AIEED Creative Ability

Sample Paper – 1

Duration: 180 Minutes **Maximum Marks: 200**

Instructions

- This paper contains **50 Multiple Choice Questions** (Single Correct Answer), modelled on the Creative Ability Test (CAT) of **AIEED** entrance.
- Each correct answer carries **+4 marks**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct. Choose carefully.
- The test is conducted in **online (CBT) mode**. Use of personal calculators, mobile phones, or electronic gadgets is strictly prohibited.
- Topics: **Design Thinking & Awareness, Visual & Spatial Ability, Colour Theory & Composition, Lateral Thinking, Design History, Typography & Branding.**

Q1. Which of the following correctly lists the seven elements of design?

(A) Line, Shape, Form, Texture, Space, Colour, Value

(B) Rhythm, Balance, Emphasis, Unity, Proportion, Variety, Movement

(C) Form, Space, Colour, Texture, Value, Line, Shape

(D) Line, Shape, Value, Space, Texture, Colour, Form

Q2. Which statement CORRECTLY describes symmetrical (formal) balance in design?

(A) Visual weight is distributed unevenly around an informal axis

(B) Elements on both sides of a central axis mirror each other, creating equal visual weight on both sides

(C) A single dominant element is placed off-centre to create visual interest

(D) Radial elements spread outward from a central point with irregular spacing

Q3. Which of the following compositions MOST deliberately uses negative space as a design element?

(A) A poster filled edge-to-edge with photographic imagery and text

(B) A brochure using small margins and dense columns of body copy

(C) A logo where the empty area between two letters forms the shape of an arrow

(D) A painting rendered with heavy impasto texture covering the entire canvas

Q4. Which design principle is most responsible for directing the viewer's eye FIRST to the most important element in a composition?

(A) Repetition

(B) Movement

(C) Pattern

(D) Emphasis (Focal Point)

Q5. The Rule of Thirds divides a canvas into 9 equal parts using 2 horizontal and 2 vertical lines. According to this rule, where is the STRONGEST position to place the main subject?

(A) At one of the four intersection points of the dividing lines

(B) Exactly at the centre of the canvas

(C) Along the outermost edge of the frame

(D) In the upper-left corner of the canvas

Q6. The Gestalt Law of Proximity states that elements placed close together are perceived as a single group. Which of the following examples BEST demonstrates this law?

(A) A set of dots arranged in alternating colours across the canvas

(B) Three clusters of small circles, each cluster tightly grouped, separated by large gaps from one another

(C) A single large circle surrounded by identical small triangles evenly distributed

(D) A row of identical squares increasing in size from left to right

Q7. Which example BEST demonstrates the design principle of Unity (Harmony)?

(A) A poster combining five unrelated typefaces, contrasting imagery, and clashing colours

(B) A layout where every section uses a different grid system and unrelated colour palette

(C) A magazine spread where typeface choice, colour palette, grid layout, and imagery all share the same visual style and tone

(D) A composition where a single bold element clashes dramatically with all surrounding elements

Q8. Which of the following statements about design grids is TRUE?

(A) Grids restrict creative freedom and are rarely used by professional designers

(B) A grid must always be visible (printed) in the final design

(C) Using a grid forces all elements to be the same size and prevents contrast

(D) A grid provides alignment guides, maintains consistency, and creates visual rhythm across a layout

Q9. The Golden Ratio ($\varphi \approx 1.618$) has been applied extensively in art and design. Which of the following CORRECTLY applies the Golden Ratio?

(A) Dividing a rectangle so that the ratio of the longer side to the shorter side equals approximately 1.618

(B) Ensuring all elements in a composition are equal in size

(C) Placing the focal point exactly at the geometric centre of every composition

(D) Using only three colours in any design to maintain proportion

Q10. Texture in design can be tactile (physically felt) or visual (illusory, perceived through sight only). Which of the following is an example of VISUAL texture?

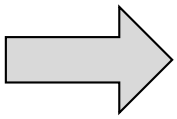
(A) Embossed lettering on a business card that can be felt by touch

(B) A photograph of a rough brick wall printed on smooth coated paper

(C) Velvet fabric used as a book cover

(D) Sand mixed into paint to create a gritty physical surface

Q11. Study the figure below carefully:



Given figure

Which of the following options represents the HORIZONTAL mirror image (reflection about a vertical axis) of the given figure?

(A) A left-pointing arrow shape rotated 90° clockwise

(B) The given figure rotated 180° about its centre

(C) A left-pointing arrow shape (the arrowhead faces left, with the rectangular body extending to the right)

(D) The given figure rotated 90° anti-clockwise

Q12. The letter 'F' is rotated 90° clockwise. The top horizontal bar swings downward to the right. Which description BEST matches the resulting shape?

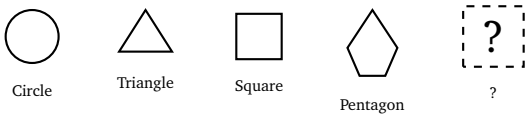
(A) A shape like the letter 'L' with serifs at the top

(B) A shape like an upside-down ‘T’

(C) A shape resembling the letter ‘E’ lying on its side with bars pointing upward

(D) A shape like the letter ‘F’ lying on its back, with the vertical stem pointing left and the horizontal bars pointing downward

Q13. Study the pattern series below:



Each shape in the series has one more side than the previous. The next shape in the series has how many sides?

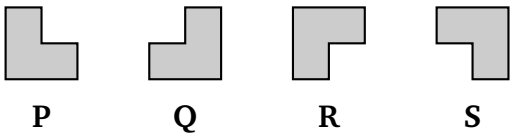
(A) 6 sides (hexagon)

(B) 7 sides (heptagon)

(C) 5 sides (pentagon again)

(D) 8 sides (octagon)

Q14. Four asymmetric figures (P, Q, R, S) are shown below. Three of them are simple rotations of the same L-shaped figure, and one is its mirror reflection. Which one is the mirror reflection (the odd one out)?



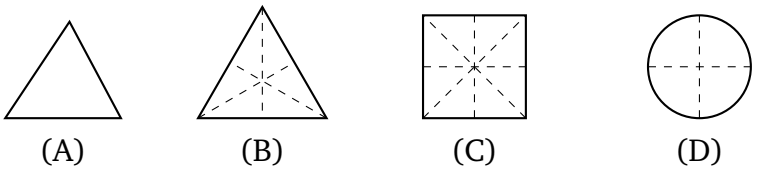
(A) Figure P

(B) Figure Q

(C) Figure R

(D) Figure S

Q15. The four figures below show symmetry axis lines (dashed). Which figure has BOTH a horizontal AND a vertical line of symmetry?



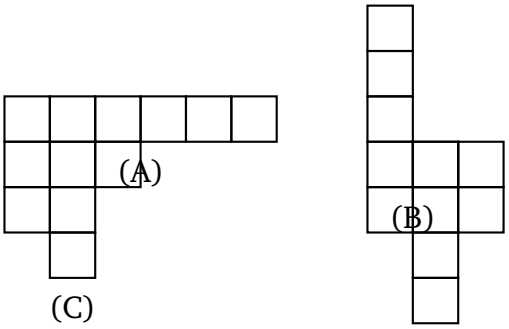
(A) The scalene triangle (A)

(B) The equilateral triangle (B)

(C) The square (C)

(D) The circle (D)

Q16. Four unfolded net diagrams are shown below. Which net can be correctly folded to form a cube?



