



# Indian School Al Wadi Al Kabir

## Second Rehearsal Examination (2025-2026)

Skill Education

Class: X

Design Thinking and Innovation (422)

Max. marks: 50

Date:02/02/2026

Set- I

Time: 2 hrs.

### GENERAL INSTRUCTIONS:

1. Please read the instructions carefully.
2. This Question Paper consists of 22 questions in two sections: Section A & Section B.
3. Section A has objective-type questions, whereas Section B contains subjective-type questions.
4. Out of the given (5 + 17 =) 22 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
5. All questions of a particular section must be attempted in the correct order.

### 6. SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):

- i. This section has 05 questions.
- ii. Marks allotted are mentioned against each question/part.
- iii. There is no negative marking.
- iv. Do as per the instructions given.

### 7. SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):

- i. This section has 17 questions.
  - ii. A candidate has to do 10 questions.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.
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### SECTION – A: OBJECTIVE TYPE QUESTIONS

| Q.1  | Answer any 4 out of the given 6 questions on Employability Skills  | (1×4=4) |
|------|--|---------|
| i.   | Which of the following is important for effective communication?<br>(a) Ignoring the listener<br>(b) Active listening<br>(c) Speaking loudly<br>(d) Using jargon | 1       |
| ii.  | Setting specific and measurable goals is a part of:<br>(a) Time management<br>(b) Health management<br>(c) Financial management<br>(d) Social management         | 1       |
| iii. | Our ability to do the things that need to be done without someone or something influencing us is:<br>(a) Emotional awareness                                     | 1       |

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|     | (b) Harnessing emotions<br>(c) Managing emotions<br>(d) Self-motivation  |   |
| iv. | Which of the following is an input device?<br>(a) Printer<br>(b) Monitor<br>(c) Mouse<br>(d) Speaker   | 1 |
| v.  | Which of the following is not a step in the entrepreneurial process?<br>(a) Idea generation<br>(b) Business planning<br>(c) Implementation<br>(d) Job seeking              | 1 |
| vi. | Which of the following practices contributes to environmental sustainability?<br>(a) Over-using resources<br>(b) Recycling<br>(c) Deforestation<br>(d) Increased pollution | 1 |

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| <b>Q.2</b> | <b>Answer any 5 out of the given 6 questions</b>  | <b>(1×5=5)</b> |
| i.         | Which stage in Design Thinking involves identifying the problem to solve?<br>(a) Ideate<br>(b) Define<br>(c) Prototype<br>(d) Test  | 1              |
| ii.        | What kind of prototype uses simple sketches or paper models?<br>(a) High-fidelity prototype<br>(b) Digital mockup<br>(c) Low-fidelity prototype<br>(d) Fully functional model               | 1              |
| iii.       | Which of these is a benefit of divergent thinking?<br>(a) Encourages one right answer<br>(b) Limits imagination<br>(c) Generates multiple creative solutions<br>(d) Follows strict patterns | 1              |
| iv.        | The method of conveying an idea or story visually through sketches or frames is called:<br>(a) Animation<br>(b) Storyboarding<br>(c) Rendering<br>(d) Sculpting                             | 1              |
| v.         | Which communication skill is essential for effective teamwork?<br>(a) Listening actively<br>(b) Speaking louder<br>(c) Ignoring others opinions   | 1              |

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|     | (d) Giving orders  |   |
| vi. | Which is a key feature of sustainable design?<br>(a) Use of non-recyclable materials<br>(b) Minimizing waste<br>(c) Maximizing energy consumption<br>(d) Ignoring environmental impact | 1 |

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| <b>Q.3</b> | <b>Answer any 5 out of the given 6 questions</b>  | <b>(1×5=5)</b> |
| i.         | Which design stage involves generating multiple possible solutions to a problem?<br>(a) Define<br>(b) Ideate<br>(c) Prototype<br>(d) Test   | 1              |
| ii.        | Which of the following is a feature of sustainable design?<br>(a) Using single-use plastic<br>(b) Prioritizing profit over the planet<br>(c) Using recyclable and eco-friendly materials<br>(d) Ignoring long-term effects      | 1              |
| iii.       | The main aim of creating animatics is to:<br>(a) Finalize sound effects<br>(b) Test animation timing and flow before production<br>(c) Replace storyboards<br>(d) Draw detailed characters                                      | 1              |
| iv.        | Which of the following statements about “analogical thinking” is true?<br>(a) It depends on numerical data<br>(b) It compares unfamiliar ideas to familiar ones<br>(c) It discourages creativity<br>(d) It relies only on logic | 1              |
| v.         | Which of these prototypes would help test the functionality of a new toy design?<br>(a) Clay model<br>(b) Cardboard sketch<br>(c) Working model with moving parts<br>(d) Paper drawing  | 1              |
| vi.        | The “Define” stage in design thinking focuses on:<br>(a) Generating ideas<br>(b) Understanding user problems<br>(c) Building prototypes<br>(d) Testing solutions  | 1              |

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| <b>Q.4</b> | <b>Answer any 5 out of the given 6 questions</b>   | <b>(1×5=5)</b> |
| i.         | A company reuses plastic waste to make furniture. This process supports a:<br>(a) Linear lifecycle<br>(b) Circular lifecycle<br>(c) Disposable model | 1              |

