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| <b>Name:</b><br><b>Enrolment No:</b> |  |
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**UPES**

**End Semester Examination, May 2025**

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| <b>Course : Elements of Design</b><br><b>Program : B.Tech-Biomedical Engineering</b><br><b>Course Code: SDCS2003</b> | <b>Semester : IV</b><br><b>Duration : 3 Hours</b><br><b>Max. Marks: 100</b> |
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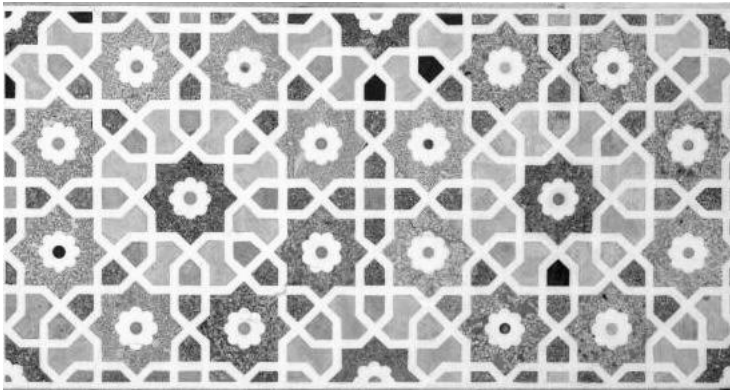
**Instructions: All questions are compulsory.**

**Please read the questions carefully. The paper contains four sections. Use answer sheets for writing and A3 sheets for drawing and illustration.**

| S. No. | Section A  | Marks | COs |
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|        | <b>Short answer questions/ MCQ/T&amp;F (20Qx1.5M= 30 Marks)</b>  |       |     |
| Q 1    | What is a dot in design?<br>a. A small circular shape<br>b. A type of line<br>c. A textured surface<br>d. A three-dimensional form                                   | 1.5   | CO1 |
| Q 2    | Which of the following does not rely heavily on texture<br>a. Ceramics design<br>b. Jewelry design<br>c. Furniture design<br>d. Poster design                        | 1.5   | CO1 |
| Q 3    | Which element of design is created by extending a dot?<br>a. Line<br>b. Texture<br>c. Shape<br>d. Pattern  | 1.5   | CO1 |
| Q 4    | How does line orientation impact perception?<br>a. Changes visual flow<br>b. Reduces contrast<br>c. Eliminates texture<br>d. Enhances symmetry                       | 1.5   | CO1 |
| Q 5    | Which texture appears rough when seen from a distance but is actually smooth?<br>a. Actual texture<br>b. Implied texture<br>c. Digital texture<br>d. Natural texture | 1.5   | CO1 |
| Q 6    | True or false: "Lines convey mood and feelings."   | 1.5   | CO1 |

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| Q 7  | How do geometric shapes differ from organic shapes?<br>a. They are less defined<br>b. They have precise mathematical structure<br>c. They are always three-dimensional<br>d. They appear random | 1.5 | CO1 |
| Q 8  | Which of the following is NOT a type of texture?<br>a. Rough<br>b. Smooth<br>c. Polished<br>d. Transparent  | 1.5 | CO1 |
| Q 9  | Which element is most responsible for creating movement in design?<br>a. Shape<br>b. Line<br>c. Texture<br>d. Pattern   | 1.5 | CO1 |
| Q 10 | “Follow the dotted line” is an example of which type of line.   | 1.5 | CO1 |
| Q 11 | What does a checkerboard pattern demonstrate?<br>a. Texture<br>b. Color blending<br>c. Alternating contrast<br>d. Random repetition   | 1.5 | CO1 |
| Q 12 | How does texture affect a composition?<br>a. It enhances realism<br>b. It removes contrast<br>c. It simplifies the layout<br>d. It reduces depth  | 1.5 | CO1 |
| Q 13 | What does a diagonal line typically convey in design?<br>a. Stability<br>b. Motion and energy<br>c. Balance<br>d. Softness  | 1.5 | CO1 |
| Q 14 | Regardless of the chosen medium, when the line is the main element of an image, the result is called<br>a. Painting<br>b. Drawing<br>c. Artwork<br>d. Installation                              | 1.5 | CO1 |
| Q 15 | By joining line you can create:<br>a. Colour<br>b. Space<br>c. Shape<br>d. Texture  | 1.5 | CO2 |

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| Q 16   | Which term best describes what the elements of design are?<br>a. Equipment and materials used to create artwork and designs. e.g. pencil, paper, brushes and paint<br>b. The essential and most basic components used to construct all designs and images<br>c. The many ways in which we combine our images, symbols and type to create designs<br>d. The hot part of a stove use for cooking up tasty designs. | 1.5 | CO2 |
| Q 17   | Red, yellow, orange are<br>a. Primary colors<br>b. Secondary colors<br>c. Cool colors<br>d. Warm colors  | 1.5 | CO2 |
| Q 18   | The “line” is a natural or man-made element.   | 1.5 | CO2 |
| Q 19   | _____ are a group of colours from which all other colours can be made.   | 1.5 | CO2 |
| Q 20   | The area within or around a shape is called<br>a. Line<br>b. Dot<br>c. Shape<br>d. Space   | 1.5 | CO2 |
| <p style="text-align: center;"><b>Section B</b><br/><b>(4Qx5M=20 Marks)</b></p>  |  |     |     |
| Q 21   | Discuss the additive color scheme and explain its basis <b>(2.5+2.5 = 5 marks)</b>   | 5   | CO2 |
| Q 22   | Describe any five elements of design.  | 5   | CO2 |
| Q 23   | Sketch five inorganic objects around you.  | 5   | CO3 |
| Q 24   | Illustrate the following textures using dots: <b>(1.25 marks each)</b><br>a. Rough<br>b. Smooth<br>c. Fluffy<br>d. Grainy  | 5   | CO3 |
| <p style="text-align: center;"><b>Section C</b><br/><b>(2Qx15M=30 Marks)</b></p> |  |     |     |
| Q 25   | Draw a color wheel. <b>(6 marks)</b><br>Identify and illustrate an example (consisting of two or three colors) of the following color schemes from the color wheel:<br>a. Monochromatic color scheme <b>(3 marks)</b><br>b. Analogous color scheme <b>(3 marks)</b><br>c. Complementary color scheme <b>(3 marks)</b>  | 15  | CO4 |

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| Q 26  | <p>Observe the geometric pattern shown below:</p>  <p>a. Assess the pattern and identify repeating element(s). <b>(3 marks)</b><br/> b. Create four new patterns using any one element or combination of elements from the above geometric pattern. <b>(3*4 = 12 marks)</b></p> | 15 | CO5 |
| <p style="text-align: center;"><b>Section D</b><br/> <b>(2Qx10M=20 Marks)</b></p> |  |    |     |
| Q 27  | <p>As part of your course, you conducted a study on textures. Outline the following details about your study:</p> <p>a. Aim of the study <b>(3 marks)</b><br/> b. Protocol or methodology of the study <b>(4 marks)</b><br/> c. Results of the study <b>(3 marks)</b></p>  | 10 | CO3 |
| Q28   | <p>a. Identify and analyze the condition for the creation of a tessellation. <b>(3 marks)</b><br/> b. Draw a tessellation using tessellating equilateral triangles and squares. Use two different color to represent each shape. <b>(7 marks)</b></p>  | 10 | CO4 |