horn), **Gogona** (jew's harp), and **Tala** (cymbals).
- **World Record:** In April 2023, Assam created a Guinness World Record for the largest Bihu dance performance at a single venue with over 11,000 performers.

Additional Knowledge:

- **Tripura:** Famous for folk dances like **Hojagiri**, performed by the Reang community involving balancing jars on the head.
- **Meghalaya:** Known for the **Wangala** (100 Drums Festival) dance and **Nongkrem** dance performed by the Khasi tribe.
- **Sikkim:** Renowned for the **Singhi Chham** (Snow Lion Dance) and **Maruni** dance.

Q.100 During the Mughal period, which tax was charged on agricultural produce?

A. Zakat
B. Kharaj
C. Ushr
D. Jizya

Answer: B

Sol: The correct answer is **(b) Kharaj**
Explaination:
· Kharaj was a tax on agricultural land and produce levied on non-Muslim subjects under Islamic law, which the Mughal administration adopted.
· During the Mughal era, particularly under Akbar's **Zabt system**, the state typically claimed one-third to one-half of the average produce.
· It was calculated based on the fertility of the land and the type of crops grown.
Information Booster:
· Raja Todar Mal, Akbar's finance minister, introduced the **Dahshala system**, which used a 10-year average of prices and yields to determine a more accurate Kharaj/Land Revenue.
· Land was classified into four categories: **Polaj** (cultivated annually), **Parauti** (left fallow for 1-2 years), **Chachar** (fallow for 3-4 years), and **Banjar** (fallow for 5+ years).
Additional Knowledge:
· **(a) Zakat:** A religious tax paid by Muslims (usually 2.5% of wealth) for charitable purposes.
· **(c) Ushr:** A land tax specifically for lands held by Muslims, usually 10% of the produce.
· **(d) Jizya:** A protection tax levied on non-Muslim subjects (*dhimmis*) in exchange for military exemption; it was abolished by Akbar but reintroduced by Aurangzeb.