

NID DAT Aptitude

Sample Paper – 7

Duration: 45 Minutes

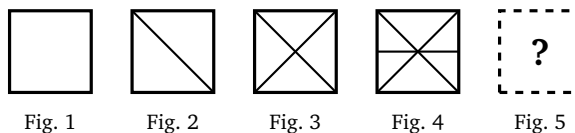
Maximum Marks: 30

Instructions

- This paper contains **22 Multiple Choice Questions** (Single Correct Answer), modelled on the Aptitude (Part A) section of the **NID DAT** entrance examination.
- **Questions 1–14** carry **+1 mark** each; **Questions 15–22** carry **+2 marks** each.
- There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct per question.
- Syllabus: Visual Reasoning, Logical Reasoning, Design Awareness & GK, Design Theory & Principles.
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

SECTION A — Visual Reasoning (Q1–Q8) [1 Mark Each]

Q1. The figure series below shows a square with an increasing number of internal lines added each step. Which of the options (A)–(D) correctly shows the **fifth figure**?



- (A) A square with only the two diagonals forming an X shape (same as Fig. 3).
- (B) A square with the X diagonals and a **vertical** midline only (3 internal lines).



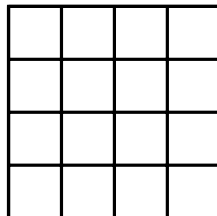
- (C) A square with the X diagonals and a **horizontal** midline only (3 internal lines, same as Fig. 4).
- (D) A square with the X diagonals, a horizontal midline, AND a vertical midline (5 internal lines total).

Q2. Which of the following correctly shows the **left-right mirror image** of the arrow below?



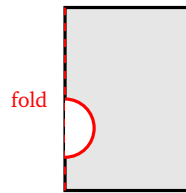
Original (pointing right)

- (A) An arrow pointing to the left ($\leftarrow$).
- (B) An arrow pointing upward ($\uparrow$).
- (C) An arrow pointing to the right (same as original, unchanged).
- (D) An arrow pointing downward ($\downarrow$).
- Q3.** How many squares of **all sizes** (1×1 , 2×2 , 3×3 , and 4×4) can be found in the 4×4 grid below?



- (A) 20
- (B) 30
- (C) 36
- (D) 16
- Q4.** A square sheet of paper is folded **vertically** (the right half is folded over the left half). A **semicircular** bite is then cut from the very centre of the **fold edge** (the left edge of the folded paper, which is the centre-line of the original sheet). When the paper is **completely unfolded**, what shape has been cut out?

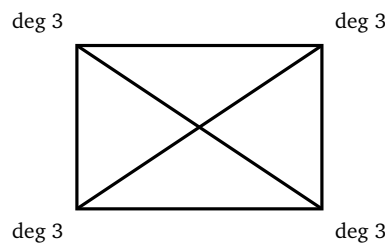




Folded paper (cut shown in red)

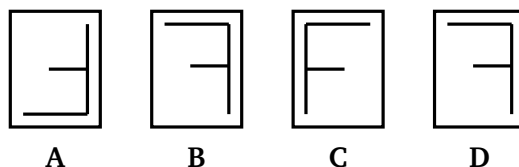
- (A) A semicircle on the left edge of the sheet only.
- (B) Two separate semicircles on the left edge of the sheet.
- (C) **A complete circle in the centre of the original sheet.**
- (D) A full oval in the centre of the sheet.

Q5. Is it possible to trace **all the lines** in the figure below **in one continuous stroke**, without lifting your pen and without retracing any line?



- (A) **No — the figure has four odd-degree vertices, making a single-stroke trace impossible.**
- (B) Yes — start from the top-left corner and it works.
- (C) Yes — any corner is a valid starting point.
- (D) Yes — only if the diagonals are drawn last.

Q6. Four versions of the same asymmetric shape are shown below (A)–(D). Three of them can be obtained by **rotating** the original; one has been **reflected** instead and is the odd one out. Which is it?

