



Indian School Al Wadi Al Kabir
Mid-term Examination (2026-2027)
Sub: Skill Education
Design Thinking & Innovation (Sub. Code.422)

Class: X
Date: 24/09/2026

Set-I

Max. Marks: 50
Time: 2 Hours

MARKING SCHEME

SECTION – A

Q.1	Answer any 4 out of the given 6 questions on Employability Skills	(1×4=4)
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Q.NO	ANSWERS	
i.	(a) Specific feedback	1
ii.	(b)Control key	1
iii.	(b) Ability	1
iv.	(b) Realistic	1
v.	(d) Check for expiry of antivirus software and renew.	1
vi.	(a) Threats	1

Q.2	Answer any 5 out of the given 6 questions	(1×5=5)
i.	(b) Organisational barrier	1
ii.	(a) Narrative	
iii.	(c) Maintaining eye contact and using open body language.	1

iv.	(c) Lateral thinking	1
v.	(c) Radio broadcast	1
vi.	(a) flexibility and adding more life and energy in the motion.	1

Q.3	Answer any 5 out of the given 6 questions	(1×5=5)
i.	(b) Artists and musicians	1
ii.	(c) Blueprint	1
iii.	(b) Analogical thinking	1
iv.	(c) Straight-ahead animation	1
v.	(c) Text, shapes and design elements	1
vi.	(d) Adding complex visual effects.	1
Q.4	Answer any 5 out of the given 6 questions	(1×5=5)
i.	(a) Both (A) and (R) are correct, and (R) is the correct explanation of (A).	1
ii.	(b) Crisis, climax and conclusion	1
iii.	(c) Divergent thinking	1
iv.	(d) Deliberate spontaneous creativity	1
v.	(a) Squash and stretch	1
vi.	(a) Substitute, Combine, Adapt, Modify, Put to another use, Eliminate and Reverse	1

Q.5	Answer any 5 out of the given 6 questions	(1×5=5)
i.	(a) Spontaneous emotional creativity	1
ii.	(b) Creating original and unconventional solutions	1
iii.	(d) Key frame animation	1
iv.	(b) To generate and connect ideas visually	1
v.	(a) Using dried leaves as eco-friendly bookmarks or coasters.	1
vi.	(d) Indus Valley Civilization	1

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	Clear and concise communication is very important in the work and business environment because it helps people understand information correctly and complete their tasks effectively. • Avoids misunderstandings: Clear messages reduce confusion and errors. • Saves time: Concise communication conveys the required information without unnecessary details. • Improves teamwork: Employees can understand instructions, ideas, and responsibilities easily. • Builds professionalism: Clear communication creates a positive impression and shows confidence. • Supports better decision-making: Accurate information helps people make appropriate decisions. • Improves relationships: Effective communication builds trust and cooperation among colleagues, customers, and managers.	2
7	The four skills that must be mastered to succeed in life are: 1. Communication Skills – Ability to express ideas and understand others	2

	effectively. Interpersonal Skills – Ability to interact, cooperate, and build good relationships with others. Problem-Solving Skills – Ability to identify problems and find suitable solutions. Decision-Making Skills – Ability to evaluate different choices and make appropriate decisions.	
8	Setting goals in life is important because it gives us direction and helps us focus our efforts towards achieving what we want. It motivates us to work hard and make better decisions. The importance of setting goals includes: Provides direction – Helps us know what we want to achieve. Increases motivation – Encourages us to work towards our targets. Helps manage time – Allows us to plan and use our time effectively. Builds confidence – Achieving small goals gives a sense of accomplishment. Helps measure progress – We can check how much we have improved. Encourages discipline – Makes us more focused and responsible.	2
9	The core qualities of effective and constructive feedback in interpersonal communication are: Specific – Clearly states what was done well or what needs improvement. Timely – Given at the appropriate time, when it can be useful. Constructive – Focuses on improvement rather than criticism. Objective – Based on facts and observations, not personal opinions. Balanced – Highlights both strengths and areas for improvement. Respectful – Given politely and with consideration for the other person’s feelings. Actionable – Provides useful suggestions for improving performance.	2
10	(a) Use passwords to login to your computer: Use passwords that are difficult to guess. Passwords are difficult to hack if they are a mix of small (For example ‘a b c d’) and capital letters (For example, ‘H J E R’), numbers (For example ‘8 7 6 5’) and special characters (For example, ‘% ^ # \$’). This would prevent unauthorized people from using your computer. (b) Install Anti-virus and Firewall: Anti-viruses and Firewall monitor the data coming in and out of a computer and prevent and viruses from entering. Anti-viruses can also detect and clean viruses that may have entered a computer. (c) Encrypt Data: This is usually done by banks and companies in which important customer information is stored. They can encrypt their entire	2

	hard disk using the encrypting feature in Windows (Bitlocker). This would force users to use a decryption password (or key) before starting the computer thus preventing unauthorized usage. (d) Secure sites: Give details of your credit card or bank account only on secure sites. See in the address bar of the browser. If the site address starts with https://and a lock symbol, then it is safe to give your credit card and bank details	
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Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)