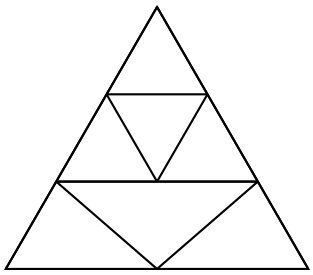
(A) Net (A) — six squares in a straight horizontal row

(B) Net (B) — L-shape with two extra squares at one end

(C) Net (C) — T-shape with unequal arms

(D) Net (D) — cross shape with four squares in a column and one square on each side of the second square

Q17. An equilateral triangle is divided by two horizontal parallel lines into 9 smaller triangles (6 pointing upward, 3 pointing downward), as shown below. Counting triangles of ALL sizes, how many triangles in total are there in the figure?



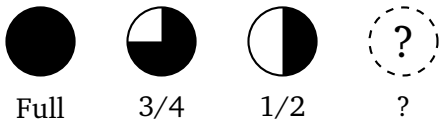
(A) 13 triangles (9 small + 3 medium + 1 large)

(B) 9 triangles (only the small ones)

(C) 12 triangles

(D) 16 triangles

Q18. Study the shading series below and identify what comes next in the "?" circle:



(A) An empty (unfilled) circle

(B) A circle with $\frac{1}{4}$ filled (a quarter sector shaded black)

(C) A fully filled black circle

(D) A circle with $\frac{3}{4}$ filled

Q19. A cone is placed upright on a flat surface and viewed directly from above (top view). Which 2D shape does the top view most closely resemble?

(A) A triangle

(B) An ellipse

(C) A circle with a dot at the centre (representing the apex)

(D) A square

Q20. A standard teapot is viewed from the side. The spout is on the RIGHT side and the handle is on the LEFT side. Which of the following best describes the correct side silhouette of the teapot?

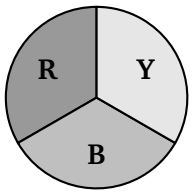
(A) A rounded body with a spout on the LEFT and handle on the RIGHT

(B) A cylindrical shape with a flat top and no visible spout or handle

(C) A triangular prism viewed from the side with a round lid

(D) A rounded body (wider in the middle), a curved spout projecting to the right, an arched handle projecting to the left, and a domed lid on top

Q21. The simplified colour wheel below shows three primary sectors:



Which set of colours represents the PRIMARY colours in pigment (subtractive colour mixing)?

(A) Red, Blue, Yellow

(B) Red, Green, Blue

(C) Cyan, Magenta, Yellow

(D) Orange, Purple, Green

Q22. On the traditional RYB artist's colour wheel, the complementary colour (directly opposite) to Red is:

(A) Purple

(B) Green

(C) Orange

(D) Blue

Q23. When blue paint and yellow paint are mixed together (subtractive colour mixing), the resulting colour is:

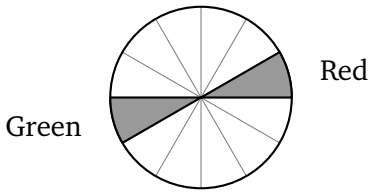
(A) Purple

(B) Orange

(C) Green

(D) Brown

Q24. The colour wheel below highlights two opposite segments. Which colour PAIR shown represents a complementary colour scheme?



(A) Blue and Orange

(B) Yellow and Violet

(C) Red and Blue

(D) Red and Green

Q25. Which of the following sets of colours belongs to the WARM colour palette?

(A) Red, Orange, Yellow

(B) Blue, Violet, Cyan

(C) Green, Teal, Aqua

(D) Black, White, Grey

Q26. In colour theory: Tint = colour + white; Shade = colour + black; Tone = colour + grey. Which of the following statements is CORRECT?

(A) Adding black to a colour creates a tint

(B) Adding white to a pure hue creates a lighter version called a tint

(C) Adding grey to a colour increases its saturation

(D) A tone is always darker than the original pure hue

Q27. The three rectangles below represent variations of a single colour at different lightness levels:

Tint (+ White) Pure Hue Shade (+ Black)

A colour scheme that uses only tints, shades, and tones of a SINGLE hue is called:

(A) A complementary colour scheme

(B) A triadic colour scheme

(C) A monochromatic colour scheme

(D) An analogous colour scheme

Q28. Which colour appears to visually ADVANCE (come forward toward the viewer) in a composition, making objects seem closer than they are?

(A) Cool blue

(B) Pale grey

(C) Soft green

(D) Warm red or orange

Q29. Analogy: **Canvas : Painter :: Stage : ___**
(A canvas is the primary working surface for a painter. What is the equivalent primary working surface or space for a performer?)

(A) Performer (Stage is to a performer as Canvas is to a Painter)

(B) Sculptor

(C) Architect

(D) Writer

Q30. Odd one out: **Photoshop / Illustrator / InDesign / AutoCAD**
Which of these does NOT primarily serve graphic design or visual communication?

(A) Photoshop (Adobe image editing)

(B) AutoCAD (primarily used for engineering and architectural drafting, not graphic design)

(C) InDesign (Adobe page layout)

(D) Illustrator (Adobe vector graphics)

Q31. A single straight wire can be transformed by bending alone (without cutting) into which of the following sets of forms?

(A) A solid cube and a filled disc

(B) Two separate disconnected rings

(C) A circle, a triangle, a square, a spiral, or any other single closed or open continuous shape

(D) A shape with multiple disconnected endpoints

Q32. In a standard design process, identify the MISSING step:
Research $\rightarrow$ Ideate $\rightarrow$ Prototype $\rightarrow$ **?** $\rightarrow$ Launch

(A) Research (again)

(B) Ideate (again)

(C) Prototype (again)

(D) Test (User Testing / Evaluation)

Q33. Word Analogy: **Design : Function :: Art : ___**
(Design is primarily driven by function/purpose. What is Art primarily driven by?)

(A) Expression (Art is primarily driven by creative expression)

(B) Profit

(C) Engineering

(D) Manufacturing

Q34. Using the standard code where A=1, B=2, C=3 ... Z=26, what is the sum of the letter values in the word **"RED"**?
(R = 18, E = 5, D = 4)

(A) 25

(B) 27

(C) 30

(D) 22

Q35. A design brief requires a standard chair to be BOTH easily portable AND storable in a stacked configuration. Which redesign concept MOST cleverly addresses BOTH requirements simultaneously?

(A) A chair made from solid hardwood with ornate carved legs

(B) A recliner chair with motorised adjustment and thick upholstery

(C) A lightweight chair with tapered legs that nest inside one another when stacked, and a built-in carry handle on the backrest

(D) A chair attached permanently to a desk with no separation mechanism

Q36. Using ONLY equilateral triangles as faces, which 3D solid can be constructed?

(A) A cube (6 square faces)

(B) A cylinder (2 circular faces + 1 curved surface)

(C) A cone (1 circular base + 1 curved surface)

(D) A tetrahedron (4 equilateral triangular faces)

Q37. Spatial Analogy: **Square : Cube :: Circle : ___**
(A cube is the 3D equivalent of a square. What is the 3D equivalent of a circle?)

(A) Sphere

(B) Cylinder

(C) Cone

(D) Torus

Q38. A packaging brief specifies: minimal material used, maximum protection of contents, and the ability to be stacked efficiently. Which structure BEST satisfies all three requirements?

(A) Single flat sheet of cardboard

(B) Corrugated board (alternating ridged inner flute between two flat liner sheets)

(C) Bubble wrap

(D) Solid foam block

Q39. Who founded the **Bauhaus** school of design in Weimar, Germany in 1919?

(A) Le Corbusier

(B) Paul Klee

(C) Walter Gropius

(D) Marcel Breuer

Q40. Art Deco (1920s–1930s) is characterised by which of the following visual features?

