

IDA CLASSES

Institute of Design & Art, Bhubaneswar

NID DAT — Mock Question Set

10 practice questions across the NID Design Aptitude Test pattern

Instructions: This mock set mirrors the range of question types seen in the NID DAT prelims/mains — observation, drawing & visualization, logical reasoning, design awareness, general knowledge, memory, storytelling, creative problem-solving, verbal ability, and situational design thinking. Attempt each question within the suggested time before checking model answers with your mentor.

Q1. Observation & Design Sensitivity

10 marks

Look at an everyday object: a folding umbrella. List five design flaws you notice in a typical folding umbrella, and suggest one simple modification for each that would improve its usability during heavy rain and strong wind.

Q2. Visualization & Drawing

20 marks

Imagine a crumpled piece of paper lying on a table, lit by a single light source from the top-left. Draw the crumpled paper showing at least six distinct folds/creases, along with accurate shading and shadow to convey its three-dimensional form.

Q3. Logical & Analytical Reasoning

10 marks

A sequence of shapes is given:

■ → ■ → ■ → ■■ → ■■ → ■■ → ■■■ → ?

Identify the next shape(s) in the sequence and explain the logic you used to arrive at your answer.

Q4. Design Awareness

10 marks

Name one traditional Indian craft form (e.g., Warli painting, Bidriware, Channapatna toys) and explain, in 100 words, how its design principles (form, material, or technique) could be adapted to solve a modern, everyday problem.

Q5. General Knowledge — Current Affairs

5 marks

Name one design, art, or architecture-related event, exhibition, or government initiative from India that has been in the news in the last six months. Briefly explain (in 50 words) why it is significant from a design perspective.

Q6. Memory & Perception

10 marks

You are shown an image of a busy street market for 30 seconds and then asked to recall it. List at least eight distinct objects, people, or activities you would expect to notice and remember from such a scene, and explain which details tend to be recalled first and why.

Q7. Storytelling Through Sketches

20 marks

Using a sequence of four simple sketches (stick figures/basic shapes are acceptable), narrate a short story titled 'The Missing Umbrella on a Rainy Day.' Each sketch should represent one stage of the story.

Q8. Creative Problem Solving

15 marks

Design a simple, low-cost solution to help elderly people safely carry grocery bags up a flight of stairs. Sketch your idea and briefly explain (in 60 words) the materials you would use and why.

Q9. Verbal Ability

5 marks

Complete the analogy and explain your reasoning:

Potter : Clay :: Weaver : ?

Explain in one line why your chosen word completes the analogy correctly.

Q10. Situation-Based Design Thinking

15 marks

You are asked to redesign the packaging of a common household item (e.g., a bar of soap) to reduce plastic waste without increasing its cost. Sketch your concept and list three specific design decisions you made and the reasoning behind each.

IDA CLASSES

Institute of Design & Art, Bhubaneswar

NID DAT — Mock Question Set 3

15 fresh practice questions across the NID Design Aptitude Test pattern

Instructions: This is Mock Question Set 3, with all-new questions distinct from previous sets — covering observation & redesign, visualization, logical/pattern reasoning, design awareness, general knowledge, memory, storytelling, sustainability, ergonomics, and future-scenario thinking. Attempt each question within a suggested time limit before reviewing with your mentor.

Q1. Object Redesign

15 marks

Choose a common office item: a stapler. Identify two problems users commonly face with its current design and sketch a redesigned version that solves both problems.

Q2. Visualization — Exploded View

20 marks

Draw an exploded view of a wristwatch, showing at least four separate components (e.g., strap, dial, casing, winding knob) pulled apart along a common axis, with labels.

Q3. Pattern & Color Sequence

10 marks

A sequence alternates shape and color: Red circle → Blue square → Yellow triangle → Red square → Blue triangle → Yellow circle → ?

Identify the next term and explain the two independent rules (shape cycle and color cycle) governing the sequence.

Q4. Design in Nature

10 marks

Choose one example from nature (e.g., a honeycomb, a cactus, a kingfisher's beak) and explain, in 100 words, one specific structural or functional principle it demonstrates that has inspired a real-world product or building.

Q5. General Knowledge — Indian Architecture

5 marks

Name one Indian monument or architectural site (e.g., Hawa Mahal, Konark Sun Temple, Rani ki Vav) and briefly explain, in 50 words, one specific design or engineering feature that makes it notable.