Q.11	Criss-crossing lines and shapes tend to evoke feelings of chaos and disorder, while horizontal lines and flat shapes create a sense of calmness and stability, reflecting the task's emphasis on how different design elements can influence emotional responses.	2
Q.12	This is one of the ways in which creativity can be classified. The activities are designed to accommodate all four types of creativity. A. Deliberate cognitive creativity is when we are focused and are consciously aware of the process based on our prior knowledge like the inventions of Edison. Examples: Thomas Edison inventing the lightbulb through persistent experimentation. Marie Curie discovering radioactivity using methodical scientific research. The Wright brothers designing the first successful airplane by studying aerodynamics and mechanics. B. Deliberate emotional creativity is consciously influenced by our emotions. Examples: Frida Kahlo painting self-portraits to process her pain and identity. A songwriter writing lyrics about heartbreak to express their feelings. A novelist crafting a story about grief based on personal loss. C. Spontaneous cognitive creativity is an unconscious and unpredictable process, but still requires prior knowledge like Archimedes and Newton's discovery. Examples: Archimedes shouting "Eureka!" in the bath when he suddenly understood buoyancy. Isaac Newton realizing the concept of gravity after watching an apple fall (legend). Albert Einstein imagining riding a beam of light, leading to the theory of relativity. D. Spontaneous emotional creativity is what usually occurs in artists and musicians. Examples: A jazz musician improvising a soulful solo during a live performance. Vincent van Gogh painting <i>Starry Night</i> in an emotionally intense state. A dancer creating a spontaneous routine that reflects inner feelings without planning.	2

Q.13	Adding voiceover, music, and sound effects improves animatics by enhancing emotional engagement and clarifying narrative elements. For example, a voiceover can provide character dialogue or narration, music can set the mood or tone of a scene, and sound effects can simulate actions or environment (eg : footsteps or background noise), making the animatics more immersive and providing a clearer sense of the film's atmosphere.	2
Q.14	Active listening plays an important role in effective communication because it ensures that the listener carefully understands, responds to, and remembers the message being communicated. Its roles include: 1. Improves understanding – Helps the listener understand the speaker's ideas and feelings correctly. 2. Reduces misunderstandings – Careful listening prevents confusion and errors. 3. Builds trust and respect – Makes the speaker feel valued and heard. 4. Encourages better interaction – Promotes meaningful two-way communication. 5. Helps in problem-solving – Understanding the complete message helps in finding suitable solutions. 6. Strengthens relationships – Good listening creates cooperation and mutual understanding.	2
Q.15	Drawing a character in multiple poses and varied facial expressions during the animation storyboard phase is important because it helps the animator plan how the character will move, act, and communicate emotions throughout the story. It is important because: 1. Shows character movement – Different poses help plan the character's actions and movements from one scene to another. 2. Expresses emotions – Facial expressions show feelings such as happiness, sadness, surprise, fear, or anger. 3. Improves storytelling – Body language and expressions help communicate the story clearly, even without dialogue. 4. Maintains character consistency – Drawing the character from different angles and poses ensures that the character looks consistent. 5. Helps plan scenes – Storyboard artists can decide the most suitable pose and expression for each shot. 6. Makes animation more engaging – Varied poses and expressions make the character appear more natural and lively.	2
Q.16	A story creator needs several qualities to create an interesting, meaningful, and effective story . Two important qualities are:	2

	1. Creativity – A story creator should be able to generate new and imaginative ideas and present them in an interesting way. Creativity makes a story unique and engaging. Example: Instead of showing an ordinary classroom, a creator may imagine a classroom where students learn with the help of a friendly robot. 2. Observation and Imagination – A story creator should carefully observe people, places, and situations and use imagination to develop them into meaningful stories. Example: Observing how students help a new classmate can inspire a story about friendship, kindness, and teamwork.	
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Answer any 3 out of the given 6 questions in 50– 80 words each (4 x 3 = 12 marks)

