Short Questions

1. What is the purpose of engineering graphics?
2. What is a plain scale in drafting?
3. How does a diagonal scale benefit draftsmen?
4. What is a conic section in mathematics?
5. Describe the general method for drawing a rectangular hyperbola.
6. What is a cycloid?
7. Define epicycloid.
8. What is a hypocycloid?
9. Explain the significance of computer-aided drafting in modern engineering.
10. What are the basic views used in CAD?
11. What are orthographic projections?
12. What conventions are used in orthographic projections?
13. Describe how points are projected in orthographic projection.
14. How are lines projected in orthographic projection?
15. What is the purpose of auxiliary planes in projection?
16. What is computer-aided orthographic projection?
17. What are regular geometric figures?
18. How are plane figures projected in orthographic projection?
19. What are the types of solids typically studied in engineering graphics?
20. Describe an auxiliary view in drafting.
21. What is a sectional view?
22. How is a right regular solid defined?
23. What are prisms?
24. How is a cylinder projected in orthographic views?
25. What is a pyramid in engineering graphics?
26. Describe the projection of a cone.
27. What tool is commonly used to draw circles in engineering graphics?
28. Explain the concept of 'views' in computer-aided drafting.
29. What is the importance of scales in engineering drawing?
30. What does the term 'diagonal scale' refer to in drawing?
31. Define a cycloid in the context of motion.
32. How is an epicycloid used in mechanical engineering?
33. Describe the generation of a hypocycloid.
34. How does CAD enhance the drawing of conic sections?
35. What is the primary advantage of using auxiliary planes in projection drawing?

36. How do computer-aided projections differ from manual projections?
37. What is the projection of points in spatial visualization?
38. How are lines represented in different views in orthographic projection?
39. What are the steps to project a plane figure in orthographic projection?
40. What role does CAD play in the projection of regular solids?
41. How does one handle the projection of complex shapes in engineering graphics?
42. What is the importance of sectional views in technical drawings?
43. How are different materials indicated in sectional views?
44. Describe how a prism is represented in different orthographic views.
45. What is the challenge in drawing a cylinder in perspective?
46. Explain the projection of a pyramid when viewed along its axis.
47. What are the characteristics of a cone's projection in an orthographic drawing?
48. What is a tangent to a circle?
49. How are hidden details indicated in engineering drawings?
50. What does the term 'true shape' mean in technical drawing?
51. What are the conventions for line thickness in engineering drawings?
52. How do you determine the number of views needed to fully describe an object?
53. Describe a method to draw a hyperbola using a string and pins.
54. What is an isometric projection?
55. Explain the difference between an axonometric projection and a perspective projection.
56. What is the purpose of a cutting plane in sectional views?
57. How can CAD software assist in the design of mechanical gears?
58. What is meant by the 'auxiliary view' in technical drawing?
59. What is a development in engineering drawing?
60. Describe the process of creating an orthographic projection from an isometric drawing.
61. How does one ensure accuracy in a manually drawn orthographic projection?
62. What are the standard practices for dimensioning in engineering drawings?
63. What is a spline in the context of drafting?
64. Why are CAD models preferable to hand drawings in modern engineering?
65. Explain the significance of the third angle projection in engineering graphics.

66. What challenges might you face when converting a 3D model to 2D drawings?
67. What is a 'detail drawing' in engineering graphics?
68. How do you represent threads and fasteners in technical drawings?
69. What does the term 'assembly drawing' mean?
70. Explain the use of 'break lines' in technical drawings.
71. What is a 'sectional front view' in drafting?
72. How do you determine the best plane for a sectional view?
73. What are typical applications of hyperbola in engineering designs?
74. How does one use a vernier scale in drafting?
75. Describe how to draw an ellipse using the two-center method.
76. What is the difference between a true length and a projected length of a line in a drawing?
77. How are bearings and gears commonly depicted in CAD drawings?
78. What is the purpose of using a 'phantom line' in engineering drawings?
79. Explain the concept of 'scaling' in technical drawings.
80. What are the benefits of using a CAD system in the creation of isometric drawings?
81. How is 'tolerance' indicated in technical drawings?
82. What is meant by 'dimensioning' in the context of CAD?
83. Describe a typical use of auxiliary views in complex mechanical assemblies.
84. What are 'limit dimensions' in engineering drawing?
85. How do you handle the representation of intersecting cylinders in a technical drawing?
86. What does the term 'projected tolerance zone' refer to in technical drawings?
87. How are different surface finishes indicated in technical drawings?
88. What is an exploded view drawing?
89. Describe the purpose of revision blocks in engineering drawings.
90. How are colors used in CAD models?
91. What is a datum in engineering drawings?
92. Explain the role of a leader line in a drawing.
93. What is the difference between a block and a layer in CAD software?
94. Describe how to dimension a radius in a technical drawing.
95. What are the advantages of using a parametric CAD system?
96. How are assemblies typically represented in CAD software?
97. What is geometric dimensioning and tolerancing (GD&T)?
98. How do you represent a knurl on a technical drawing?
99. What considerations are important when choosing the scale for a drawing?

100. Explain the importance of a title block on engineering drawings.
101. How is electrical wiring represented in technical drawings?
102. What does the term 'assembly interference' refer to in CAD?
103. Describe the purpose of a cross-sectional drawing.
104. How are fastening elements like screws and bolts detailed in drawings?
105. What is an oblique projection in technical drawing?
106.What is meant by the term “as-built drawing” in engineering documentation?
107. Explain the purpose of a revision cloud in CAD drawings.
108. How are chamfers and fillets represented in technical drawings?
109. Describe the role of a bill of materials (BOM) in engineering drawings.
110. What is the purpose of using exploded views in assembly drawings?
111.Explain the significance of GD&T (geometric dimensioning and tolerancing) in manufacturing.
112. How are centerlines represented in engineering drawings?
113. Describe the process of dimensioning an angle in a technical drawing.
114. What is the purpose of a detail view in engineering drawings?
115. Explain the concept of "tolerance stack-up" in engineering.
116. How are weld symbols used in technical drawings?
117. Describe the purpos of an interference fit in mechanical assemblies.
118. What is the significance of datum targets in GD&T?
119. How are surface finishes indicated in engineering d23rawings?
120. Explain the concept of "draft" in product design.
121. What is meant by "dimensioning to a virtual condition" in GD&T?
122. Describe the role of GD&T in ensuring interchangeability of parts.
123. How are coordinate dimensioning systems used in engineering drawings?
124. Explain the concept of "minimum wall thickness" in product design.
125. What is the purpose of using auxiliary views in engineering drawings?