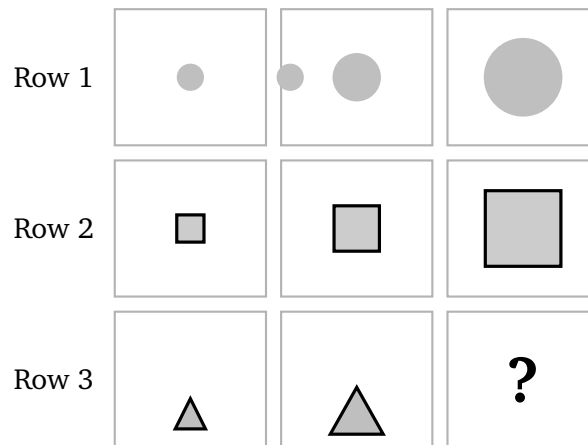


- (A) Figure A



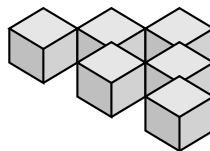
- (B) Figure B
 (C) Figure C
 (D) **Figure D**

Q7. In the 3×3 matrix below, each row shows the **same shape** in small, medium, and large sizes. Which shape correctly completes the **missing cell** (bottom-right)?



- (A) A small triangle
 (B) **A large triangle**
 (C) A medium circle
 (D) A large square

Q8. The isometric view below shows a **staircase** structure (each step is one block wide and one block deep). How many **individual blocks** make up the entire structure?



Isometric view of staircase

- (A) 5
 (B) 4
 (C) **6**



(D) 7

SECTION B — Logical Reasoning (Q9–Q13) [1 Mark Each]

Q9. Choose the word that best completes the analogy:

Bricklayer : Wall :: Author : ?

- (A) Library
- (B) **Book**
- (C) Pen
- (D) Story

Q10. What is the **next number** in the series?

1, 4, 9, 16, 25, ____

- (A) 30
- (B) 32
- (C) 34
- (D) **36**

Q11. **Statements:**

- (1) All designers are creative.
- (2) Some creative people are musicians.

Which of the following is **definitely** a valid conclusion?

- (A) **Some designers may also be musicians.**
- (B) All musicians are designers.
- (C) No designer is a musician.
- (D) All creative people are designers.



- Q12.** If the **1st day** of a month is a **Monday**, what day of the week will the **100th day** from that date be?
- (A) Monday
(B) Wednesday
(C) **Tuesday**
(D) Thursday
- Q13.** If $\star + \blacksquare = 13$ and $\star - \blacksquare = 3$, find the value of $\star \times \blacksquare$.
- (A) 35
(B) **40**
(C) 45
(D) 48

SECTION C — Design Awareness / GK (Q14–Q18) [Q14: 1 Mark | Q15–18: 2 Marks Each]

- Q14.** Victor Papanek's 1971 landmark book advocating **socially responsible and ecologically sound design**, which challenged designers to address real human needs rather than commercial trends, is titled:
- (A) The Design of Everyday Things
(B) How Designers Think
(C) Notes on the Synthesis of Form
(D) **Design for the Real World**
- Q15.** The famous **New York City subway map** redesign of 1972 — celebrated for its rational, geometric layout using the Helvetica typeface — was produced by which design consultancy?
- (A) Pentagram
(B) Chermayeff & Geismar
(C) **Unimark International (led by Massimo Vignelli and Bob Noorda)**



(D) Total Design (Netherlands)

Q16. The **Tulip Chair** (1956), designed with a single pedestal base to ‘clear up the slum of legs’ in modern interiors, was created by:

- (A) **Eero Saarinen**
- (B) Charles Eames
- (C) Arne Jacobsen
- (D) Hans Wegner

Q17. Satyajit Ray (1921–1992) is celebrated internationally as a filmmaker. He is also regarded as an accomplished:

- (A) Sculptor and ceramist
- (B) **Graphic designer, illustrator, and typographer**
- (C) Furniture designer and craftsman
- (D) Textile designer and weaver

Q18. The iconic **Eames Lounge Chair** (1956) was first manufactured for Charles and Ray Eames by which furniture company, which continues to produce it today?

