

NID DAT PRELIMS 2027

B.Des Mock Test Series

30 Full-Length Mock Tests · Answer Key · Worked Solutions

Tests	30 mock tests (Test 1 to Test 30)
Mode and time	Pen-and-paper style · 3 hours per test
Total marks	100 per test, no negative marking
Section A (30 marks)	22 objective questions: Q1-14 carry 1 mark each (14), Q15-22 carry 2 marks each (16)
Section B (70 marks)	4 subjective drawing and design questions: Q23 (15), Q24 (20), Q25 (15), Q26 (20)
Topics	Visualisation and spatial ability · logical and analytical reasoning · design awareness, colour, typography, craft and architecture · drawing, observation, design thinking, storytelling
Included for every test	Answer key for Section A, a worked solution for every question, and an approach plus marking rubric for each Section B question

About the pattern. NID has not published a detailed paper structure that I could confirm, and websites disagree. Reports agree on a 100-mark, 3-hour, pen-and-paper paper with no negative marking, an objective Section A worth roughly 20 to 30 marks (one site says 19 questions for 25 marks) and a subjective Section B worth roughly 70 to 80 marks. These mocks use 22 MCQs (30 marks) plus four subjective questions (70 marks). Others say the 2026 Prelims was drawing and design-thinking questions only, with the objective section removed, and that the objective section may or may not return. These mocks follow the first description because it covers both kinds of skill. If your paper turns out to be subjective only, use Section B of each test and ignore Section A. Prelims is a qualifier for shortlisting to Mains (Studio Sensitivity Test and In-Person Sensitivity Test), so it does not count in the final merit list as per current reports. Check the official NID Admissions Handbook 2027-28 at admissions.nid.edu for the final pattern.

These are original practice questions, not official NID papers.

MOCK TEST 4

Time: 3 hours · Maximum marks: 100 · No negative marking

SECTION A - Objective (30 marks): Q1-14 carry 1 mark each, Q15-22 carry 2 marks each

1. A solid is built by stacking unit cubes as per the top-view plan shown. How many cubes are used in all? [1 mark]

Top view: number of cubes in each stack

1	4	0
3	0	2
3	2	3

- (1) 20 (2) 17 (3) 19 (4) 18

2. A 'thumbnail sketch' is [1 mark]

- (1) A small, quick rough sketch (2) A finished oil painting
(3) A 3D printed model (4) A photograph

3. A designer walks 16 m north, turns right and walks 12 m, then turns right again and walks 11 m. How far is she from the starting point? [1 mark]

- (1) 39 m (2) 4 m (3) 13 m (4) 17 m

4. In a perspective drawing, lines that appear to meet at a single point on the horizon converge at the [1 mark]

- (1) Vanishing point (2) Picture plane (3) Focal length (4) Ground line

5. Find the figure that continues the series. [1 mark]



- (1) (2) (3) (4)



6. An 'infographic' is mainly used to [1 mark]

- (1) Present information visually (2) Print on fabric
(3) Compress files (4) Record sound

7. Which of the following is a principle of design? [1 mark]

- (1) Line (2) Form (3) Texture (4) Contrast

- 8.** A solid is built by stacking unit cubes as per the top-view plan shown. How many cubes are used in all? [1 mark]

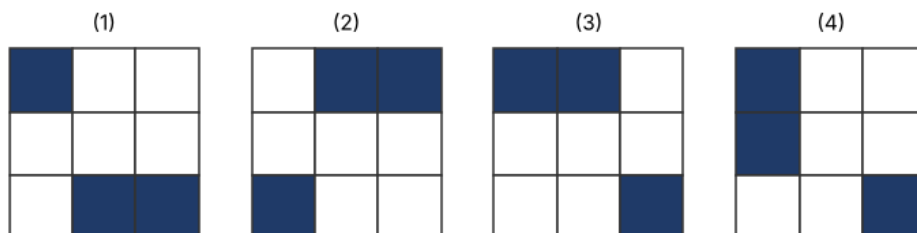
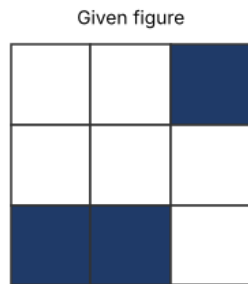
Top view: number of cubes in each stack

4	1	1
0	4	0
0	0	4

- (1) 15 (2) 16 (3) 14 (4) 13
- 9.** Of 80 design students, 26 like sketching, 33 like clay modelling and 13 like both. How many like neither? [1 mark]