Q6. Rapid Visual Recall

10 marks

You are shown a busy railway station platform for 20 seconds. List at least eight objects, signs, or activities you would expect to notice, and explain which details are usually recalled first and why.

Q7. Comic Strip Narrative

20 marks

Using four simple sketches, narrate a short story titled 'The Broken Umbrella.' Each panel should show one clear stage of the story without using any text.

Q8. Constraint-Based Design

15 marks

Design a multipurpose piece of furniture for a shared hostel room (bed + storage + study space combined). Sketch your idea and explain, in 60 words, how it saves space without compromising comfort.

Q9. Verbal Reasoning

5 marks

Complete the analogy and explain your reasoning:

Painter : Brush :: Carpenter : ?

Explain in one line why your chosen word completes the analogy correctly.

Q10. Sustainable Design Scenario

15 marks

Design an eco-friendly packaging solution for street food vendors to replace plastic plates and cutlery. Sketch your concept and list three specific design decisions (material, cost, ease of disposal) with your reasoning for each.

Q11. Texture & Material Sensitivity

10 marks

List five packaging materials you encounter daily and describe, for each, one texture-based quality and one product category where that texture is a design advantage.

Q12. Symbol Design

10 marks

Design a simple, text-free symbol/icon for 'No Photography' to be used in a museum. Sketch it and explain, in 40 words, why your visual choices communicate the restriction instantly.

Q13. Optical Illusion Analysis

10 marks

Sketch the Muller-Lyer illusion (two lines of equal length with differently angled arrowheads at their ends). Explain in 50 words why the human eye perceives the lines as unequal.

Q14. Ergonomics in Everyday Design

15 marks

Examine the design of a typical office chair used in Indian workplaces. Identify three ergonomic problems it may cause during long working hours, and propose one design change for each.

Q15. Future Scenario Design

15 marks

Imagine the year is 2050 and personal flying vehicles are common in Indian cities. Sketch your concept for a compact flying vehicle and describe, in 60 words, two design considerations you accounted for (safety, parking, or noise).

IDA CLASSES

Institute of Design & Art, Bhubaneswar

NID DAT — Mock Question Set 2

15 fresh practice questions across the NID Design Aptitude Test pattern

Instructions: This is a fresh mock set (Set 2), covering different questions from Set 1, across observation & redesign, visualization, logical reasoning, design history & awareness, general knowledge, memory, storytelling, sustainability, ergonomics, and future-scenario thinking. Attempt each question within a suggested time limit before reviewing with your mentor.

Q1. Object Redesign

15 marks

Choose any common kitchen utensil (e.g., a ladle or a peeler). Identify two problems users commonly face with its current design and sketch a redesigned version that solves both problems.

Q2. Visualization — Cutaway View

20 marks

Draw a cutaway (cross-sectional) view of a thermos flask, showing at least three internal layers or components and labeling each one.

Q3. Series Completion

10 marks

A number-shape hybrid sequence is given:

1 circle → 2 squares → 3 triangles → 4 circles → 5 squares → ?

Identify the next term in the sequence and explain the two rules (numeric and shape-based) governing it.

Q4. Design in Nature

10 marks

Choose one example from nature (e.g., a beehive, a spider web, a lotus leaf) and explain, in 100 words, one specific design or engineering principle it demonstrates that has inspired human-made products.

Q5. General Knowledge — Design History

5 marks

Name one design movement or design school (Indian or global — e.g., Bauhaus, Arts and Crafts Movement) and briefly explain, in 50 words, one idea from it that still influences product or graphic design today.

Q6. Rapid Visual Recall

10 marks

You are shown a busy airport departure lounge for 20 seconds. List at least eight objects, signs, or activities you would expect to notice, and explain which type of detail (color, motion, or text) tends to be remembered first.

Q7. Comic Strip Narrative

20 marks

Using four simple sketches, narrate a short story titled 'The Late Delivery.' Each panel should show one clear stage of the story without using any text.

Q8. Constraint-Based Design

15 marks

Design a foldable study desk for a student living in a very small room (under 80 sq. ft.). Sketch your idea and explain, in 60 words, how your design saves space without sacrificing usability.

Q9. Verbal Reasoning

5 marks

Complete the analogy and explain your reasoning:

Sculptor : Chisel :: Calligrapher : ?

Explain in one line why your chosen word completes the analogy correctly.