- (A) Knoll
- (B) Fritz Hansen
- (C) Cassina
- (D) **Herman Miller**

SECTION D — Design Theory & Principles (Q19–Q22) [2 Marks Each]

Q19. The Gestalt principle of ‘**Continuity**’ means that:

- (A) **The eye naturally follows smooth, continuous lines or curves in the direction they are already moving.**
- (B) Objects placed close together are perceived as one group.



- (C) Incomplete shapes are perceived as complete by the mind.
- (D) Objects that look similar are grouped together.

Q20. In colour theory, warm colours (red, orange, yellow) are said to ‘**advance**’ because they appear to:

- (A) Recede into the background and appear farther away.
- (B) Blend seamlessly with cool colours.
- (C) **Come forward in space, appearing closer to the viewer.**
- (D) Create a calming and relaxing atmosphere.

Q21. The hidden **arrow** formed by the negative space between the ‘E’ and the ‘x’ in the **FedEx** logo is a classic example of which design concept?

- (A) Gestalt law of similarity
- (B) **Figure-ground reversal (use of negative space)**
- (C) Visual rhythm and repetition
- (D) Typographic hierarchy

Q22. A typeface that has **no** small decorative strokes (serifs) at the ends of letter arms is classified as:

- (A) Serif
- (B) Script
- (C) Slab serif
- (D) **Sans-serif**



Answer Key**Questions 1–10 (1 mark each):**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
D	A	B	C	A	D	B	C	B	D

Questions 11–14 (1 mark each):

Q11	Q12	Q13	Q14
A	C	B	D

Questions 15–22 (2 marks each):

Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22
C	A	B	D	A	C	B	D

Answer distribution: A = 5 B = 6 C = 5 D = 6

Detailed Solutions

Sol. 1.

Solution

Concept — Figure Series (Progressive Internal Lines): Each step adds one new internal line to the square in a fixed order: first diagonal, second diagonal, horizontal midline, vertical midline.

Step 1 — List the pattern:

- Fig. 1: 0 internal lines (empty square).
- Fig. 2: 1 line — one diagonal (top-left to bottom-right).
- Fig. 3: 2 lines — both diagonals (X shape).
- Fig. 4: 3 lines — X plus horizontal midline.
- Fig. 5: 4th line added = **vertical midline** $\Rightarrow$ X + horizontal + vertical = 5 internal lines total (asterisk/snowflake pattern).

Step 2 — Eliminate wrong options:

- Option A: Only X (2 lines) — same as Fig. 3, not a progression.
- Option B: X + vertical only (3 lines) — skips the horizontal midline of Fig. 4.
- Option C: X + horizontal only (3 lines) — same as Fig. 4, no change.
- **Option D:** X + horizontal + vertical (5 internal lines) — correctly adds the vertical midline to Fig. 4. ✓

Final Answer: Square with X diagonals, horizontal midline, AND vertical midline $\Rightarrow$ D

Answer: (D) [Go Back to Q1](#)

Sol. 2.

Solution

Concept — Left-Right Mirror Image: A left-right (lateral) reflection swaps the left and right sides of a figure about a vertical axis. The up-down orientation is preserved.

Step 1 — Identify the original: The original arrow points to the **right** ($\rightarrow$). Its tip is on the right; its tail is on the left.



Step 2 — Apply the mirror: Reflecting left-to-right swaps the tip and tail positions. The tip now falls on the *left* side and the tail on the *right* side. The resulting arrow points to the **left** ($\leftarrow$).

Why other options are wrong:

- Option B ($\uparrow$): An upward arrow is a 90° rotation, not a left-right mirror.
- Option C ($\rightarrow$): Identical to the original; no reflection has occurred.
- Option D ($\downarrow$): A downward arrow is a 270° rotation, not a left-right mirror.

Final Answer: Arrow pointing left $\Rightarrow$ A

Answer: (A) [Go Back to Q2](#)

Sol. 3.

