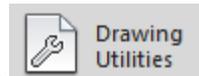1. What is CAD?
    a. CAD = Computer added design, Autocad is an drafting software developed by Autodesk in 19982. This software use for design and drafting Engineering 2D & 3D drawings.
2. What is measurement (Using measure tape)
    a. Meter   SQMT = square meter
        i. MM = millimeter
        ii. CM = Centimeter
        iii. M = Meter
    b. Feet   SQFT = square feet
        i. Inches

3. Drawing Unit **(UN Space)** = For Set Unit
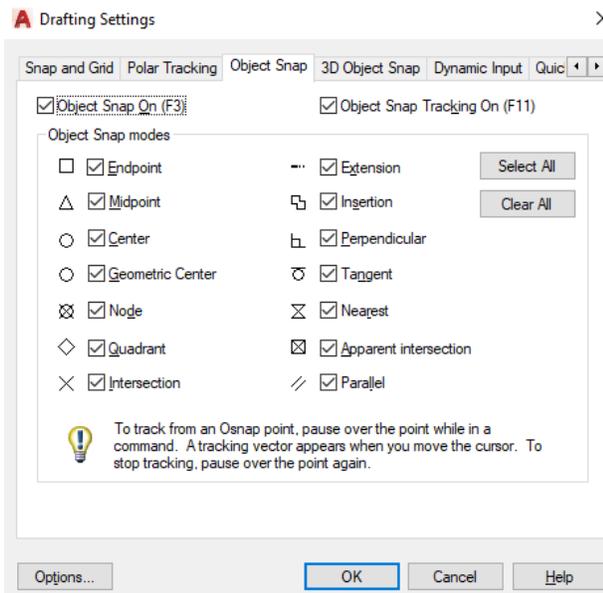   Meter Setting

   Feet Setting

4. **CTRL + G** for Hide and show Grid Line
5. **F7** also for hide and show grid line

6. Object Snap **(OS Space)**   make sure all object snap mode active.
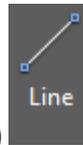
7. Line Tool **(L Space)**   Create line with shortcut key
   a.   Line tool use for create vertical and horizontal (segment) Line
8. Ortho **F8** for Ortho Mode : create line constrained and perpendicular direction.
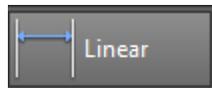

9. Polyline **(PL Space)**   use for create straight line segment as well as arc. Polyline connected each line of segment
   a.   When you using polyline **A** for Arch and **L** for Line again.
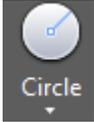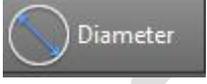10. (D Space) Dimension Style manager
    a.


11. Dimension **(DIM Space)**   to Create linear or aligned dimenstion.
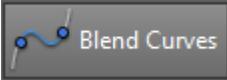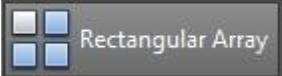

12. Linear Dimension **(DLI space)**   use for create a linear vertical or Horizontal Straight perpendicular line dimension.

13. Aligned Dimension **(DAL Space)**   For Create aligned constrained line dimension

14. Angular Dimension **(DIN Space)** create an angular dimension

15. Circle **(C Space)** Create center point circle there are to type of measurement in circle

16. Arch **(A Space)** use for Create a three point arc.

    a. Radius **(DRA Space)** Create a radius or Arc dimension. Radius dimension measure from center point on circle.

    b. Diameter **(DDI Space)** Measure the diameter of a selected circle**.**

17. Rectangle **(REC Space)** create rectangular Exp. 20,20.

18. Move Tool **(M Space)** move selected object one location to another location. Moves objects a specified distance in a specified direction.

19. Copy **(CO Space)** Copy selected object a specified distance or direction. Also use multiple copy.

20. Rotate **(RO Space)** use for rotate selected object around a base point or angle.

21. Mirror **(MI Space)** mirror an selected object or crate a mirrored copy. Create the other half copy.

22. Offset **(O Space)** Create offset distance between two line or object.
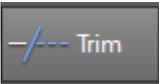
23. Trim **(TR Space)** trim an wanted segment.

24. Extend **(EX Space)** Extend object to next edge to connect

25. Text **(T Space)** you can write a text in cad.
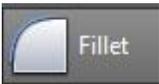
26. Fillet **(F Space)** Fillet use for connect 2 direction angle line, create rounds and fillet the edges.

27. Chamfer **(CHA Chamfer)** cut the rectangular & corner angle distance.

28. Blend Curves **(BLE Space)** create a tangent or smooth spline between the endpoints of two open curves.

29. Scale **(SC Space)** Scale selected object bigger or smaller, also use for make drawing Meter to feet or Feet to Meter.

30. Explode **(X Space)** Brake a compound object, make connected object separate.

31. Array **(AR Space)**: There are 3 types of Array.

   a. Rectangular Array **(AR Space)**: use for create copy object rows and columns, Distributes object copies into any combination of rows, Columns and levels.

   b. Path Array **(AR Space)**: distributes objects copies along a path.

   c. Polar Array**(AR Space)**: distributes object copies in a circular pattern around a center point or axis of rotation.

32. Insert Block (**I Space**) insert a block into the current drawing.

33. Match Properties (MA Space) this tool use for applies the properties of a selected object to another object.

34. Layer Properties **(SA Space)** Manage and create layers and layers properties.

35. Spline Fit **(SPL Space)** make curve design draws a spline with fit points.

36. Construction Line **(XL Space   V & H)** Create a construction line V Space For Vertical line H Space For horizontal line.

37. Join **(J Space)** Join similar object to form a single line, unbroken object.

38. Hatch **(H Space)** Fills an enclosed area or selected object hatch and pattern

39. Gradient **(GD Space)** Fills an enclosed area or selected object gradient, gradient fill one or two colors in object.

40. Boundary Creation **(BO Space)** Create a region or a polyline from an enclose area boundary.

41. Table **(TB Space)** Creates an Table in AutoCAD.

42. New (**CTRL + N**) open new black document

43. Save (**CTRL + S**) save current file document.

44. Save As (**CTRL + Shift + S**) save as current already saved document an other name or an other location.
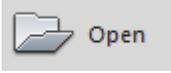
45. Open (**CTRL + O)** Open an existing document

46. Print **(CTRL + P)** print document setting.

47. Zoom **(Z Space)** Zoom Selected area

48. Zoom in or zoom out **(Z space Space)** Zoom in or zoom out with mouse.

49. Zoom all (Z Space A Space) Zoom All drawing fit to the page.

50. Erase (Delete) delete or remove all selected object.

51. Group **(G Space)** Create a group of objects.

52. Ungroup **(UNG Space)** Explodes or ungroup object or group.

53. Calculator **(QC Space)** Opens the Quick Calculator in autocad.