Q10. Sustainable Design Scenario

15 marks

You are asked to design a reusable carry bag for vegetable vendors in a local market to replace single-use plastic bags. Sketch your concept and list three specific design decisions (material, form, cost) and your reasoning for each.

Q11. Texture & Material Sensitivity

10 marks

List five materials found in your home and describe, for each, one specific texture-based quality (rough, smooth, grainy, etc.) and one product category where that texture would be a design advantage.

Q12. Symbol Design

10 marks

Design a simple, text-free symbol/icon that could be used on a public signboard to indicate 'Silent Zone' in a library or hospital. Sketch it and explain, in 40 words, why your visual choices communicate silence instantly.

Q13. Optical Illusion Analysis

10 marks

Sketch a simple optical illusion (e.g., two lines of equal length that appear different, or a shape that seems to shift). Explain in 50 words why the human eye perceives it incorrectly.

Q14. Ergonomics in Everyday Design

15 marks

Examine the design of a typical school backpack. Identify three ergonomic problems it may cause for children, and propose one design change for each to reduce strain.

Q15. Future Scenario Design

15 marks

Imagine the year is 2040 and most deliveries in Indian cities are made by small autonomous robots instead of humans. Sketch your concept for such a delivery robot and describe, in 60 words, two design considerations you accounted for (safety, size, or navigation).

IDA CLASSES

Institute of Design & Art, Bhubaneswar

NID DAT — Mock Question Set 4

15 fresh practice questions across the NID Design Aptitude Test pattern

Instructions: This is Mock Question Set 4, with all-new questions distinct from previous sets — covering observation & redesign, visualization, logical/pattern reasoning, design awareness, general knowledge, memory, storytelling, sustainability, ergonomics, and future-scenario thinking. Attempt each question within a suggested time limit before reviewing with your mentor.

Q1. Object Redesign

15 marks

Choose a common household item: a wall clock. Identify two problems users commonly face with its current design (readability, winding, wall-mounting, etc.) and sketch a redesigned version that solves both.

Q2. Visualization — X-ray View

20 marks

Draw an X-ray-style view of a sports shoe, showing at least three internal layers or components (sole cushioning, arch support, lacing structure) with labels.

Q3. Alphanumeric Pattern

10 marks

A sequence is given: A1 → C3 → E5 → G7 → ?

Identify the next term in the sequence and explain the two separate rules (for the letter and the number) governing it.

Q4. Design in Nature

10 marks

Choose one example from nature (e.g., a lotus leaf's water-repelling surface, a bird's hollow bones, a spider web's tensile strength) and explain, in 100 words, how this principle could inspire a new product design.

Q5. General Knowledge — Indian Craft Heritage

5 marks

Name one Indian craft or textile that holds a GI (Geographical Indication) tag (e.g., Pochampally Ikat, Kutch embroidery, Odisha Pattachitra) and briefly explain, in 50 words, what makes it unique.

Q6. Rapid Visual Recall

10 marks

You are shown a busy hospital waiting room for 20 seconds. List at least eight objects, signs, or activities you would expect to notice, and explain which type of detail tends to be remembered first.

Q7. Comic Strip Narrative

20 marks

Using four simple sketches, narrate a short story titled 'The Lost Keys.' Each panel should show one clear stage of the story without using any text.

Q8. Constraint-Based Design*15 marks*

Design a compact vertical garden setup for a small urban balcony (under 15 sq. ft.). Sketch your idea and explain, in 60 words, how your design maximizes plant growth within the limited space.

Q9. Verbal Reasoning*5 marks*

Complete the analogy and explain your reasoning:

Author : Pen :: Sculptor : ?

Explain in one line why your chosen word completes the analogy correctly.

Q10. Sustainable Design Scenario*15 marks*

Design an eco-friendly clay or reusable diya (lamp) that could replace disposable ones during festivals. Sketch your concept and list three specific design decisions (material, form, reusability) with your reasoning.

Q11. Texture & Material Sensitivity*10 marks*

List five flooring materials commonly used in Indian homes and describe, for each, one texture-based quality and one context (room type) where that texture is most suitable.

Q12. Symbol Design*10 marks*

Design a simple, text-free symbol/icon for 'Wet Floor' to be used in a shopping mall. Sketch it and explain, in 40 words, why your visual choices communicate caution instantly.

