



Indian School Al Wadi Al Kabir

Mid-term Examination (2025-2026)

Subject: Skill Education

Class: IX

DESIGN THINKING & INNOVATION (422)

Max. marks: 50

Date: 25/09/2025

Set- I

Time: 2 hrs.

ANSWER KEY

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.

Marks allotted are mentioned against each question/part.

SECTION – A

Q.NO	ANSWERS
Q 1.	Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)
i.	(a) Listening
ii.	(b) Simple words
iii.	(a) Both A and R are correct and R is the correct explanation of A
iv.	(c) Confidence
v.	(a) Information and Communication Technology
vi.	(d) Rahul learns from the feedback and makes his project work better
Q 2.	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
i.	(c) Be a highly creative person who enjoys solving problems and is sensitive to the needs of people.
ii.	(c) Five
iii.	(b) Ideate
iv.	(c) Aspects of sustainability
v.	(d) Innovation
vi.	(a) Observe
3	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
i.	(c) Creative
ii.	(d) Lens
iii.	(d) Point and shoot
iv.	(c) Shutter
v.	(a) High Shutter Speed

vi.	(c) Image processor
4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
i.	(b) Megapixel
ii.	(a) Optical Zoom
iii.	(d) Liquid Crystal Display
iv.	(b) Symmetry
v.	(c) Gestalt grouping principle
vi.	(a) Both assertion and reason are correct and the reason is the correct explanation of the assertion.
5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)
i.	(a) Value
ii.	(b)Balance
iii.	(a)Contrast
iv.	(a)Elements of design
v.	(a)Texture
vi.	(b) Emphasis

SECTION B: SUBJECTIVE TYPE QUESTIONS

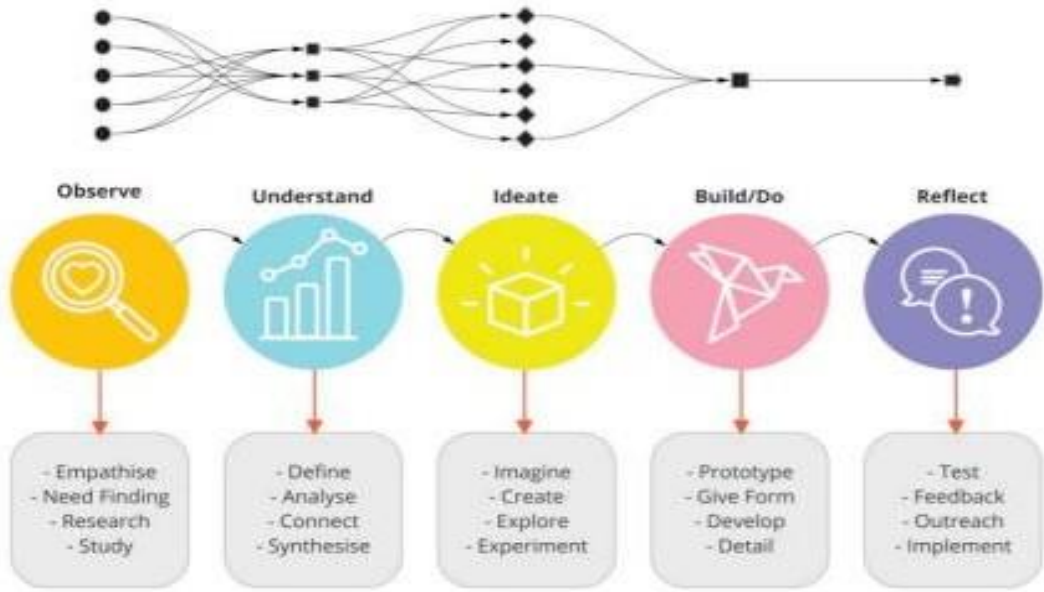
Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks). Answer each question in 20 – 30 words.