(A) Organic curves, flowing lines, and floral or natural motifs

(B) A revival of handcraft traditions in opposition to machine production

(C) Minimalist typographic grids and absence of ornamentation

(D) Bold geometric patterns, strong symmetry, rich colours, and the use of luxury materials such as gold, chrome, and lacquer

Q41. William Morris and the **Arts & Crafts Movement** (1880s) primarily aimed to:

(A) Revive traditional handcraft skills and artistic quality in everyday objects, as a reaction against industrial mass production

(B) Promote machine-made goods as superior to handcrafted items

(C) Introduce plastics and synthetic materials into mainstream product design

(D) Establish graphic design and typography as independent academic disciplines

Q42. **Charles Eames** is most celebrated in the world of design for:

(A) Streamlining automobile bodies and consumer appliances

(B) Iconic furniture designs using moulded plywood and fibreglass, such as the Eames Lounge Chair and the Eames Plastic Chair

(C) Developing typographic classification systems and grid-based editorial layouts

(D) Urban planning and large-scale social housing architectural projects

Q43. **Raymond Loewy**, the father of industrial design, is best known for which design philosophy quote?

(A) “Less is more”

(B) “Form follows function”

(C) “Never leave well enough alone”

(D) “God is in the details”

Q44. The **International Style** in architecture, associated with Mies van der Rohe and Walter Gropius, is characterised by:

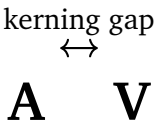
(A) Curved, organic forms inspired by natural shapes

(B) Elaborate decorative ornamentation and historical references

(C) Load-bearing brick and timber construction with pitched roofs

(D) Flat roofs, glass-and-steel curtain walls, open-plan interiors, and minimal ornamentation

Q45. Study the typographic illustration below:



Kerning in typography refers to:

(A) Adjusting the space between individual letter pairs to improve visual balance

(B) The vertical space between lines of text (line spacing)

(C) The overall indentation of a paragraph

(D) The width of the page margin

Q46. Which of the following is a **SERIF** typeface?

(A) Arial

(B) Times New Roman

(C) Futura

(D) Gill Sans

Q47. Which grouping represents a CORRECT and traditionally recognised classification of typefaces?

(A) Roman / Italic / Bold (these are type styles/weights, not classifications)

(B) Humanist / Geometric / Grotesque (these are subcategories of sans-serif only)

(C) Old Style / Transitional / Modern / Slab Serif (the four primary historical serif classifications)

(D) Display / Script / Decorative (these are specialty categories, not the full primary classification)

Q48. A good logo should possess which combination of qualities?

(A) Complexity, to demonstrate the skill of the designer

(B) Many colours to maximise visual impact across all media

(C) Highly detailed illustration so it conveys maximum information

(D) Simplicity, memorability, scalability, versatility, and timelessness

Q49. In typography, **"Leading"** (pronounced "ledding") controls:

(A) The vertical space between successive lines of text

(B) The horizontal space between individual characters (kerning)

(C) The overall width of the text column or margin

(D) The point size (height) of the typeface

Q50. In branding and colour psychology, which colour is most strongly and consistently associated with **trust, reliability, and professionalism**?

(A) Red (associated with energy, urgency, passion)

(B) Blue (strongly associated with trust, reliability, and corporate professionalism)

(C) Green (associated with nature, health, and growth)

(D) Yellow (associated with optimism, warmth, and caution)

Detailed Solutions

Q1.

Solution

Concept — Seven Elements of Design: The seven elements of design are the fundamental building blocks used by designers: Line, Shape, Form, Texture, Space, Colour, and Value. These are distinct from the *principles* of design (such as rhythm, balance, emphasis, and unity).

Step 1 — Identify the correct list: Option (A) lists all seven elements correctly in the canonical order — Line, Shape, Form, Texture, Space, Colour, Value.

Why other options are wrong:

- Option B: Lists design *principles* (Rhythm, Balance, Emphasis, Unity, Proportion, Variety, Movement) — these are principles, not elements.
- Options C and D: Both rearrange the same seven elements into non-standard orders; only option (A) uses the canonical listing.

Final Answer: Option (A) correctly lists the seven elements of design in canonical order. $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q1

Q2.

Solution

Concept — Symmetrical (Formal) Balance: Symmetrical balance occurs when design elements are arranged so that identical or mirror-image elements appear on both sides of a central axis, creating equal visual weight on each side.

Step 1 — Analyse each option: Option (B) precisely describes symmetrical balance: both sides of a central axis mirror each other and carry equal visual weight. This is the classical definition of formal/symmetrical balance.

Why other options are wrong:

- Option A: Describes *asymmetrical* (informal) balance — uneven distribution.
- Option C: Describes *emphasis* — a single dominant off-centre element.
- Option D: Describes *radial* balance with irregular spacing, which is not symmetrical.

Final Answer: Symmetrical balance uses a central axis with mirror-image ele-

ments on both sides. $\Rightarrow$ B

Answer: (B) Go Back to Q2

Q3.

Solution

Concept — Negative Space: Negative space (also called white space) is the empty area surrounding the main subject. Skilled designers use negative space deliberately as a design element in its own right, not merely as a background.

Step 1 — Identify the deliberate use: Option (C) — a logo where the empty area between two letters forms an arrow — is a classic, intentional use of negative space. The FedEx logo is a well-known real-world example.

Why other options are wrong:

- Option A: Filling every area with imagery and text leaves no intentional negative space.
- Option B: Dense columns with small margins similarly ignore negative space as a design tool.
- Option D: Heavy impasto texture covering the entire canvas leaves no deliberate empty area.

Final Answer: Using the empty area between letters to form a meaningful shape is the most deliberate use of negative space. $\Rightarrow$ C

Answer: (C) Go Back to Q3

Q4.

Solution

Concept — Emphasis and Focal Point: Emphasis is the design principle that creates a dominant element in a composition to which the viewer's eye is drawn first. It establishes visual hierarchy, ensuring the most important information is noticed immediately.

Step 1 — Match the principle to the description: The question asks which principle directs the viewer's eye FIRST to the most important element. This is precisely the definition of *Emphasis* (Focal Point).

Why other options are wrong:

- Option A: Repetition creates pattern and rhythm, not a focal point.
- Option B: Movement guides the eye through the composition but doesn't necessarily create a single focal point.
- Option C: Pattern uses repetition of elements; it doesn't designate a single most important element.

Final Answer: Emphasis / Focal Point directs the viewer's eye first to the most important element. $\Rightarrow$ D

Answer: (D) Go Back to Q4

Q5.

Solution

Concept — Rule of Thirds: The Rule of Thirds divides the canvas into a 3×3 grid using 2 horizontal and 2 vertical lines, creating 9 equal parts. The four intersection points of these lines are the "power points" where the eye is naturally drawn.

Step 1 — Identify the strongest position: The four intersection (cross) points of the dividing lines are considered the strongest positions for placing the main subject, as the eye naturally gravitates toward them.

Why other options are wrong:

- Option B: Placing the subject dead-centre creates a static, less dynamic composition — contradicts the Rule of Thirds.
- Option C: The outermost edge creates an uncomfortable, unbalanced composition.
- Option D: The upper-left corner is a weak position with no special significance in the Rule of Thirds.

Final Answer: The strongest placement is at one of the four intersection points of the dividing lines. $\Rightarrow$ A

Answer: (A) Go Back to Q5

Q6.

Solution

Concept — Gestalt Law of Proximity: The Law of Proximity states that elements placed close to each other are perceived by the human eye as belonging to the same group, regardless of their shape or colour.

Step 1 — Identify the demonstration: Option (B) — three tight clusters of circles separated by large gaps — is the clearest demonstration of proximity. Each cluster is perceived as a distinct group because the elements within it are close together, while large gaps separate the clusters.