- (1) 67 (2) 21 (3) 46 (4) 34

- 10.** A mirror is placed on the bottom (a horizontal mirror) of the figure. Which option shows the mirror image? [1 mark]

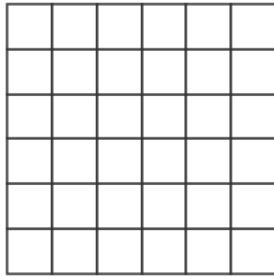


- 11.** Black and white are called neutral colours because they [1 mark]
- (1) Do not appear on the colour wheel (2) Cannot be printed
- (3) Are the brightest colours (4) Are primary colours

- 12.** A designer walks 14 m north, turns right and walks 12 m, then turns right again and walks 9 m. How far is she from the starting point? [1 mark]

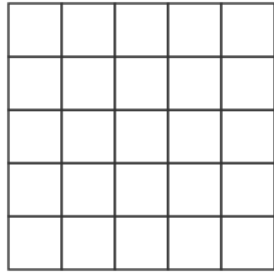
- (1) 17 m (2) 35 m (3) 2 m (4) 13 m

13. How many squares of all sizes can be found in the 6×6 grid shown? [1 mark]



- (1) 85 (2) 91 (3) 97 (4) 36

14. How many squares of all sizes can be found in the 5×5 grid shown? [1 mark]



- (1) 60 (2) 55 (3) 25 (4) 50

Questions 15 to 22 carry 2 marks each.

15. Looking at the solid from the bottom edge of the plan (front view), how many unit squares of the front elevation are visible? [2 marks]

Top view: number of cubes
in each stack

3	3	2
1	3	3
1	3	1

- (1) 10 (2) 8 (3) 11 (4) 9

16. The term 'ergonomics' in design deals with [2 marks]

- (1) Fitting products to human use and comfort
- (2) Pricing of products
- (3) Choosing colours for logos
- (4) Printing methods

17. Find the next term of the series: 66, 83, 102, 123, 146, ? [2 marks]

- (1) 171 (2) 173 (3) 172 (4) 170

18. A poster is 17 cm by 4 cm. If its area is increased by 25%, the new area is [2 marks]

- (1) 85 cm^2 (2) 93 cm^2 (3) 136 cm^2 (4) 89 cm^2

19. A poster is 16 cm by 8 cm. If its area is increased by 25%, the new area is [2 marks]

- (1) 168 cm^2 (2) 153 cm^2 (3) 256 cm^2 (4) 160 cm^2

20. Find the figure that continues the series. [2 marks]



(1)



(2)



(3)

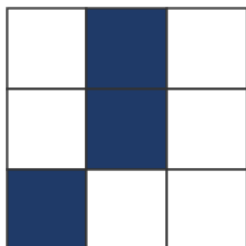


(4)

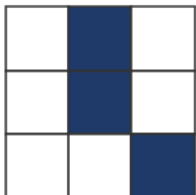


21. The figure shown is rotated 90° clockwise about its centre. Which option shows the result? [2 marks]

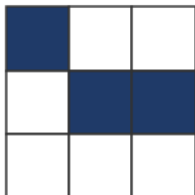
Given figure



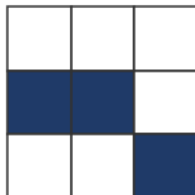
(1)



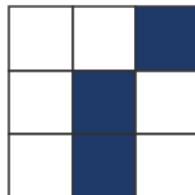
(2)



(3)

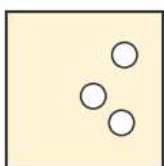


(4)



22. A square sheet of paper is folded twice (in half, then in half again) and 3 holes are punched through all layers as shown. How many holes will the sheet have when fully unfolded? [2 marks]

Sheet after folding,
with punched holes



(1) 6

(2) 12

(3) 11

(4) 13

SECTION B - Subjective (70 marks): answer all four questions on separate sheets

23. Observe a desk organiser carefully (from memory or from a real one near you). (a) Draw it from three different viewpoints: front, top and a 3/4 view. [9 marks] (b) Show two close-up details (e.g. a joint, handle, texture or pattern) and label what material you think each part is made of. [6 marks]