Q.17	Communication Barrier: The communication barrier in this situation is poor interpersonal communication caused by an aggressive/dominating communication style. Arjun takes control of decisions and presentations without giving his teammates an opportunity to express their ideas. This leads to lack of participation, poor morale, and reduced teamwork. Two Strategies to Overcome It: 1. Adopt an assertive communication style: Arjun should express his ideas confidently while also respecting and listening to the opinions of his teammates. Decisions should be discussed rather than imposed. 2. Encourage active participation: The group can divide responsibilities among all members and give everyone a chance to share ideas, make decisions, and contribute to the presentation.	4												
Q.18	<table><tr><th>Chronological Narrative</th><th>Fractured Narrative</th></tr><tr><td>Events are presented in the order in which they happen.</td><td>Events are presented out of chronological order.</td></tr><tr><td>It usually follows a clear beginning → middle → end sequence.</td><td>It may use flashbacks, flash-forwards, or different timelines.</td></tr><tr><td>Easy for the reader to follow and understand.</td><td>Makes the reader think, connect clues, and piece together the story.</td></tr><tr><td>Creates a smooth and predictable flow of events.</td><td>Creates mystery, suspense, or surprise.</td></tr><tr><td>Example: A story begins with a child going to school, then shows the classes, lunch break, and finally the child returning home.</td><td>Example: A story begins with a detective finding a mysterious object, then moves to events from the previous week and later reveals how the object came to be there.</td></tr></table>	Chronological Narrative	Fractured Narrative	Events are presented in the order in which they happen .	Events are presented out of chronological order .	It usually follows a clear beginning → middle → end sequence.	It may use flashbacks, flash-forwards, or different timelines .	Easy for the reader to follow and understand.	Makes the reader think, connect clues, and piece together the story.	Creates a smooth and predictable flow of events.	Creates mystery, suspense, or surprise .	Example: A story begins with a child going to school, then shows the classes, lunch break, and finally the child returning home.	Example: A story begins with a detective finding a mysterious object, then moves to events from the previous week and later reveals how the object came to be there.	4
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Q.19	Systematic Approach: 1. Observe the cart in use – Study how the vendor prepares, stores, displays, and sells products. 2. Interview the vendor – Ask about problems faced, customer needs, storage requirements, and frequently used tools. 3. Measure the cart – Record its height, width, length, storage space, weight, and working areas. 4. Identify problems – Note issues such as limited storage, difficult movement, poor lighting, uncomfortable working height, or lack of protection from weather. 5. Study user needs – Consider both the vendor’s requirements and the customer’s convenience. 6. Develop and test solutions – Create sketches or prototypes and test whether the redesigned cart is practical and comfortable. Ergonomic Factors: • Working height should be comfortable to reduce strain. • Handles and controls should be easy to reach and use. • Adequate space should allow comfortable movement. • The cart should have safe and accessible storage. • Seating, if required, should provide suitable comfort. • Sharp edges and unsafe projections should be avoided. Functional Factors: • Easy mobility with suitable wheels and handles. • More organised storage for materials and equipment. • Proper display area for products. • Easy-to-clean and durable surfaces. • Weather protection such as a foldable canopy. • Adequate lighting for evening use. • Provision for waste disposal and hygiene. • Compact or foldable features to make transportation and storage easier.	4
Q.20	Two important principles of animation that can be understood through a bouncing ball and a pendulum are: 1. Squash and Stretch – This principle gives a sense of weight and flexibility to drawn objects. For example, a bouncing ball squashes when it hits the ground and stretches when it moves up. Timing and Spacing – Timing refers to the number of frames used for an action, which affects the speed and emotion of the motion. Spacing controls the distance between each frame to create smoothness or abruptness	4

	Squash and Stretch: This principle shows how an object changes its shape when it moves or interacts with a surface. Example: When a ball hits the ground, it squashes slightly, and when it moves upward, it stretches. This makes the movement look more natural and gives the ball a sense of flexibility and weight. Timing and spacing: This principle shows that objects usually start moving slowly, become faster, and then slow down before stopping or changing direction. Example: A pendulum moves fastest when passing through the centre and slows down as it reaches either end before changing direction. Similarly, a bouncing ball slows down as it reaches its highest point and speeds up while falling	
Q.21	Animation Style: The animation style being used is Motion Graphics. Motion graphics combine animated text, graphics, symbols, charts, icons, and simple characters to communicate information in an engaging way. In this case, animated infographics, dynamic text, and characters are used to explain water wastage and conservation. How Motion Graphics Support Educational Campaigns: Simplifies complex information – Data and ideas can be presented through easy-to-understand graphics and animations. Captures attention – Movement, animated text, and visuals make the message more interesting than plain text. Improves understanding and memory – Visual presentation helps learners understand and remember important points. Communicates quickly – A short animation can convey a large amount of information in a limited time. Encourages action – Showing the consequences of water wastage and the benefits of conservation can motivate people to change their habits. Suitable for multiple platforms – The same animation can be used on social media, smart boards, presentations, and awareness programmes.	4
Q.22	SCAMPER stands for: • S – Substitute • C – Combine • A – Adapt • M – Modify (or Magnify/Minify) • P – Put to another use • E – Eliminate • R – Reverse/Rearrange	

	Answers to the given situations: Replacing the plastic cap with a stronger and leak-proof material: Answer: S – Substitute Riya is replacing one material with another to improve the bottle. Adding a small compartment to store a spoon or straw: Answer: C – Combine A new function/storage feature is combined with the existing bottle. Removing an unnecessary decorative part to make the bottle lighter: Answer: E – Eliminate An unnecessary element is removed to improve the product. Changing the position of the handle to make it easier to carry: Answer: R – Rearrange The position of an existing feature is changed to improve usability.	
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