Solution

Concept — Counting Squares in a Grid: In an $n \times n$ grid, the total number of squares of all sizes is $\sum_{k=1}^n (n+1-k)^2$.

Step 1 — Count each size in a 4×4 grid:

- 1×1 squares: $(4) \times (4) = 16$
- 2×2 squares: $(3) \times (3) = 9$
- 3×3 squares: $(2) \times (2) = 4$
- 4×4 squares: $(1) \times (1) = 1$

Step 2 — Total:

$$16 + 9 + 4 + 1 = 30$$

Why other options are wrong:

- Option A (20): Undercount — misses the 2×2 , 3×3 , and 4×4 squares.
- Option C (36): Overcounts; this is 6^2 , which applies to a 5×5 grid.
- Option D (16): Only counts the 1×1 unit squares.

Final Answer: 30 $\Rightarrow$ B

Answer: (B) [Go Back to Q3](#)



Sol. 4.

Solution

Concept — Paper Folding (Symmetry of Cut): When a sheet is folded and a shape is cut from the fold edge, unfolding produces a shape that is *symmetric about the fold line*. The cut on the fold edge becomes two mirrored halves that join together.

Step 1 — Analyse the fold: The square sheet is folded **vertically** (right half over left). The left edge of the folded paper corresponds to the **vertical centre-line** of the original sheet.

Step 2 — Analyse the cut: A *semicircular* bite is cut from the fold edge (centre-line) at mid-height. The semicircle is cut from the centre-line inward (to the right, into the paper).

Step 3 — Unfold: When unfolded, the left half of the original sheet contributes the semicircle. The right half (which was folded on top) contributes a mirror-image semicircle. The two semicircles face each other and together form a **complete circle** located at the exact centre of the original sheet.

Why other options are wrong:

- Option A: A single semicircle on one edge would result if only one layer were cut.
- Option B: Two separate semicircles would occur if the cut were away from the fold edge.
- Option D: An oval would require an elliptical cut, not a semicircular one.

Final Answer: A complete circle in the centre $\Rightarrow$ C

Answer: (C) [Go Back to Q4](#)

Sol. 5.

Solution

Concept — Eulerian Path (Graph Theory): A connected graph has an *Eulerian path* (a single-stroke traversal of all edges without retracing) if and only if it has **exactly 0 or 2 vertices of odd degree**.

Step 1 — Find the degree of each vertex:

The figure is a rectangle with both diagonals drawn. It has 4 corner vertices. At each corner, **3 edges** meet (two sides of the rectangle and one diagonal):



- Top-left: rectangle-top + rectangle-left + diagonal = degree 3 (odd)
- Top-right: rectangle-top + rectangle-right + diagonal = degree 3 (odd)
- Bottom-left: rectangle-bottom + rectangle-left + diagonal = degree 3 (odd)
- Bottom-right: rectangle-bottom + rectangle-right + diagonal = degree 3 (odd)

Step 2 — Apply the Euler condition: There are 4 odd-degree vertices. Since this is more than 2, an Eulerian path does **not** exist — it is **impossible** to trace all lines in one continuous stroke without retracing.

Why other options are wrong:

- Options B, C, D: All claim the trace is possible. They contradict Euler's theorem; the starting vertex does not matter when there are 4 odd-degree vertices.

Final Answer: Not possible (four odd-degree vertices) $\Rightarrow$ A

Answer: (A) [Go Back to Q5](#)

Sol. 6.

Solution

Concept — Rotation vs. Reflection (Odd One Out): A rotation preserves the *handedness* (chirality) of a figure. A reflection reverses it. An asymmetric shape can never be made to look like its mirror image through rotation alone.

Step 1 — Identify the original F-shape: The original has a vertical bar on the *left* with two horizontal bars extending to the *right* (like the capital letter F).