Q13. Optical Illusion Analysis*10 marks*

Sketch the Ponzo illusion (two identical horizontal lines placed between converging diagonal lines, appearing different in length). Explain in 50 words why the human eye perceives them incorrectly.

Q14. Ergonomics in Everyday Design*15 marks*

Examine the design of a typical laptop bag used by students. Identify three ergonomic problems it may cause during daily commutes, and propose one design change for each.

Q15. Future Scenario Design*15 marks*

Imagine the year is 2050 and small underwater habitats exist along India's coastline for research and tourism. Sketch your concept for such a habitat and describe, in 60 words, two design considerations you accounted for (pressure, light, or access).

IDA CLASSES

Institute of Design & Art, Bhubaneswar

NID DAT — Mock Question Set 5

15 fresh practice questions across the NID Design Aptitude Test pattern

Instructions: This is Mock Question Set 5, with all-new questions distinct from previous sets — covering observation & redesign, visualization, logical/pattern reasoning, design awareness, general knowledge, memory, storytelling, sustainability, ergonomics, and future-scenario thinking. Attempt each question within a suggested time limit before reviewing with your mentor.

Q1. Object Redesign

15 marks

Choose a common item: a tiffin box (lunch box). Identify two problems users commonly face with its current design (leakage, stacking, cleaning) and sketch a redesigned version that solves both.

Q2. Visualization — Cross-Section

20 marks

Draw a cross-sectional view of a ballpoint pen, showing at least three internal components (ink cartridge, spring mechanism, tip) with labels.

Q3. Visual-Numeric Pattern

10 marks

A sequence of dot-patterns is given: 1 dot → 3 dots (triangle) → 6 dots (triangle) → 10 dots (triangle) → ?

Identify the number of dots in the next term and explain the mathematical rule governing the pattern.

Q4. Design in Nature

10 marks

Choose one example from nature (e.g., a peacock feather's pattern, a termite mound's ventilation, a chameleon's camouflage) and explain, in 100 words, one specific principle it demonstrates that could inspire a product or building design.

Q5. General Knowledge — Indian Designers

5 marks

Name one well-known Indian designer or architect (e.g., Charles Correa, Ray sisters at NID, Sabyasachi Mukherjee) and briefly explain, in 50 words, one contribution they are known for.

Q6. Rapid Visual Recall

10 marks

You are shown a busy wedding function hall for 20 seconds. List at least eight objects, people, or activities you would expect to notice, and explain which details tend to be remembered first.

Q7. Comic Strip Narrative

20 marks

Using four simple sketches, narrate a short story titled 'The New Neighbor.' Each panel should show one clear stage of the story without using any text.

Q8. Constraint-Based Design*15 marks*

Design a compact, all-in-one kitchen setup for a tiny studio apartment (under 100 sq. ft. total). Sketch your idea and explain, in 60 words, how your design fits cooking, storage, and washing into the space.

Q9. Verbal Reasoning*5 marks*

Complete the analogy and explain your reasoning:

Farmer : Plough :: Fisherman : ?

Explain in one line why your chosen word completes the analogy correctly.

Q10. Sustainable Design Scenario*15 marks*

Design a reusable water bottle system for schools to reduce single-use plastic bottle waste. Sketch your concept and list three specific design decisions (material, size, cleaning ease) with your reasoning.

Q11. Texture & Material Sensitivity*10 marks*

List five fabrics commonly used in Indian clothing and describe, for each, one texture-based quality and one context (season or occasion) where that texture is most suitable.

Q12. Symbol Design*10 marks*

Design a simple, text-free symbol/icon to distinguish an 'Organic Waste' bin from other waste bins. Sketch it and explain, in 40 words, why your visual choices communicate the category instantly.

Q13. Optical Illusion Analysis*10 marks*

Sketch the Ebbinghaus illusion (a central circle surrounded by larger circles appears smaller than the same circle surrounded by smaller circles). Explain in 50 words why the human eye misjudges the size.

Q14. Ergonomics in Everyday Design*15 marks*

Examine the design of a typical classroom desk-chair used in Indian schools. Identify three ergonomic problems it may cause for growing children, and propose one design change for each.

Q15. Future Scenario Design*15 marks*

Imagine the year is 2050 and Indian coastal cities are adapting housing to rising sea levels. Sketch your concept for a climate-adaptive home and describe, in 60 words, two design considerations you accounted for (flooding, materials, or mobility).