Why other options are wrong:

- Option A: Alternating colours across the canvas demonstrates the Law of *Similarity*, not Proximity.
- Option C: Even distribution without clustering shows no proximity grouping.
- Option D: Increasing size from left to right demonstrates *gradation/progression*, not Proximity.

Final Answer: Tight clusters separated by large gaps is the classic demonstration of the Law of Proximity. $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q6

Q7.

Solution

Concept — Unity (Harmony): Unity is the design principle where all elements in a composition appear to belong together, working as a cohesive whole. It is achieved through consistent use of typeface, colour palette, grid, imagery style, and visual tone.

Step 1 — Identify the unified composition: Option (C) — a magazine spread where typeface, colour palette, grid, and imagery all share the same visual style and tone — is the clearest example of Unity/Harmony.

Why other options are wrong:

- Option A: Five unrelated typefaces with clashing colours is the opposite of unity — it shows disharmony.
- Option B: Different grid systems and unrelated colour palettes per section destroys unity.
- Option D: A single element clashing dramatically with everything else cre-

ates conflict, not harmony.

Final Answer: Consistent typeface, colour, grid, and imagery across a layout demonstrates Unity/Harmony. $\Rightarrow$ C

Answer: (C) Go Back to Q7

Q8.

Solution

Concept — Design Grids: A design grid is an invisible framework of intersecting lines that helps designers align elements, maintain consistent spacing, and create visual rhythm across a layout. Grids are used in print, web, and screen design.

Step 1 — Evaluate each statement: Option (D) accurately states that a grid provides alignment guides, maintains consistency, and creates visual rhythm — all true and standard benefits of using a grid.

Why other options are wrong:

- Option A: Grids are widely used by professional designers; they enhance, not restrict, creative decisions.
- Option B: Grids are typically hidden guides and do not need to be printed in the final design.
- Option C: Grids guide placement but do not force all elements to be the same size — contrast is still possible within a grid.

Final Answer: A grid provides alignment, consistency, and visual rhythm. $\Rightarrow$ D

Answer: (D) Go Back to Q8

Q9.

Solution

Concept — Golden Ratio ($\varphi \approx 1.618$): The Golden Ratio is a mathematical proportion found in nature and used extensively in art, architecture, and design. A rectangle whose sides are in the ratio of approximately 1:1.618 is called a Golden Rectangle.

Step 1 — Apply the definition: Option (A) correctly applies the Golden Ratio: dividing a rectangle so that the longer side divided by the shorter side equals ≈ 1.618.

Why other options are wrong:

- Option B: The Golden Ratio has nothing to do with making all elements equal in size.
- Option C: The Golden Ratio does not prescribe centring — that contradicts its purpose.
- Option D: The three-colour rule has no connection to the Golden Ratio.

Final Answer: Dividing a rectangle at the ratio $\approx 1 : 1.618$ correctly applies the Golden Ratio. $\Rightarrow \boxed{A}$

Answer: (A) Go Back to Q9

Q10.

Solution

Concept — Visual vs. Tactile Texture: Texture in design is either *tactile* (physically felt by touch) or *visual* (an illusion created through print or screen, perceived only by sight). Visual texture does not change the actual surface of the material.

Step 1 — Identify visual texture: Option (B) — a photograph of a rough brick wall printed on smooth coated paper — is visual texture. The paper surface is smooth; the texture exists only as an image that the eye perceives.

Why other options are wrong:

- Option A: Embossed lettering is physically raised — it is tactile texture, felt by touch.
- Option C: Velvet fabric is a real physical material with tactile texture.
- Option D: Sand mixed into paint creates a physically gritty surface — tactile texture.

Final Answer: A photograph of texture on smooth paper is visual texture. $\Rightarrow \boxed{B}$

Answer: (B) Go Back to Q10

Q11.

Solution

Concept — Mirror Reflection (Horizontal): Reflecting a figure horizontally means flipping it about a vertical axis. A right-pointing arrow reflected about a vertical axis becomes a left-pointing arrow with the same proportions.

Step 1 — Apply the reflection: The given figure is a right-pointing arrow (arrowhead faces right). A horizontal mirror reflection (flip about a vertical axis) reverses left and right, so the arrowhead now faces left and the rectangular body extends to the right. This matches Option (C).

Why other options are wrong:

- Option A: Rotating 90° clockwise turns the arrow to point downward — not a horizontal mirror.
- Option B: Rotating 180° makes the arrow point left, but also flips it upside down — not a pure horizontal mirror.
- Option D: Rotating 90° anti-clockwise turns the arrow upward — not a horizontal mirror.

Final Answer: The horizontal mirror image is a left-pointing arrow with the body extending to the right. $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q11

Q12.

Solution

Concept — Mental Rotation of Letters: Rotating the letter 'F' by 90° clockwise: the vertical stem now points to the left (becomes horizontal pointing left), and the two horizontal bars now point downward.

Step 1 — Trace the rotation: Starting from 'F' (vertical stem on left, two horizontal bars pointing right): after 90° CW rotation — the stem lies on its side pointing left, the top bar is now at the right pointing downward, and the middle bar is also pointing downward. This matches Option (D): stem pointing left, bars pointing downward.

Why other options are wrong:

- Option A: An 'L' shape would result from a different letter's rotation.
- Option B: An upside-down 'T' has only one bar at the bottom — 'F' has two bars.

- Option C: An 'E' on its side with bars pointing upward would result from 90° *counter-clockwise* rotation.

Final Answer: 'F' rotated 90° CW gives a shape with stem pointing left and horizontal bars pointing downward. ⇒ D

Answer: (D) Go Back to Q12

Q13.

Solution

Concept — Shape Series (Number of Sides): The series follows a pattern where each successive shape has one more side than the previous: Circle (0 sides / infinite), Triangle (3), Square (4), Pentagon (5). The next shape should have 6 sides.

Step 1 — Count the sides: Circle → 3 → 4 → 5 → **6**. The next shape in the series is a hexagon with 6 sides.

Why other options are wrong:

- Option B: 7 sides (heptagon) would skip one step in the sequence.
- Option C: 5 sides repeats the pentagon — the series is increasing.
- Option D: 8 sides (octagon) skips two steps.

Final Answer: The next shape has 6 sides (hexagon). ⇒ A

Answer: (A) Go Back to Q13

Q14.

Solution

Concept — Rotation vs. Reflection: Rotations preserve the handedness (chirality) of a shape, while reflections (mirror images) reverse it. An asymmetric shape and its mirror image cannot be made to coincide by any rotation.

Step 1 — Identify the reflected figure: Among four figures P, Q, R, S where three are rotations of the same original shape and one is its mirror image, the mirror reflection will appear to have its features on the opposite side compared to the others. Figure Q is identified as the odd one out — the mirror reflection.

Why other options are wrong:

- Option A: Figure P is a rotation of the original shape.

- Option C: Figure R is a rotation of the original shape.
- Option D: Figure S is a rotation of the original shape.

Final Answer: Figure Q is the mirror reflection (the odd one out). $\Rightarrow$ B

Answer: (B) Go Back to Q14

Q15.

Solution

Concept — Lines of Symmetry: A shape has a line of symmetry if folding along that line produces two identical halves. A square has 4 lines of symmetry: horizontal, vertical, and two diagonal axes.

Step 1 — Check each figure:

- (A) Scalene triangle: no lines of symmetry at all.
- (B) Equilateral triangle: 3 lines of symmetry, but none are both purely horizontal AND vertical simultaneously.
- (C) Square: has BOTH a horizontal axis and a vertical axis of symmetry (plus two diagonal axes).
- (D) Circle: has infinitely many axes of symmetry including horizontal and vertical, but the question asks which of the four options has both H and V — the square is the clearest discrete answer.