24. Problem solving. A single bench must be shared by many users in a public place (such as a railway station or a school). (a) List three ways it could be misused or damaged. [4 marks] (b) Sketch a design that prevents or reduces these problems. [10 marks] (c) Explain in 3 to 4 lines why your design is sustainable and who benefits. [6 marks]

25. Storyboard. In six panels (no words, or at most two words per panel), tell a short story set at a library after closing time that begins calmly and ends with loneliness. Number the panels and vary the viewpoint (close-up, wide shot, from above). [15 marks]

26. Imagination. Imagine a new object that combines a flower vase and a watering can. (a) Draw it in colour, showing how it works. [10 marks] (b) Write three lines about who would use it and why. [4 marks] (c) Design a simple logo and name for it. [6 marks]

Marks: Q23 = 15, Q24 = 20, Q25 = 15, Q26 = 20. Use A4 sheets for each answer.

ANSWER KEY – SECTION A

Each entry is the number of the correct option, (1) to (4). Section B has no fixed answer key; see the approach and rubric in the solutions.

Mock Test 1

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	1	5	2	9	3	13	4	17	3	21	1
2	3	6	4	10	4	14	2	18	2	22	1
3	3	7	4	11	1	15	3	19	3		
4	1	8	2	12	2	16	2	20	2		

Mock Test 2

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	2	5	3	9	1	13	3	17	3	21	2
2	3	6	3	10	3	14	3	18	1	22	2
3	2	7	3	11	4	15	1	19	3		
4	1	8	1	12	1	16	1	20	1		

Mock Test 3

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	3	5	2	9	2	13	1	17	3	21	3
2	4	6	3	10	3	14	1	18	1	22	4
3	1	7	4	11	4	15	4	19	4		
4	1	8	4	12	1	16	3	20	2		

Mock Test 4

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	4	5	1	9	4	13	2	17	1	21	2
2	1	6	1	10	3	14	2	18	1	22	2
3	3	7	4	11	1	15	4	19	4		
4	1	8	3	12	4	16	1	20	3		

Mock Test 5

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	2	5	3	9	2	13	3	17	2	21	2
2	3	6	3	10	4	14	3	18	3	22	4
3	4	7	2	11	1	15	3	19	4		
4	3	8	2	12	3	16	3	20	1		

Mock Test 6

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	1	5	2	9	4	13	3	17	1	21	2
2	3	6	3	10	3	14	1	18	4	22	4
3	4	7	2	11	4	15	4	19	2		
4	3	8	4	12	3	16	2	20	2		

WORKED SOLUTIONS

Section A solutions give the correct option and the reasoning. Section B gives an approach and a marking rubric.

Solutions - Mock Test 4

SECTION A

Q1. Answer: (4) - 18

Add the numbers in all cells of the plan: $1 + 4 + 3 + 2 + 3 + 2 + 3 = 18$.

Q2. Answer: (1) - A small, quick rough sketch

Thumbnails are small rapid sketches for exploring layout ideas.

Q3. Answer: (3) - 13 m

Take the start as the origin. After the first leg (16 m) and the turns, the net movement along that line is $16 - 11 = 5$ m, and the sideways movement is 12 m. Distance $= \sqrt{5^2 + 12^2} = 13$ m.

Q4. Answer: (1) - Vanishing point

Parallel lines receding from the viewer appear to meet at the vanishing point on the horizon line.

Q5. Answer: (1)

Compare consecutive boxes: the arrow turns 90° anticlockwise each time (the arrow angles, measured anticlockwise from the right, are 135° , 225° , 315° , 45°). The next angle is $45^\circ + 90^\circ = 135^\circ$, which is option (1).

Q6. Answer: (1) - Present information visually

Infographics combine text, icons and data visuals so information can be understood quickly.

Q7. Answer: (4) - Contrast

Principles describe how elements are organised: balance, contrast, emphasis, rhythm, unity, proportion. Line, texture and form are elements.

Q8. Answer: (3) - 14

Add the numbers in all cells of the plan: $4 + 1 + 1 + 4 + 4 = 14$.

Q9. Answer: (4) - 34

Students who like at least one $= 26 + 33 - 13 = 46$. Neither $= 80 - 46 = 34$.

Q10. Answer: (3)

A mirror placed along the bottom (a horizontal mirror) reverses the figure top-to-bottom and leaves the other direction unchanged. Reverse each column of the grid to get option (3). The remaining options are rotations or the opposite flip, which a mirror cannot produce.

