



School of Woodworking Skills
Session: 2021-22 (Summer Semester)
B. Voc. Program, 3rd Semester,
1st In-Sem. Examination

Course Code: GEN1309

Time: 1 Hour

Course Name: Woodworking CAD

Max. Marks: 20

Instruction:

1. Answer all questions from section A, each question carries one mark.
2. Answer all questions from section B, each question carries two mark.
3. Answer all questions from section C, each question carries three mark.

Section – A

05X01 = 05 Marks

Q.1 A line drawn with a long section, short dash, and another long section is a _____.

- (a) Hidden feature
- (b) Center of a circle
- (c) Center axis of a hidden cylinder
- (d) Center of a radius

Q.2 The default position of the UCS icon is positioned at _____ on the AutoCAD grid.

- (a) 0, 0, 0
- (b) 10, 10, 10
- (c) 20, 20, 20
- (d) None of the above

Q.3 Traditional drafters need to be able to create several different line widths because _____.

- (a) Different line widths convey different information
- (b) The line width has to do with how dark it appears in the finished drawing
- (c) They seem to transmit better in a fax machine
- (d) It makes no difference

Q.4 Once a drawing is determined to be complete, the title block is used to document the change from:

- (a) A draft to a finished drawing
- (b) A finished to a working drawing
- (c) An assembly to a finished drawing
- (d) A working drawing to a draft

Q.5 In order to convert fractional inches into decimal inches _____.

- (a) Look on a metric conversion chart



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- (b) Divide the numerator (top number) by the denominator (bottom number)
- (c) Check the engineer's scale
- (d) All of the above

Section -- B

03X02 = 06 Marks

- Q.6 Write down four differences between Line & Polyline with their short key and also explain conversion of a line object into polyline object.
- Q.7 Discuss any two types of object selection method used in AutoCAD.
- Q.8 What do you understand by DWG and DXF file format, write down any two difference between them.

Section -- C

03X03 = 09 Marks

- Q.9 Explain difference between Measure & Divide with the help of an example and also write their short keys.
- Q.10 Explain any four difference between basic hand drawing and AutoCAD drawing and discuss how drawing is useful in improving product quality.
- Q.11 Describe the following tools and also mention their short key being used in AutoCAD.
- (a) Scale (b) Stretch (c) Offset (d) Join (e) Break (f) Explode

Signature
09/10/21



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(b)

Section – B

03X02 = 06 Marks

Q.6 Write down four differences between Line & Polyline with their short key and also explain conversion of a line object into polyline object.

Ans.

S. No.	line	Polyline
1	Short Key – L + Enter	Short Key – PL + Enter
2	Line object is multi selective by no. of sides.	Polyline object is single selective by one entity.
3	Line can't be editable.	polyline is editable.
4	Line can't be change into other shapes.	Polyline can be change into curved shapes.
5	Line object have equal width.	Polyline object have equal and unequal width.

Conversion - By the Polyline edit tool, select join function, then select all lines for conversion as required, press enter, and Esc, then all the sides of line object can be convert into polyline object.

Q.7 Discuss any two types of object selection method used in AutoCAD.

Ans. 1. Implied window selection method – Just click on the left upper corner and drag it down in opposite side, then a default blue window appears at the time of object selection. In this if object is not covered fully, but object will not select by this method.

2. Cross window selection method – Just click on the right upper corner and drag it down in opposite side, then a default green window appears at the time of object selection. In this if object is not covered fully, but object will select by this method.

Q.8 What do you understand by DWG and DXF file format, write down any two difference between them.

Ans. These both are file extension of AutoCAD file.

DWG - It should be used if your drawing will only be accessed via AutoCAD.

DXF - It should be used if you're sharing drawings between different CAD or vector based programs.

S. No.	DWG File	DXF File



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1.	The acronym DWG stands for Drawing.	The acronym DXF stands for Drawing Exchange Format.
2.	It is the native file format for AutoCAD for storing 2D and 3D design data.	DXF format became the standard for data exchange between CAD programs.