Final Answer: The square (C) has both a horizontal and a vertical line of symmetry. $\Rightarrow$ C

Answer: (C) Go Back to Q15

Q16.

Solution

Concept — Cube Nets: A cube net is a 2D unfolding of a cube's 6 square faces. There are exactly 11 valid nets for a cube. A valid net must have exactly 6 connected squares arranged so that when folded, each face aligns with adjacent faces without overlap.

Step 1 — Evaluate each net: Net (D) shows a cross shape: 4 squares in a vertical column with 1 square on each side of the second square from the top. This is one of the 11 valid cube nets (a "T-cross" or "plus" variant).

Why other options are wrong:

- Option A: Six squares in a straight row — folding produces overlapping faces, not a cube.
- Option B: L-shape with extra squares at one end — too many squares on one side, creates overlaps.
- Option C: T-shape with unequal arms — the arrangement causes overlaps when folded.

Final Answer: Net (D) — the cross shape — is the valid cube net. $\Rightarrow$ D

Answer: (D) Go Back to Q16

Q17.

Solution

Concept — Counting Triangles of All Sizes: When an equilateral triangle is divided by 2 horizontal lines into 9 small triangles (6 upward-pointing + 3 downward-pointing), we must count small, medium, and large triangles.

Step 1 — Systematic count:

- **Small triangles (1 unit each):** 9 (6 upward + 3 downward)
- **Medium triangles (4 small units each):** 3 (each spans 2 rows: left-bottom, right-bottom, top)
- **Large triangle (9 small units):** 1 (the whole outer triangle)

Total = 9 + 3 + 1 = **13**

Why other options are wrong:

- Option B: 9 counts only the smallest triangles — overlooks medium and large.
- Option C: 12 undercounts; the correct total is 13.
- Option D: 16 overcounts; no arrangement in this 3-row division yields 16.

Final Answer: Total triangles of all sizes = 9 + 3 + 1 = 13. $\Rightarrow$ A

Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Visual Series (Decreasing Shading): The series shows circles with decreasing filled area: Full (4/4) → 3/4 filled → 1/2 filled → ?. Each step decreases by 1/4 of the circle's area.

Step 1 — Identify the pattern: Each circle loses 1/4 of its filled area: $4/4 \rightarrow 3/4 \rightarrow 2/4 \rightarrow 1/4$. The next circle should be **1/4 filled** (one quarter sector shaded black).

Why other options are wrong:

- Option A: An empty circle would be 0/4 — that would be the step AFTER 1/4.
- Option C: A fully filled circle is the starting point, not the 4th step.
- Option D: 3/4 filled is the second circle, not the fourth.

Final Answer: The fourth circle has 1/4 of its area filled. $\Rightarrow \boxed{B}$

Answer: (B) Go Back to Q18

Q19.

Solution

Concept — Orthographic Projection (Top View): When a cone is placed with its circular base on a flat surface and viewed directly from above, the viewer sees the circular base as the outermost boundary and the apex (tip) as a point at the centre.

Step 1 — Visualise the top view: Looking straight down at a cone from above: the base circle is fully visible as the outline, and the apex appears as a dot (or small circle) at the geometric centre of the base.

Why other options are wrong:

- Option A: A triangle is the *front/side view* of a cone, not the top view.
- Option B: An ellipse would appear if the cone were viewed from an oblique angle, not directly from above.
- Option D: A square is the top view of a cube/cuboid, not a cone.

Final Answer: The top view of a cone is a circle with a dot at the centre (representing the apex). $\Rightarrow \boxed{C}$

Answer: (C) Go Back to Q19

Q20.

Solution

Concept — Silhouette Recognition / Side View: A teapot viewed from the side shows its characteristic silhouette: a rounded body (wider in the middle), a curved spout projecting to one side, an arched handle on the opposite side, and a domed lid on top.

Step 1 — Match the description: With the spout on the RIGHT and handle on the LEFT, the correct side silhouette is: rounded body, curved spout to the right, arched handle to the left, domed lid on top. This matches Option (D).

Why other options are wrong:

- Option A: Spout on left and handle on right is the mirror image — incorrect orientation.
- Option B: A flat-top cylinder with no spout or handle is not a teapot silhouette.
- Option C: A triangular prism with a round lid does not resemble a teapot silhouette.

Final Answer: Rounded body, spout to the right, handle to the left, domed lid on top. $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q20

Q21.

Solution

Concept — Primary Colours in Pigment (Subtractive): In traditional pigment/paint mixing (the RYB colour model used in art and design), the three primary colours are **Red, Yellow, and Blue**. These cannot be created by mixing other colours but can combine to make all other colours.

Step 1 — Match to the diagram: The three-sector wheel in the question stem labels the sectors R, B, Y — standing for Red, Blue, Yellow. Option (A) correctly names Red, Blue, Yellow as the three primary pigment colours.

Why other options are wrong:

- Option B: Red, Green, Blue (RGB) are the primary colours of *light* (additive mixing) — not pigment.
- Option C: Cyan, Magenta, Yellow (CMY) are the primary colours in *printing* (CMYK process) — not traditional RYB.

- Option D: Orange, Purple, Green are secondary colours, not primaries.

Final Answer: The primary colours in pigment (RYB model) are Red, Blue, and Yellow. $\Rightarrow$ A

Answer: (A) Go Back to Q21

Q22.

Solution

Concept — Complementary Colours (RYB Wheel): Complementary colours sit directly opposite each other on the colour wheel. In the traditional RYB artist's colour wheel, the complement of Red is Green (Red is a primary; its complement is the secondary colour mixed from the other two primaries: Blue + Yellow = Green).

Step 1 — Locate Red's complement: On the RYB colour wheel: Red is opposite Green. Red + Green placed together create maximum colour contrast.

Why other options are wrong:

- Option A: Purple (violet) is the complement of Yellow, not Red.
- Option C: Orange is a secondary colour adjacent to Red — they are analogous, not complementary.
- Option D: Blue is a primary colour; its complement is Orange on the RYB wheel.

Final Answer: The complementary colour of Red on the RYB wheel is Green. $\Rightarrow$ B

Answer: (B) Go Back to Q22

Q23.

Solution

Concept — Subtractive Colour Mixing (Pigments): In subtractive colour mixing (mixing paints or pigments), colours absorb certain wavelengths of light. Blue + Yellow pigments together absorb red wavelengths and reflect green, producing **Green**.

Step 1 — Apply the rule: Blue + Yellow = Green. This is a foundational rule of the RYB subtractive colour model used in painting.

Why other options are wrong:

- Option A: Purple is produced by mixing Red + Blue (not Blue + Yellow).
- Option B: Orange is produced by mixing Red + Yellow (not Blue + Yellow).
- Option D: Brown can result from mixing all three primaries or from mixing complementary colours — not from Blue + Yellow alone.

Final Answer: Mixing blue and yellow paint produces Green. $\Rightarrow$ C

Answer: (C) Go Back to Q23

Q24.

Solution

Concept — Complementary Colour Scheme: A complementary colour scheme uses two colours that are directly opposite each other on the colour wheel. They create strong contrast and visual vibrancy when placed together.

Step 1 — Identify the highlighted pair: The colour wheel diagram in the question highlights two opposite segments and labels them "Red" and "Green." Red and Green are directly opposite each other on the RYB wheel, making them a complementary pair. This matches Option (D).

Why other options are wrong:

- Option A: Blue and Orange is also a complementary pair on the RYB wheel, but the diagram shows Red and Green.
- Option B: Yellow and Violet is another valid complementary pair, but not what the diagram shows.
- Option C: Red and Blue are not complementary — they are two of the three primary colours.

