

**Answers are in brief. Q 19 to 24 are auto-cad question.**

**Q1. What is projection, projector and plane of projection?**

**Q2. Explain auxiliary plane with sketch.**

**MAKE SKETCH as explained in class.**

**Q3. Classify projection by making a chart.**

**MAKE CHART as explained in class.**

**Q4. Differentiate first and third angle projection. (Explain all 5 differences)**

**Q5. What are the types of lines?**

**Dimension Line & Notations**

**Ø Extension Line**

**Ø Dimension Line**

**Ø Arrow Heads**

**Ø Numerals**

**Ø Leader**

**Ø Notes**

**Q6. What is dimensioning? Mention its notations.**

**Q7. What are reference, coordinate and section cutting planes?**

**Q8. What is an isometric projection? Differentiate it with oblique view.**

**Q9. Why 30° angle is used in isometric projection?**

**Q10. Explain isometric scale and write isometric view of a circle & sphere.**

**Q11. What is difference between orthographic and pictorial views?**

**Q12. What is perspective view and where is it preferably used?**

**Q13. Why orthographic projection is commonly used to express engineering details?**

**Q14. Why it is necessary to use isometric scale for drawing isometric projection?**

**Explain with sketch**

**Q15. Under what circumstances hidden lines are to be drawn in an isometric projection.**

**Q16. How do isometric drawing and isometric view differ in projection?**

**Q17. For which type of an object, oblique view is preferred over an isometric view.**

**Q18. What are the factors to be kept in mind for taking perfect orientation of an object?**

**Q19. What do you mean by Auto Cad? Give definition & their use.**

**Q20. What are Co-ordinates systems? Name types of co-ordinate systems and explain with an example of a polygon for each system.**

**Q21. Explain how an ellipse can be drawn by different ways, if axes are 180x70.**

**Q22. What are the basic object-selection methods? How many types of selection windows?**

**Q23. Explain Move, Copy, Fillet and Chamfer with free hand sketches**

**Q24. Name any 10 commands used in drawing orthographic projection.**