Step 2 — Check each option:

- Figure A: Vertical bar along the *bottom*, horizontal bars extending *upward on the right* — this is a 90° CW rotation. ✓
- Figure B: Vertical bar on the *right*, horizontal bars extending to the *left at top and middle* — this is a 180° rotation. ✓
- Figure C: Vertical bar along the *top*, horizontal bars extending *downward on the left* — this is a 270° CW rotation. ✓
- Figure D: Vertical bar on the *right*, bars extending *left* at the same relative positions as a mirror image of the original (left-right flip). This **cannot** be achieved by any rotation of the original F-shape; it is a **reflected** version. ✗



Why other options are wrong:

- Figures A, B, C are all valid rotations of the original F-shape.

Final Answer: Figure D is the reflected (odd) one $\Rightarrow$ D

Answer: (D) [Go Back to Q6](#)

Sol. 7.

Solution

Concept — Matrix Pattern (Systematic Rule): Identify the rule that governs rows (or columns) and apply it to find the missing element.

Step 1 — Identify the row rule: Each row shows the *same shape* in three increasing sizes: small (col 1), medium (col 2), large (col 3).

Step 2 — Identify shapes per row:

- Row 1: Circles — small, medium, large.
- Row 2: Squares — small, medium, large.
- Row 3: Triangles — small, medium, ?

Step 3 — Apply the rule: The missing cell must be a **large triangle** (following the small $\rightarrow$ medium $\rightarrow$ large progression of Row 3).

Why other options are wrong:

- Option A (small triangle): Repeats the size from col 1; violates the increasing-size rule.
- Option C (medium circle): Wrong shape (circles belong to Row 1, not Row 3).
- Option D (large square): Wrong shape (squares belong to Row 2, not Row 3).

Final Answer: Large triangle $\Rightarrow$ B

Answer: (B) [Go Back to Q7](#)



Sol. 8.

Solution

Concept — 3D Block Counting (Isometric View): Count blocks column by column, assuming each visible face represents one block and the structure is one block deep.

Step 1 — Identify each column:

- Left column (top step): 1 block.
- Middle column (second step): 2 blocks stacked.
- Right column (bottom step, tallest): 3 blocks stacked.

Step 2 — Total count:

$$1 + 2 + 3 = 6 \text{ blocks}$$

Why other options are wrong:

- Option A (5): Undercounts — misses one block, possibly in the tallest column.
- Option B (4): Significant undercount; only reaches 4 by misidentifying column heights.
- Option D (7): Overcount — may count a non-existent hidden block.

Final Answer: 6 blocks $\Rightarrow$

Answer: (C) [Go Back to Q8](#)

Sol. 9.

Solution

Concept — Word Analogy (Creator:Creation): Identify the relationship between the given pair and apply the same relationship to the second pair.

Step 1 — Analyse the given pair: Bricklayer : Wall. A bricklayer is a skilled worker who *creates/builds* a wall. The relationship is **Creator** $\rightarrow$ **Product created**.

Step 2 — Apply to the second pair: Author : ? An author *creates/writes* a **Book**. The product of an author's work is a book.

Why other options are wrong:



- Option A (Library): A library is where books are stored, not the product the author creates.
- Option C (Pen): A pen is the *tool* an author uses, not the product.
- Option D (Story): A story is a component *within* a book, but a *book* is the complete authored product. (An author writes a book, not just a story in isolation.)

Final Answer: Book $\Rightarrow$

Answer: (B) [Go Back to Q9](#)

Sol. 10.

Solution

Concept — Number Series (Perfect Squares): Recognise that each term is a perfect square: n^2 .

Step 1 — Verify the pattern:

$$1 = 1^2, \quad 4 = 2^2, \quad 9 = 3^2, \quad 16 = 4^2, \quad 25 = 5^2$$

Each term is the square of the next natural number.

Step 2 — Find the next term: The 6th term = $6^2 = 36$.

Why other options are wrong:

- Option A (30): $25 + 5 = 30$; this would imply differences increasing by 1 in the differences, but the actual next perfect square is 36.
- Option B (32): $25 + 7 = 32$; incorrect.
- Option C (34): Not a perfect square; $5^2 = 25$ and $6^2 = 36$, so 34 falls in between with no series justification.

Final Answer: 36 $\Rightarrow$

Answer: (D) [Go Back to Q10](#)



Sol. 11.