6	(a)Prepare (b)Practice (c)Perform	2
7	a) Self-awareness b) Self-confidence c) Self-control d) Problem solving e) Positive thinking f) Personal hygiene and grooming	2
8.	a) I am a student. b) Where are you from? c) My new job is so exciting! d) You should do the work now.	2
9	Arrow Key One of four computer keys marked with an up, down, left, or right arrow, used for moving the cursor. Backspace The key that you press on a keyboard to move one space backwards in a document. Caps Lock A key on a computer keyboard that makes all the keys produce capital letters. Character Set A complete set of letters, numbers, or symbols that can be used by a computer.	2
10.	Any relevant answer	2
11	Design is about understanding needs and being sensitive to issues, identifying problems that need to be solved, creating innovative, appropriate solutions and considering aspects of sustainability such that it makes a positive difference to life in our universe.	2
12	Innovation involves the implementation of something new and replacing or reframing the existing mindset. Innovation is in how an invention can be used to solve problems.	2

13	a) Balance b) Contrast c) Rhythm d) Emphasis	2
14	Optical Zoom is the physical zoom that camera can perform. It is better than digital zoom. Digital Zoom is the amount of zoom that camera performs digitally. Digital zoom enlarges the center of your frame by cropping.	2
15	<ul style="list-style-type: none"> • Advertising Industry • Fashion Industry • Music Industry • Photo journalism • Sports industry • Fine art photography 	2
16	<ul style="list-style-type: none"> • Shape • Line • Form • Texture 	

Answer any 3 out of the given 6 questions. (4 x 3 = 12 marks)

17.	<p>Lens: Often called the "eye" of the camera, the lens focuses light from the scene onto the image sensor. Lenses come in various types, each with a different focal length and purpose.</p> <p>Aperture: Located within the lens, the aperture is an adjustable opening that controls the amount of light entering the camera. It also affects the depth of field, which determines how much of the scene is in focus.</p> <p>Shutter: This is a physical or electronic mechanism that controls the duration of time the image sensor is exposed to light. Shutter speed is a critical setting for controlling motion blur and exposure.</p> <p>Sensor: In a digital camera, this component is responsible for converting the light that passes through the lens into electrical signals, which are then processed to form a digital image. In a film camera, this is replaced by a strip of light-sensitive film.</p>	4
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18.	<ul style="list-style-type: none"> • Megapixel is the number of your pixels in the sensor. • Sensor is the size of actual physical dimension in your sensor. • Megapixel alone won't give you a better image quality. • Sensor size matters more than the megapixel count. • More megapixel count let you print bigger sized prints. • More megapixel in smaller sensor will result in more noise. 	4
19.		4
20.	<p>a) Color: Color helps establish a mood for your composition. When light waves strike an object and reflect back to the optic nerve in a human's eyes, the sensation they perceive is called color.</p> <p>b) Point: A point is a single dot or mark that has position but is otherwise limited. It is a single entity in itself and alone it can act as a focal point or a stopping point in a composition.</p> <p>c) Line: Line refers to the way that two points in space are connected. Whether they're horizontal lines, diagonal lines, or vertical lines, lines can help direct the eye toward a certain point in your composition.</p> <p>d) Value: In design, value refers to the lightness or darkness of a color.</p>	4

21	<p>The elements of design refer to the basic building blocks of any composition. The principles of design refer to how the elements are used, like the symmetrical and asymmetrical balance, pattern, emphasis, movement, and proportion. The principles of design are a set of cardinal rules and techniques for composing the various elements of design.</p>	4
22	<p>Aperture is the opening in a camera lens that controls the amount of light entering the camera, significantly affecting exposure and depth of field in photographs.</p> <p>ISO stands for the International Organization for Standardization, and in photography , it indicates how sensitive your camera's sensor is to light. The ISO setting is one of the three pillars of exposure, alongside aperture and shutter speed. Adjusting the ISO allows photographers to adapt to various lighting conditions, making it possible to capture well-exposed images in both bright and low-light environments.</p> <p>Composition in photography is the silent language that speaks volumes through the mere placement of various visual elements within the frame. It is one of the defining techniques of visual storytelling, one that requires a delicate balance between technical precision and artistic intuition. But what is composition photography exactly? It is more than mere visual arrangement; it is the deliberate orchestration of lines, shapes, colors, and perspectives that guide the viewer's eye through a narrative, influencing emotions and perceptions.</p>	4