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|      | (d) Resource depletion model   |   |
| ii.  | Which statement about the role of empathy in Design Thinking is true?<br>(a) It is optional in the process.<br>(b) It helps understand user needs and emotions.<br>(c) It only focuses on financial outcomes.<br>(d) It comes after testing. | 1 |
| iii. | A designer modifies a chair design after observing users struggling to sit comfortably. This represents which step?<br>(a) Define<br>(b) Prototype<br>(c) Test and Iterate<br>(d) Implement  | 1 |
| iv.  | Which of the following visual communication elements improves clarity?<br>(a) Overcrowded slides<br>(b) Clear typography and icons<br>(c) Random colors<br>(d) Distracting animations  | 1 |
| v.   | Using cardboard, foam, or clay to model early design ideas helps to:<br>(a) Finalize designs quickly<br>(b) Save cost and visualize ideas easily<br>(c) Eliminate creativity<br>(d) Replace the need for testing                             | 1 |
| vi.  | Which of the following is <b>not</b> a type of creativity?<br>(a) Spontaneous emotional creativity<br>(b) Deliberate cognitive creativity<br>(c) Artificial imagination creativity<br>(d) Spontaneous cognitive creativity                   | 1 |

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| <b>Q.5</b> | <b>Answer any 5 out of the given 6 questions</b>  | <b>(1×5=5)</b> |
| i.         | The term ' <b>Innovation</b> ' best refers to:<br>(a) Copying existing ideas<br>(b) Introducing something new and useful<br>(c) Repeating old methods<br>(d) Avoiding risks                   | 1              |
| ii.        | What is the primary goal of prototyping?<br>(a) To test ideas quickly and improve designs<br>(b) To finalize the product directly<br>(c) To replace the ideation phase<br>(d) To skip testing | 1              |
| iii.       | A company that produces biodegradable pens from paper pulp is practicing:<br>(a) Green design<br>(b) Industrial design<br>(c) Artificial design<br>(d) Virtual design                         | 1              |
| iv.        | The following question contains an Assertion followed by a Reason. Read them carefully and select the option that best describes the two statements:  | 1              |

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|-----|--|---|
|     | <p><b>Assertion (A):</b> In 2D animation, objects are drawn in a flat space using only height and width.</p> <p><b>Reason (R):</b> 2D animation uses frame-by-frame movement to create the illusion of motion.</p> <p>(a) Both assertion and reason are correct, and the reason is the correct explanation of the assertion.</p> <p>(b) Both assertion and reason are correct, but the reason is not the correct explanation of the assertion.</p> <p>(c) Assertion is correct, but the reason is not correct.</p> <p>(d) Assertion is incorrect, but the reason is correct.</p> |   |
| v.  | <p>“Brainstorming” sessions are most useful during which stage?</p> <p>(a) Empathize</p> <p>(b) Ideate</p> <p>(c) Prototype</p> <p>(d) Define</p>  | 1 |
| vi. | <p>“Thinking outside the box” is another term for:</p> <p>(a) Convergent thinking</p> <p>(b) Divergent thinking</p> <p>(c) Sequential thinking</p> <p>(d) Critical thinking</p>  | 1 |

### **SECTION B: SUBJECTIVE TYPE QUESTIONS**

**Answer any 3 out of the given 5 questions on Employability Skills (2 × 3 = 6 marks).**

**Answer each question in 20 – 30 words.**

|      |  |   |
|------|--|---|
| Q.6  | Distinguish between Interpersonal Communication and Public Communication, providing one example of each type.          | 2 |
| Q.7  | What is 'Stress'? List the three steps required for effective stress management.                                       | 2 |
| Q.8  | What are Green Skills? List two core requirements for an individual who wants to contribute to environmental outcomes. | 2 |
| Q.9  | Define an entrepreneur and list any two qualities they possess.  | 2 |
| Q.10 | Explain the core purpose of computer security and list two specific measures taken to protect data.                    | 2 |

**Answer any 4 out of the given 6 questions in 20 – 30 words each (2 × 4 = 8 marks)**

|      |   |   |
|------|---|---|
| Q.11 | What do you understand by the “Empathize” stage in Design Thinking?         | 2 |
| Q.12 | Define sustainability with an example from your daily life.                 | 2 |
| Q.13 | Explain the importance of feedback in the prototyping process.              | 2 |
| Q.14 | What is the difference between divergent and convergent thinking?           | 2 |
| Q.15 | Describe two advantages of low-fidelity prototyping.                        | 2 |
| Q.16 | Define a story and state two key purposes of storytelling in communication. | 2 |

**Answer any 3 out of the given 6 questions in 50– 80 words each (4 × 3 = 12 marks)**

|      |   |   |
|------|---|---|
| Q.17 | Explain how design thinking can be applied to reduce food wastage in school canteens.             | 4 |
| Q.18 | Compare linear and circular lifecycles with suitable examples.                                    | 4 |
| Q.19 | Propose a gadget-free family activity that promotes creativity and togetherness among children.   | 4 |
| Q.20 | “Recycling and reuse are the foundation of sustainability.” Justify this statement with examples. | 4 |
| Q.21 | Discuss an innovative product or idea you recently came across. What problem does it solve?       | 4 |
| Q.22 | What is a storyboard, and how is it used in the prototyping stage?                                | 4 |