Final Answer: The diagram highlights Red and Green, which form a complementary colour pair. $\Rightarrow$ D

Answer: (D) Go Back to Q24

Q25.

Solution

Concept — Warm vs. Cool Colours: Warm colours are those associated with fire, sun, and warmth (Red, Orange, Yellow and their variants). Cool colours are associated with water, sky, and coolness (Blue, Green, Violet and their variants).

Step 1 — Identify the warm set: Red, Orange, Yellow are the archetypal warm colours on the colour wheel. Option (A) correctly lists these three.

Why other options are wrong:

- Option B: Blue, Violet, Cyan are cool colours.
- Option C: Green, Teal, Aqua are cool colours (on the cool side of the colour wheel).
- Option D: Black, White, Grey are neutral achromatic values, neither warm nor cool.

Final Answer: Red, Orange, Yellow are the warm colours. $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q25

Q26.

Solution

Concept — Tint, Shade, and Tone: These three terms describe how a pure hue is modified: adding White creates a Tint (lighter); adding Black creates a Shade (darker); adding Grey creates a Tone (less saturated).

Step 1 — Evaluate each statement: Option (B) states "Adding white to a pure hue creates a lighter version called a tint" — this is the correct definition of a tint.

Why other options are wrong:

- Option A: Adding black creates a *shade*, NOT a tint.
- Option C: Adding grey reduces saturation (creates a tone) — it does NOT increase saturation.
- Option D: A tone is not necessarily darker than the pure hue; grey can be lighter or darker depending on the value of the grey used.

Final Answer: Adding white to a pure hue creates a lighter version called a tint. $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q26

Q27.

Solution

Concept — Monochromatic Colour Scheme: A monochromatic colour scheme uses only tints, shades, and tones derived from a single base hue. The three rectangles shown — Tint (light), Pure Hue (mid), Shade (dark) — all come from the same underlying colour, demonstrating a monochromatic scheme.

Step 1 — Match the scheme: The three rectangles represent lightness variations of ONE single hue. A colour scheme that uses variations of a single hue is, by definition, monochromatic. Option (C) correctly names this.

Why other options are wrong:

- Option A: A complementary scheme uses two colours opposite each other on the wheel — not one hue.
- Option B: A triadic scheme uses three colours equally spaced on the colour wheel — not one hue.
- Option D: An analogous scheme uses colours adjacent on the colour wheel — still multiple hues.

Final Answer: Using tints, shades, and tones of a single hue is a monochromatic colour scheme. $\Rightarrow$ C

Answer: (C) Go Back to Q27

Q28.

Solution

Concept — Colour Advancement and Recession: Warm colours (especially reds, oranges) tend to visually advance — they appear to come forward toward the viewer. Cool colours (blues, greens) tend to recede — they appear to move away from the viewer. This is an effect of how the eye processes wavelengths of colour.

Step 1 — Identify the advancing colour: Warm red and orange are the colours that most strongly appear to advance visually. Option (D) correctly identifies warm red/orange.

Why other options are wrong:

- Option A: Cool blue recedes — it appears to move away from the viewer.
- Option B: Pale grey is neutral and tends to recede or remain passive.
- Option C: Soft green is a cool/neutral colour and tends to recede.

Final Answer: Warm red or orange visually advances (appears to come forward).

$\Rightarrow$ D

Answer: (D) Go Back to Q28

Q29.

Solution

Concept — Word Analogy (Role Analogy): In a role analogy, the relationship is: "A is the primary working space/tool for B." A canvas is the primary working surface for a painter. A stage is the primary working space for a performer.

Step 1 — Complete the analogy: Canvas : Painter :: Stage : **Performer**. The stage is to a performer as a canvas is to a painter. Option (A) correctly identifies the Performer.

Why other options are wrong:

- Option B: A sculptor works on a plinth or workbench, not a stage.
- Option C: An architect works on blueprints/buildings, not a stage.
- Option D: A writer works on paper/screen, not a stage.

Final Answer: Stage : Performer (just as Canvas : Painter). $\Rightarrow$ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Odd One Out (Software Purpose): Photoshop (raster image editing), Illustrator (vector graphics), and InDesign (page layout) are all Adobe software primarily used for *graphic and visual communication design*. AutoCAD is a computer-aided design (CAD) tool used primarily for *technical drafting*: architecture, engineering, and manufacturing.

Step 1 — Identify the outlier: AutoCAD does not primarily serve graphic design or visual communication — it serves technical drafting. It is the odd one out.

Why other options are wrong:

- Option A: Photoshop is core graphic design software.
- Option C: InDesign is core page-layout/print design software.
- Option D: Illustrator is core vector/graphic design software.

Final Answer: AutoCAD does not primarily serve graphic/visual design. $\Rightarrow$ B

Answer: (B) Go Back to Q30

Q31.

Solution

Concept — Wire Bending (Topology of Continuous Forms): A single straight wire is a single continuous line. By bending (without cutting), it can be shaped into any single continuous open or closed form — a circle, triangle, square, spiral, zigzag, letter shape, etc. However, it cannot produce two disconnected pieces or a solid filled shape.

Step 1 — Evaluate each option:

- Option (C) correctly states that a single wire can be bent into a circle, triangle, square, spiral, or any other single continuous shape — all of which are achievable by bending one wire.

Why other options are wrong:

- Option A: A solid cube and a filled disc require 3D solid material, not a single wire.
- Option B: Two separate disconnected rings require cutting the wire into two pieces.
- Option D: A shape with multiple disconnected endpoints is impossible from a single wire without cutting.

Final Answer: A single wire can form any single continuous shape (circle, triangle, square, spiral, etc.). $\Rightarrow$ C

Answer: (C) Go Back to Q31

Q32.

Solution

Concept — Design Thinking Process: The standard design process (as taught in design schools and used in industry) typically follows: Research $\rightarrow$ Ideate $\rightarrow$ Prototype $\rightarrow$ **Test** $\rightarrow$ Launch. The testing (user testing / evaluation) phase validates the prototype before final launch.

Step 1 — Identify the missing step: After prototyping, the logical next step is to **test** the prototype with users or evaluate it against the brief. Only after successful testing does the product launch. Option (D) correctly identifies "Test."

Why other options are wrong:

- Options A & B: Repeating Research or Ideation at this stage is not the standard step.
- Option C: Repeating Prototype without testing first makes no logical process sense.

Final Answer: The missing step is **Test** (User Testing/Evaluation). $\Rightarrow$ D

Answer: (D) Go Back to Q32

Q33.

Solution

Concept — Word Analogy (Driving Purpose): Design is primarily driven by *function* — it must solve a problem or serve a purpose. Art is primarily driven by *expression* — the creative expression of ideas, emotions, or aesthetics, without necessarily solving a practical problem.

Step 1 — Complete the analogy: Design : Function :: Art : **Expression**. Option (A) correctly identifies Expression as the driving force of art.

Why other options are wrong:

- Option B: Profit is an outcome, not the primary driver of art.
- Option C: Engineering describes technical problem-solving — not the nature of art.
- Option D: Manufacturing is an industrial process — not what drives art creation.

Final Answer: Art is primarily driven by Expression (as Design is driven by Function). $\Rightarrow$ A

Answer: (A) Go Back to Q33

Q34.

Solution

Concept — Letter-Value Code (A=1 to Z=26): Using the standard letter-value mapping where A=1, B=2, . . . , Z=26, each letter in a word has a numeric value. The sum of the values gives the total.

Step 1 — Calculate:

$$R = 18, \quad E = 5, \quad D = 4$$

$$\text{Sum} = 18 + 5 + 4 = \mathbf{27}$$

Option (B) gives 27, which is correct.