Solution

Concept — Syllogism (Logical Deduction): Derive only what is *necessarily* true from the given premises. Avoid drawing conclusions that go beyond what the premises guarantee.

Step 1 — Map out the premises:

- P1: All designers $\subset$ Creative people.
- P2: Some creative people $\in$ Musicians (i.e., there is an overlap).

Step 2 — Test each conclusion:

- **Option A** — “Some designers may also be musicians”: Since all designers are creative, and some creative people are musicians, it is *possible* (but not guaranteed) that the musicians in P2 include some designers. This is a valid *possible* conclusion. ✓
- **Option B** — “All musicians are designers”: Neither premise implies anything about all musicians. ✗
- **Option C** — “No designer is a musician”: We cannot rule this out, but nor can we assert it. ✗
- **Option D** — “All creative people are designers”: P1 says all designers are creative, not the converse. ✗

Note: Option A uses “may” (possibility), which is the most logically defensible conclusion from these premises.

Final Answer: Some designers may also be musicians $\Rightarrow$ A

Answer: (A) [Go Back to Q11](#)

Sol. 12.

Solution

Concept — Calendar / Day of Week Calculation: Use modular arithmetic (mod 7) to find the day.

Step 1 — Set up the calculation: Day 1 is **Monday**. Day 100 is $100 - 1 = 99$ days *after* Day 1.



Step 2 — Apply modular arithmetic:

$$99 \div 7 = 14 \text{ weeks remainder } 1$$

So Day 100 is **1 day after Monday = Tuesday**.

Step 3 — Verify: $14 \times 7 = 98$ days after Day 1 is also a Monday (Day 99 is Monday). Adding 1 more day: Day 100 is Tuesday.

Why other options are wrong:

- Option A (Monday): Would require $99 \equiv 0 \pmod{7}$; but $99 = 14 \times 7 + 1 \neq 0$.
- Option B (Wednesday): Would require remainder 2; $99 \div 7$ gives remainder 1, not 2.
- Option D (Thursday): Would require remainder 3; incorrect.

Final Answer: Tuesday $\Rightarrow$ C

Answer: (C) [Go Back to Q12](#)

Sol. 13.

Solution

Concept — Symbol Arithmetic (Simultaneous Equations): Treat each symbol as an unknown variable and solve.

Step 1 — Set up equations:

$$\star + \blacksquare = 13 \quad \dots (1)$$

$$\star - \blacksquare = 3 \quad \dots (2)$$

Step 2 — Solve: Add equations (1) and (2):

$$2\star = 16 \implies \star = 8$$

Subtract equation (2) from (1):

$$2\blacksquare = 10 \implies \blacksquare = 5$$



Step 3 — Find the product:

$$\star \times \blacksquare = 8 \times 5 = 40$$

Why other options are wrong:

- Option A (35): Would require $\star = 7$, $\blacksquare = 5$ but then $\star + \blacksquare = 12 \neq 13$.
- Option C (45): Would require $\star = 9$, $\blacksquare = 5$ but then $\star - \blacksquare = 4 \neq 3$.
- Option D (48): Would require $\star = 8$, $\blacksquare = 6$ but then $\star - \blacksquare = 2 \neq 3$.

Final Answer: $40 \Rightarrow$ B

Answer: (B) [Go Back to Q13](#)

Sol. 14.

Solution

Concept — Design History (Victor Papanek): Knowledge of landmark design texts and their authors is essential for NID DAT.

Step 1 — About the book: *Design for the Real World: Human Ecology and Social Change* was published by **Victor Papanek** in 1971. It argued that designers have a moral responsibility to address the needs of the world's majority — not just wealthy consumers — and to design with ecological awareness.

Why other options are wrong:

- Option A (*The Design of Everyday Things*): By **Donald Norman** (1988); focuses on user-centred design and cognitive psychology.
- Option B (*How Designers Think*): By **Bryan Lawson**; about the design thinking process.
- Option C (*Notes on the Synthesis of Form*): By **Christopher Alexander** (1964); about form and context in design.

