

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Engineering - SEMESTER - IV EXAMINATION - WINTER 2025

Subject Code: 114AV01

Date: 03-12-2025

Subject Name: Basics of Planning - Software Applications

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Simple and non-programmable scientific calculators are allowed.**

	Marks
Q.1 (a) List out The Principles of Building Planning and Explain Grouping.	03
(b) Explain Objectives, Scope and Applicability of Building Bye Laws and Development control regulations.	04
(c) Explain the purpose of setting up drawing limits and units during the general setting up phase for a new AutoCAD file	07
Q.2 (a) Differentiate between Absolute Coordinates and Relative Coordinates in AutoCAD drafting	03
(b) Describe the various options to draw CIRCLE, and ARC in AutoCAD	04
(c) Explain the function and usage of the TRIM and EXTEND modification commands	07
OR	
(c) Explain the function and usage of the COPY and MOVE commands	07
Q.3 (a) What are the advantages of computer aided drafting over manual drafting?	03
(b) Explain the measurement units in AutoCAD.	04
(c) Describe the function and usage of various osnap options	07
OR	
(a) Explain UCS and WCS?	03
(b) Explain different annotations in AutoCAD	04
(c) Explain the difference between Model Space and Paper Space within the AutoCAD workspace. and how it can be utilized to prepare the composite layouts.	07
Q.4 (a) What is the importance of preparing line diagram or sketch before preparing the floor plans?	03
(b) Describe how the TEXT command is used to add dimensional annotations and room labels to a 2D floor plan.	04
(c) Why are Layers essential in AutoCAD plan preparation? Explain essential options in layer menu.	07

OR

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|----------------|---|-----------|
| (a) | Explain various line types in AutoCAD | 03 |
| (b) | Outline the procedural steps for the planning and drawing of a typical straight-flight staircase within a floor plan. | 04 |
| (c) | Explain setting of dimension style with various options. | 07 |
| Q.5 (a) | Explain use of array to place 6 chairs on the round dining table | 03 |
| (b) | Explain use of dynamic blocks in AutoCAD | 04 |
| (c) | Explain use of construction line (XLINE) and RAY to draw sections and elevation from the floor plan support your answer with the sketch | 07 |

OR

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|------------|---|-----------|
| (a) | How do you decide on the furniture requirement and its placement in a room? | 03 |
| (b) | Explain collaboration feature of the AutoCAD. | 04 |
| (c) | Explain procedure to draw elevation from various floor plans. Explain the procedure using appropriate sketch. | 07 |
