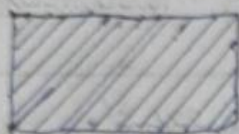


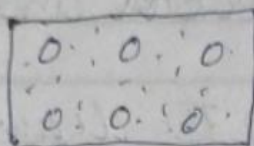
Machine drawing & **DIAGRAM** engineering graphics

Q1 When the cutting plane extends straight line entirely through an object is called full section.

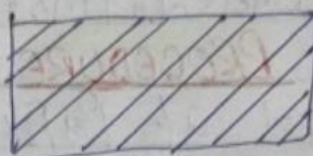
Q2 Name the following figures:



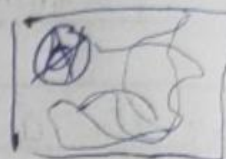
Cast Iron



concrete



steel



wood

$\angle 45^\circ$ → horizontal
→ equidistant → 12-3mm gap

Q3 Half section: has Interior + exterior planes of 90° .

Q4 Rib → support → provides rigidity.

Q5 Offset section is a straight, center, bent or cutting plane through the part.

Q6 Assembly section is a sectioned multiple part.

Q7 Unlabeled section is made to clarify details.

Q8 Detailed close approximation of the appearance of an actual screw thread.

Q9 Schematic use staggered lines to represent the thread roots & crest.

Q10 Simplified visible & hidden lines to represent major & minor diameter.

Q11 BSW, BSF, BSP threads are 55° .

Q12 Co metric thread is 60° .

Q13 B.A.T (British Association) thread 47.5° .

Q14 Square thread 90° .

Q15 Knuckle thread 30° .

Dated _____

Teacher's Signature _____

lifting load

angles concerned with the profiles.

Q20. \angle of some thread is 29° (British) 30° (Metric)

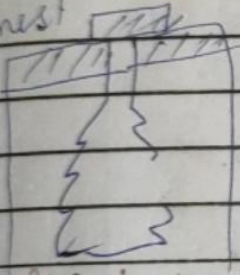
Q21. trapezoid thread 30°

Q22. \angle Butress thread 45°

Q23. unified thread or \checkmark thread 60°

Q24. Whitworth 55°

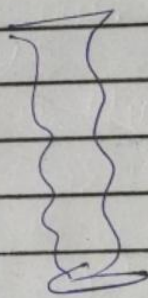
Q25. represent the following bolts & give their names



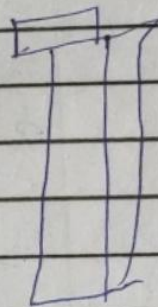
RAG bolt



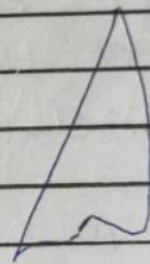
Square



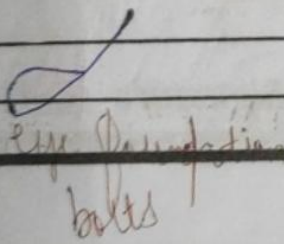
zig-zag



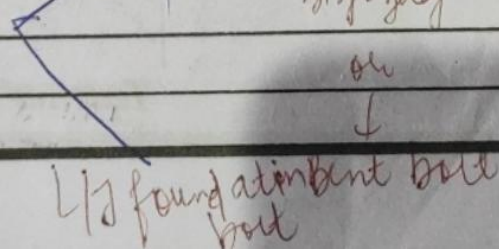
Lewis Bolt



Fish tail



eye foundation bolts



foundation bent bolt

DIAGRAM

Q 26. Bearing reduces friction. used shafts, support rotating, radial on fresh shaft.

Q 27. journal bearing reduce load friction, used for light load & motion continuous, uses no rolling element also called radial or sleeve bearing has high horsepower & high loads like turbines & pumps.

Q 28. Pivot bearing is vertical shaft & is frictionless also called axial thrust or foot step bearing.

Q 29. thrust bearing is also called hydrodynamic bearing. to carrying axial loads or called axial bearings.

Q 30. Ball bearing used rolling element, reduce rotational friction support radial & axial loads has lower co-efficient of friction lower load capacity also called deep groove single row or Conrad bearing.

Q 31. CAD increased the productivity of the designer improves the quality of design.

Q 32. AUTO CAD was developed in 1902.

Q 33. Isometric is a representation of an object in 3 dimensional views where vertical lines are drawn vertically & horizontal lines in the width & depth planes at 30° to the horizontal.

Q 34. sectioning is used for knowing internal details.

Q 35. Orthographic having 3 views (front, top, side).

Q 36. Dimension line is a thin line with arrow heads among 3mm long & 1mm wide.

Q 37. Perspective projection is bigger than object.

Dated _____

Teacher's Signature _____

11) Plane mirror should be placed vertically on the plane of paper.

30. Parallel like object inspection is same in size

9. except orthographic projections all are 3-D projections
 10. In orthographic projection the projectors are parallel to each other & \perp to plane.

11. With the help of ortho. p. we can draw the true shape of any flat surface.

12. lines of sight are called projectors.
 13. Multiview projection has infinite views & 6 principle view.

14. axonometric is an isometric projection technique used to create pictorial drawing of an object rotated about all 3 dimensions.