Final Answer: Design for the Real World $\Rightarrow$ D

Answer: (D) [Go Back to Q14](#)



Sol. 15.

Solution

Concept — Graphic Design History (NYC Subway Map): Landmark public information design projects are important NID DAT knowledge.

Step 1 — Historical fact: The 1972 New York City subway map redesign was led by **Massimo Vignelli** and **Bob Noorda** of **Unimark International**. Their design was celebrated for its schematic, geometric clarity, using only horizontal, vertical, and 45° diagonal lines, and exclusively the **Helvetica** typeface.

Why other options are wrong:

- Option A (Pentagram): A major UK/US design consultancy, but not responsible for this specific map.
- Option B (Chermayeff & Geismar): Famous for corporate identity work (Chase Bank logo, NBC peacock logo), not the subway map.
- Option D (Total Design): A pioneering Dutch graphic design firm; not involved in the NYC subway project.

Final Answer: Unimark International ⇒

Answer: (C) [Go Back to Q15](#)

Sol. 16.

Solution

Concept — Furniture Design History (Tulip Chair): Classic mid-century modern furniture designers are regularly tested in NID DAT.

Step 1 — Historical fact: The **Tulip Chair** (also called the Pedestal Chair), model 151, was designed by **Eero Saarinen** in 1956 for **Knoll**. Saarinen's stated goal was to "clear up the slum of legs in the home" by eliminating the visual clutter of multiple chair legs in favour of a single graceful pedestal base.

Why other options are wrong:

- Option B (Charles Eames): Designed the Eames Lounge Chair, DSW Shell Chair, etc., but not the Tulip Chair.
- Option C (Arne Jacobsen): Danish designer; known for the Egg Chair and Swan Chair (also 1958).
- Option D (Hans Wegner): Danish designer; known for the Wishbone Chair and Round Chair.



Final Answer: Eero Saarinen ⇒ A

Answer: (A) [Go Back to Q16](#)

Sol. 17.

Solution

Concept — Indian Design History (Satyajit Ray): Satyajit Ray's multidisciplinary contributions beyond filmmaking are important cultural knowledge for NID DAT.

Step 1 — Historical fact: Satyajit Ray (1921–1992) was not only a legendary filmmaker (the *Apu Trilogy*, *Charulata*, *Nayak*) but also a distinguished **graphic designer, illustrator, and typographer**. He designed the visual identity of his own films — posters, titles, book covers — and created the iconic **Ray Roman** typeface. He also illustrated books and wrote extensively.

Why other options are wrong:

- Option A (Sculptor and ceramist): No documented practice in these fields.
- Option C (Furniture designer): Not an area associated with Ray.
- Option D (Textile designer and weaver): Not an area associated with Ray.

Final Answer: Graphic designer, illustrator, and typographer ⇒ B

Answer: (B) [Go Back to Q17](#)

Sol. 18.

Solution

Concept — Furniture Design History (Eames Lounge Chair): Classic furniture manufacturer-designer partnerships are frequently tested in design awareness sections.

Step 1 — Historical fact: The Eames Lounge Chair and Ottoman (Model 670 and 671) was designed by **Charles and Ray Eames** and first produced in **1956** by **Herman Miller**, Inc. (USA). Herman Miller continues to manufacture it under license to this day, alongside Vitra (Europe & Asia). The chair features moulded plywood shells with leather cushions.

Why other options are wrong:



- Option A (Knoll): Produces Eames-style seating for some markets but is primarily known for Saarinen, Bertoia, and Mies van der Rohe furniture. The Eames Lounge Chair is a Herman Miller product.
- Option B (Fritz Hansen): A Danish manufacturer; known for Arne Jacobsen's Egg and Swan chairs.
- Option C (Cassina): An Italian manufacturer; known for Le Corbusier and Mackintosh designs.

Final Answer: Herman Miller $\Rightarrow$ D

Answer: (D) [Go Back to Q18](#)

Sol. 19.

Solution

Concept — Gestalt Principles (Continuity): The Gestalt principles describe how the human visual system groups and organises visual elements.