Q11. Answer: (1) - Do not appear on the colour wheel

Neutrals (black, white, grey) are not hues on the colour wheel.

Q12. Answer: (4) - 13 m

Take the start as the origin. After the first leg (14 m) and the turns, the net movement along that line is $14 - 9 = 5$ m, and the sideways movement is 12 m. Distance $= \sqrt{5^2 + 12^2} = 13$ m.

Q13. Answer: (2) - 91

Count squares by size. In an 6×6 grid there are $(6-k+1)^2$ squares of side k : $36 + 25 + 16 + 9 + 4 + 1 = 91$.

Q14. Answer: (2) - 55

Count squares by size. In an 5×5 grid there are $(5-k+1)^2$ squares of side k : $25 + 16 + 9 + 4 + 1 = 55$.

Q15. Answer: (4) - 9

In the front view, each column shows only its tallest stack: 3, 3, 3. Sum $= 9$.

Q16. Answer: (1) - Fitting products to human use and comfort

Ergonomics studies how people interact with products so they are comfortable, safe and efficient.

Q17. Answer: (1) - 171

The terms are the squares 64, 81, 100, 121, 144 plus 2. The next square is $169 + 2 = 171$.

Q18. Answer: (1) - 85 cm²

Original area $= 17 \times 4 = 68$ cm². A 25% increase gives $68 \times 125/100 = 85$ cm².

Q19. Answer: (4) - 160 cm²

Original area $= 16 \times 8 = 128$ cm². A 25% increase gives $128 \times 125/100 = 160$ cm².

Q20. Answer: (3)

Compare consecutive boxes: the arrow turns 135° clockwise each time (the arrow angles, measured anticlockwise from the right, are 180°, 45°, 270°, 135°). The next angle is $135^\circ - 135^\circ = 0^\circ$, which is option (3).

Q21. Answer: (2)

Rotate the whole grid 90° clockwise: the top row moves to the right column, so every shaded square moves one quarter-turn about the centre. Rotating the other way, by 180°, or flipping (mirror) gives the other options. Only option (2) matches a pure 90° clockwise turn.

Q22. Answer: (2) - 12

Each fold doubles the layers punched through. The sheet is folded twice (in half, then in half again), so 3 hole(s) in the folded sheet go through 4 layers. Unfolding gives $3 \times 4 = 12$ holes (each hole is mirrored across every crease).

SECTION B - approach and marking rubric

Q23 (15 marks). Approach:

Start with light construction shapes (a cylinder, box or cone) to block in the desk organiser, check proportions by comparing parts (e.g. handle length against the body), then firm up the outline. For the top view imagine looking straight down and keep widths consistent with the front view. In the 3/4 view overlap forms to show depth. For the close-ups, enlarge a joint or surface and use hatching, dots or cross-lines to show texture. Label each material (e.g. steel, plastic, wood) and say why it suits the job.

Criterion	Marks
Accurate proportions and construction in the three views	5
Variety and clarity of viewpoints	4
Detail studies with texture and line quality	3
Labels showing material and function	3

Q24 (20 marks). Approach:

Think of the bench in rough public use: heavy use, theft, weather, dirt, children. Pick materials and forms that resist these (durable, repairable, fixed down, easy to clean). Show your idea with a main sketch plus one detail view. For sustainability mention locally available materials, long life, repair rather than replacement and low cost, and say who gains (users, maintenance staff, the environment).

Criterion	Marks
Realistic misuse list	4
Design response that clearly addresses the list	10
Sustainability and benefits reasoning	4
Clarity of sketches and notes	2

Q25 (15 marks). Approach:

Plan the story in one line first: setup, a small surprise, a turning point and the result (loneliness). Use panel 1 as a wide shot to show a library after closing time, panel 3 or 4 as a close-up of a face or hand, and a high angle for the turning point. Keep one recognisable character (same clothes or shape) in every panel, and make each panel readable without text.

Criterion	Marks
Clear beginning, middle and end	5
Variety of viewpoints and framing	4
Character/expression clarity	3
Neat, consistent panels	3

Q26 (20 marks). Approach:

List the main functions and shapes of a flower vase and of a watering can, then look for an overlap (a shared shape or action) to join them naturally. Draw with arrows showing how it works. Name a real user group and the problem it solves. For the logo keep one simple shape and a short, memorable name.

Criterion	Marks
Originality and logic of the combined object	8
Drawing, colour and clarity of working	4
User and purpose reasoning	4
Name and logo	4