Section – C

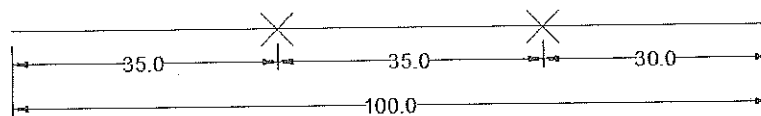
03X03 = 09 Marks

Q.9 Explain difference between Measure & Divide with the help of an example and also write their short keys.

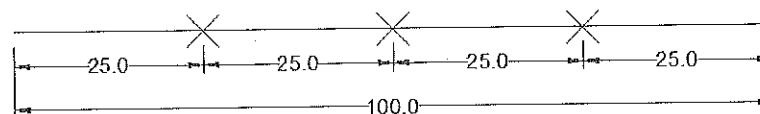
Ans.

S. No.	Measure	Divide
1	Short Key – ME + Enter	Short Key – DIV + Enter
2	A line divided by no of segment	A line divided by length of segment
3	Length is automatic fixed according to segments	Length is define by user
4.	Example – If you have a 100 mm length and you required segment length 35, then it will start from left with 35 mm segment and cover it until there is margin as per desired length otherwise you have remain length segment as 30 mm	Example – If you have a 100 mm length and you required segments 4, it will start from left to right to divide, then total length divided in given 4 segment and no remain segment you get.

Major



Divide



Q.10 Explain any four difference between basic hand drawing and AutoCAD drawing and discuss how drawing is useful in improving product quality.

Ans.



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S. No.	Basic Hand Drawing	Auto Cad Drawing
1	It is truly made by hand on paper	We can draw in software computer
2	It has to be store manually cause of hard copy	It has to be store in computer memory
3	More time consuming to draw on paper	Less time consuming cause of electronic medium
4	Correction in drawing is too tough	Correction in drawing is too easy
5	All things have to draw, no any predefined library as AutoCAD	We can access predefined library of AutoCAD

It is true that quality of product is related to drawing because of the assembly and connections of joints are totally based on the drawing and this is so important to get qualitative product drawing has to be realistic and qualitative.

Importance of drawing in product quality -

1. To know visualization of product in 2D & 3D
2. In assembly of joints
3. Product reality
4. Product quality
5. To check error in product.

Q.11 Describe the following tools and also mention their short key being used in AutoCAD.

(a) Scale (b) Stretch (c) Offset (d) Join (e) Break (f) Explode

Ans.

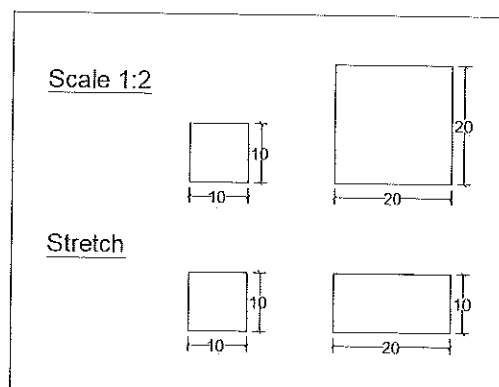
(a) Scale - Used for either reducing or increasing the actual size of the selected object by a specified scale. A scale factor represents the ratio of two corresponding lengths in similar geometric shapes.

Short key - SC + Enter

(b) Stretch - Used to lengthen object, shorten them and to alter their shapes by a selection window. This moves only the vertices and endpoints that lie inside the crossing selection.

Stretch does not modify 3D Solids.

Short key - S + Enter





(c) Offset - Used to create concentric circle, parallel lines, and parallel curves at a specified distance. You can offset an object at a specified distance or through a point. After you offset objects, you can trim and extend them as an efficient method to create drawings containing many parallel lines and curves. The OFFSET command repeats for convenience.

Short key - O + Enter

(d) Join - Used to join the end points of linear objects and curved objects. Combines a series of finite linear and open curved objects at their common endpoints to create a single 2D entity.

Short key - J + Enter

(e) Break - Used to erase the part of an object. It breaks the selected object between two points. You can create a gap between two specified points on an object, breaking it into two objects. BREAK is often used to create space for a block or text.

Short key - BR + Enter

(f) Explode – Explodes a compound object when you want to modify its component separately i.e. used for explode/brake a unit object to modify its component separately. Objects that can be exploded includes, polylines, blocks etc.

Short key - X + Enter