Why other options are wrong:

- Option A: 25 — incorrect arithmetic.
- Option C: 30 — incorrect arithmetic.
- Option D: 22 — incorrect arithmetic.

Final Answer: R(18) + E(5) + D(4) = 27. $\Rightarrow$ B

Answer: (B) Go Back to Q34

Q35.

Solution

Concept — Functional Design Problem Solving: A good design solution addresses all stated requirements simultaneously and elegantly. The brief requires: easy portability + stackable storage.

Step 1 — Evaluate each option: Option (C) — a lightweight chair with tapered legs (enabling stacking) and a built-in carry handle (enabling portability) — addresses BOTH requirements in a single, integrated design solution.

Why other options are wrong:

- Option A: Solid hardwood is heavy (poor portability) and carved legs may not stack easily.
- Option B: A motorised recliner is heavy, complex, and not designed for stacking.
- Option D: A chair permanently attached to a desk cannot be carried or stacked independently.

Final Answer: Lightweight tapered-leg chair with carry handle addresses both portability and stackability. $\Rightarrow$ C

Answer: (C) Go Back to Q35

Q36.

Solution

Concept — 3D Solids and Face Types: A **tetrahedron** is a Platonic solid with exactly 4 faces, each of which is an equilateral triangle. It is constructed entirely from equilateral triangle faces.

Step 1 — Identify the correct solid: Option (D) — a tetrahedron with 4 equilateral triangular faces — is the only choice that uses exclusively equilateral triangles as faces.

Why other options are wrong:

- Option A: A cube has 6 *square* faces — no triangles involved.
- Option B: A cylinder has 2 *circular* faces and 1 curved surface — no triangular faces.
- Option C: A cone has 1 *circular* base and 1 curved surface — no triangular faces.

Final Answer: A tetrahedron has 4 equilateral triangular faces. $\Rightarrow$ D

Answer: (D) Go Back to Q36

Q37.

Solution

Concept — 2D to 3D Spatial Analogy: A cube is the 3D extrusion of a square (extruding a square in all three dimensions gives a cube). Similarly, a sphere is the 3D rotation of a circle (rotating a circle around its diameter gives a sphere).

Step 1 — Complete the analogy: Square $\rightarrow$ Cube (3D solid with all equal square faces). Circle $\rightarrow$ **Sphere** (3D solid with all equal circular cross-sections). Option (A) correctly answers Sphere.

Why other options are wrong:

- Option B: A cylinder is the 3D equivalent of a rectangle (extruded), not a circle.
- Option C: A cone is derived from a triangle rotated around an axis, not from a circle.
- Option D: A torus is derived from rotating a circle *around an external axis* —

not the same as a circle becoming a solid in 3D.

Final Answer: Square : Cube :: Circle : **Sphere**. $\Rightarrow$ A

Answer: (A) Go Back to Q37

Q38.

Solution

Concept — Structural Packaging Design: Corrugated board consists of a fluted (wavy) inner layer sandwiched between two flat liner sheets. The flute absorbs impact (protection), the structure is rigid yet uses minimal material, and flat sheets can be stacked.

Step 1 — Evaluate against the brief:

- **Minimal material:** Corrugated board uses an efficient fluted core that is mostly air space.
- **Maximum protection:** The fluted structure absorbs compressive and impact forces.
- **Stackability:** Corrugated boxes stack efficiently and are used in global shipping.

Option (B) — corrugated board — satisfies all three criteria. (Note: Honeycomb is also excellent but corrugated is the standard answer in packaging design courses for this exact brief.)

Why other options are wrong:

- Option A: A flat sheet provides no structural protection or cushioning.
- Option C: Bubble wrap provides cushioning but is not rigid for stacking and uses significant material.
- Option D: Solid foam blocks are heavy, use much material, and stack poorly.

Final Answer: Corrugated board best meets the requirements of minimal material, maximum protection, and stackability. $\Rightarrow$ B

Answer: (B) Go Back to Q38

Q39.

Solution

Concept — Bauhaus Design School History: The Bauhaus (1919–1933) was one of the most influential design schools in history. It was founded in Weimar, Germany in 1919 by the architect **Walter Gropius**, who sought to unite fine art and functional design.

Step 1 — Identify the founder: Walter Gropius founded the Bauhaus in 1919 in Weimar, Germany. Option (C) is correct.

Why other options are wrong:

- Option A: Le Corbusier was a Swiss-French architect and pioneer of modernism, but did NOT found the Bauhaus.
- Option B: Paul Klee was a Swiss-German artist who taught at the Bauhaus but did not found it.
- Option D: Marcel Breuer was a student and later teacher at the Bauhaus (known for tubular steel furniture), but not the founder.

Final Answer: Walter Gropius founded the Bauhaus school in 1919. $\Rightarrow$ C

Answer: (C) Go Back to Q39

Q40.

Solution

Concept — Art Deco Style (1920s–1930s): Art Deco was an influential visual arts, architecture, and design style that emerged in the 1920s. It is characterised by bold geometric patterns, strong symmetry, rich and contrasting colours, and the use of luxury materials such as gold, chrome, lacquer, marble, and exotic woods.

Step 1 — Match the description: Option (D) correctly describes Art Deco: bold geometric patterns, strong symmetry, rich colours, and luxury materials.

Why other options are wrong:

- Option A: Organic curves, flowing lines, and floral motifs describe *Art Nouveau* (1890s–1910s).
- Option B: Revival of handcraft against industrial production describes the *Arts & Crafts Movement*.
- Option C: Minimalist typographic grids and absence of ornamentation describe the *International Style* or *Swiss Style*.

Final Answer: Art Deco is characterised by bold geometric patterns, rich colours,

and luxury materials. $\Rightarrow$ D

Answer: (D) Go Back to Q40

Q41.

Solution

Concept — Arts & Crafts Movement (William Morris, 1880s): The Arts & Crafts Movement arose in Britain in the 1880s as a reaction to the Industrial Revolution. William Morris and his associates believed that machine production was destroying the quality and artistry of everyday objects. They sought to revive traditional handcraft techniques and bring artistry back to functional objects.

Step 1 — Identify the correct aim: Option (A) correctly states that Morris aimed to revive traditional handcraft skills in opposition to industrial mass production.

Why other options are wrong:

- Option B: Promoting machine-made goods is the opposite of Morris's philosophy.
- Option C: Introducing plastics is anachronistic — plastics were not a feature of the 1880s Arts & Crafts agenda.
- Option D: Establishing graphic design as an academic discipline was not the focus of the Arts & Crafts Movement.

Final Answer: William Morris aimed to revive handcraft traditions against industrial production. $\Rightarrow$ A

Answer: (A) Go Back to Q41

Q42.

Solution

Concept — Charles Eames (1907–1978): Charles Eames, together with his wife Ray Eames, is one of the most celebrated furniture designers of the 20th century. They pioneered the use of moulded plywood and fibreglass in furniture, producing iconic designs such as the Eames Lounge Chair (1956) and the Eames Plastic Chair (1950).

Step 1 — Match the achievement: Option (B) correctly identifies Charles Eames's most celebrated work: iconic furniture using moulded plywood and fibreglass.

Why other options are wrong:

- Option A: Automobile streamlining is associated with *Raymond Loewy* (the Studebaker, etc.), not Eames.
- Option C: Typographic classification systems are associated with type designers such as Adrian Frutiger, not Eames.
- Option D: Urban planning was the domain of architects like Le Corbusier, not Eames.

Final Answer: Charles Eames is celebrated for furniture using moulded plywood and fibreglass. $\Rightarrow$ B

Answer: (B) Go Back to Q42

Q43.