Step 1 — Define Continuity: The Gestalt principle of **Continuity** (also called “Good Continuation”) states that the eye is naturally inclined to follow smooth, uninterrupted paths, lines, or curves in the direction they are already travelling. When lines intersect, the eye tends to continue along the smoothest path rather than making a sharp turn.

Step 2 — Distinguish from other Gestalt principles:

- Option B describes **Proximity** (grouping by closeness).
- Option C describes **Closure** (completing incomplete shapes mentally).
- Option D describes **Similarity** (grouping by shared visual properties).

Final Answer: The eye follows smooth continuous lines $\Rightarrow$ A

Answer: (A) [Go Back to Q19](#)



Sol. 20.

Solution

Concept — Colour Theory (Warm Colours Advance): Colour has both emotional and spatial perceptual effects in design.

Step 1 — Explain the advancing property: Warm colours (red, orange, yellow) have **longer wavelengths** in the visible spectrum. The human eye needs to adjust its focal length more to bring these colours into sharp focus, creating a perceptual effect where these colours appear to **come forward** (advance) in the visual plane — they seem *closer* to the viewer than they actually are.

Step 2 — Contrast with cool colours: Cool colours (blue, green, violet) have shorter wavelengths and appear to **recede** — they seem farther away or to push back into the background. This is why distant mountains appear blue.

Why other options are wrong:

- Option A: Describes the effect of cool colours (receding), not warm ones.
- Option B: Blending with cool colours is not related to the advance/recede property.
- Option D: Calming effects are associated with cool blues and greens, not warm advancing colours.

Final Answer: Come forward, appearing closer ⇒ C

Answer: (C) [Go Back to Q20](#)

Sol. 21.

Solution

Concept — Negative Space / Figure-Ground Reversal: A core principle in graphic design where the background (negative) space is shaped to convey additional meaning.

Step 1 — About the FedEx logo: The FedEx logo (designed by Lindon Leader at Landor Associates in 1994) uses the negative (empty) space between the letters 'E' and 'x' to form a **hidden forward-pointing arrow**. This is invisible at first glance but, once seen, powerfully reinforces the idea of speed and forward direction.

Step 2 — Identify the concept: This technique is called **figure-ground reversal** — the “ground” (background/negative space) is given a meaningful shape, re-



versing the conventional figure-ground relationship. It is also broadly described as the creative use of **negative space**.

Why other options are wrong:

- Option A (Gestalt similarity): Similarity groups elements that share visual properties; no grouping is at work in the FedEx arrow.
- Option C (Visual rhythm and repetition): Refers to repeated patterns creating a sense of movement; not applicable here.
- Option D (Typographic hierarchy): Refers to the organisation of text by importance (size, weight, etc.); unrelated to the hidden arrow.

Final Answer: Figure-ground reversal / negative space ⇒ **B**

Answer: (B) [Go Back to Q21](#)

Sol. 22.

Solution

Concept — Typography (Typeface Classification): Typefaces are classified by the presence or absence of serifs and the style of their stroke.

Step 1 — Define the terms:

- **Serif:** Has small decorative strokes (serifs) at the ends of letter arms. Examples: Times New Roman, Garamond, Georgia.
- **Sans-serif:** Has *no* serifs — clean, unadorned letter endings. Examples: Helvetica, Arial, Futura, Gill Sans.
- **Script:** Mimics handwriting or calligraphy. Examples: Lobster, Pacifico.
- **Slab serif:** Has thick, block-like serifs. Examples: Rockwell, Clarendon, Courier.

Step 2 — Apply to the question: A typeface with *no* decorative strokes at the ends of letter arms is **sans-serif** (from French: *sans* = without).

Why other options are wrong:

- Option A (Serif): The opposite — serifs are *present*.
- Option B (Script): Mimics handwriting; irrelevant to the presence/absence of serifs.
- Option C (Slab serif): Has serifs, specifically thick rectangular ones.



Final Answer: Sans-serif $\Rightarrow$

Answer: (D) [Go Back to Q22](#)