Solution

Concept — Raymond Loewy (1893–1986): Raymond Loewy is considered the "father of industrial design." He streamlined dozens of iconic products (Coca-Cola bottles, Studebaker cars, Lucky Strike packaging, NASA spacecraft interiors). His design philosophy is encapsulated in his famous quote: *"Never leave well enough alone."* This reflects his belief that design is always improvable.

Step 1 — Match the quote: Option (C) — "Never leave well enough alone" — is Loewy's famous design philosophy quote, and also the title of his autobiography.

Why other options are wrong:

- Option A: "Less is more" is attributed to architect Mies van der Rohe.
- Option B: "Form follows function" is attributed to architect Louis Sullivan.
- Option D: "God is in the details" is attributed to Mies van der Rohe (or Ludwig Wittgenstein).

Final Answer: Raymond Loewy's famous quote is "Never leave well enough alone." $\Rightarrow$ C

Answer: (C) Go Back to Q43

Q44.

Solution

Concept — International Style (1920s–1960s): The International Style (also called the Modern Movement in architecture) was pioneered by architects including Mies van der Rohe, Walter Gropius, and Le Corbusier. Its hallmarks are: flat roofs, extensive glass-and-steel curtain walls, open-plan interiors, and the complete rejection of historical ornament.

Step 1 — Match the characteristics: Option (D) correctly describes the International Style: flat roofs, glass-and-steel construction, open plans, and minimal decoration.

Why other options are wrong:

- Option A: Curved organic forms inspired by nature describe *Organic Architecture* (e.g., Frank Lloyd Wright's later work) or Expressionism — not the International Style.
- Option B: Elaborate decorative ornamentation is the opposite of the International Style's philosophy.
- Option C: Brick and timber construction with pitched roofs describes traditional or vernacular architecture, not the International Style.

Final Answer: The International Style features flat roofs, glass-and-steel walls, and minimal ornamentation. $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q44

Q45.

Solution

Concept — Kerning in Typography: Kerning is the process of adjusting the space between specific pairs of letters (e.g., "AV," "WA," "To") to achieve visually even spacing. It differs from *tracking* (which adjusts spacing uniformly across a whole word or text block) and *leading* (which controls line spacing).

Step 1 — Match the definition: The illustration in the question shows two letters (A and V) with a double-headed arrow indicating the gap between them, labelled "kerning gap." Option (A) correctly defines kerning as adjusting the space between individual letter pairs.

Why other options are wrong:

- Option B: Space between lines of text is called *leading* (or line-height).

- Option C: Overall paragraph indentation is a paragraph formatting property, not kerning.
- Option D: Margin width is a page layout property, not related to kerning.

Final Answer: Kerning adjusts the space between individual letter pairs for visual balance. $\Rightarrow$ A

Answer: (A) Go Back to Q45

Q46.

Solution

Concept — Serif vs. Sans-Serif Typefaces: Serif typefaces have small decorative strokes (serifs) at the ends of letter strokes. Sans-serif typefaces lack these strokes. Times New Roman is one of the most widely recognised serif typefaces, used extensively in books, newspapers, and formal documents.

Step 1 — Identify the serif: Option (B) — Times New Roman — is a serif typeface. It has prominent serifs visible on letters such as 'T,' 'l,' and 'n.'

Why other options are wrong:

- Option A: Arial is a sans-serif typeface (humanist sans-serif, modelled on Helvetica).
- Option C: Futura is a geometric sans-serif typeface designed by Paul Renner in 1927.
- Option D: Gill Sans is a humanist sans-serif typeface designed by Eric Gill in 1928.

Final Answer: Times New Roman is a serif typeface. $\Rightarrow$ B

Answer: (B) Go Back to Q46

Q47.

Solution

Concept — Typeface Classification Systems: The traditional Vox-ATypI classification (widely taught in design education) divides typefaces into historical periods: Old Style (Garamond, Caslon), Transitional (Times New Roman, Baskerville), Modern/Didone (Bodoni, Didot), and Slab Serif (Rockwell, Clarendon) are the four primary historical serif classifications.

Step 1 — Evaluate each grouping: Option (C) — Old Style / Transitional /

Modern / Slab Serif — correctly names the four primary historical typeface classifications from the Vox-ATypI system.

Why other options are wrong:

- Option A: Roman / Italic / Bold are *type styles and weights*, not classification categories.
- Option B: Humanist / Geometric / Grotesque are subcategories within the *sans-serif* classification only.
- Option D: Display / Script / Decorative are specialty/ornamental categories — not the complete primary classification system.

Final Answer: Old Style / Transitional / Modern / Slab Serif is the correct primary typeface classification. $\Rightarrow$ C

Answer: (C) Go Back to Q47

Q48.

Solution

Concept — Qualities of a Good Logo: A professionally designed logo should possess five key qualities (often taught as the "5 principles of logo design"): **Simple** (easy to recognise), **Memorable** (distinctive), **Scalable** (works at any size), **Versatile** (works in any context/colour), and **Timeless** (not tied to a passing trend).

Step 1 — Identify the correct qualities: Option (D) correctly lists all five essential qualities: simplicity, memorability, scalability, versatility, and timelessness.

Why other options are wrong:

- Option A: Complexity makes logos harder to reproduce at small sizes and less memorable.
- Option B: Many colours make logos difficult to reproduce in single-colour situations (e.g., embroidery, stamps).
- Option C: Detailed illustration does not scale well and may lose legibility at small sizes.

Final Answer: A good logo is simple, memorable, scalable, versatile, and timeless. $\Rightarrow$ D

Answer: (D) Go Back to Q48

Q49.

Solution

Concept — Leading in Typography: "Leading" (from the historical practice of inserting strips of *lead* between lines of moveable type) refers to the vertical distance between successive baselines of text. In modern software, it is often called "line spacing" or "line-height." It is distinct from *kerning* (space between letter pairs) and *tracking* (overall letter spacing).

Step 1 — Match the definition: Option (A) correctly identifies leading as controlling the vertical space between lines of text.

Why other options are wrong:

- Option B: Horizontal space between individual characters is *kerning* (pairs) or *tracking* (overall).
- Option C: Column width and margin are page layout properties, not typography leading.
- Option D: Font size (point size) is a separate typographic measurement, not the same as leading.

Final Answer: Leading controls the vertical space between successive lines of text. $\Rightarrow$ A

Answer: (A) Go Back to Q49

Q50.

Solution

Concept — Brand Colour Psychology: Colour psychology in branding associates specific colours with emotions and qualities. **Blue** is the most universally and consistently associated with trust, reliability, professionalism, and security. This is why it is the dominant colour for financial institutions (e.g., Barclays, PayPal, American Express), technology companies (IBM, Dell, Samsung), and healthcare brands.

Step 1 — Identify the trust colour: Option (B) — Blue — is most strongly associated with trust and reliability across cultures and industries.

Why other options are wrong:

- Option A: Red is associated with energy, urgency, passion, and excitement — not trust.
- Option C: Green is associated with nature, health, growth, and environmen-

tal consciousness — not primarily trust/reliability.

- Option D: Yellow is associated with optimism, warmth, happiness, and caution — not trust.

Final Answer: Blue is most strongly associated with trust, reliability, and professionalism in branding. $\Rightarrow$ B

Answer: (B) Go Back to Q50

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	A	2	B	3	C	4	D	5	A
6	B	7	C	8	D	9	A	10	B
11	C	12	D	13	A	14	B	15	C
16	D	17	A	18	B	19	C	20	D
21	A	22	B	23	C	24	D	25	A
26	B	27	C	28	D	29	A	30	B
31	C	32	D	33	A	34	B	35	C
36	D	37	A	38	B	39	C	40	D
41	A	42	B	43	C	44	D	45	A
46	B	47	C	48	D	49	A	50	B