

Subject: Computer-Aided Design

Level : 2nd year architecture

Date : 12/02/2025

Time : 8h30 – 10h00

Name :

Group :

Exam

1. Name the different types of coordinates used for 2D drawing and their format. (/4pts)

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2. In AutoCAD, some keyboard keys are used specifically. What are the functions of the following keys (3pts):

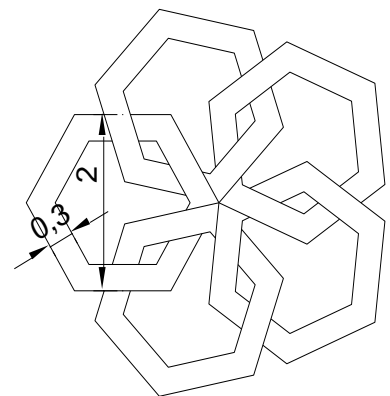
- F8:
- F9:
- F3:

3. What are the characteristics that define elements in the same layer? (1.5pts)

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4. Give the steps (commands and data) to create the following drawing (/4pts):

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-
-
-



5. Give the name and function of the commands corresponding to the following icons (/3p):



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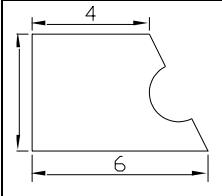
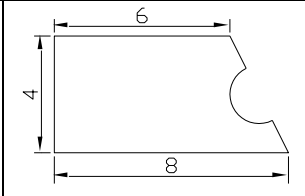
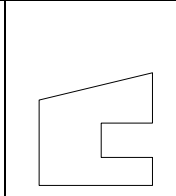
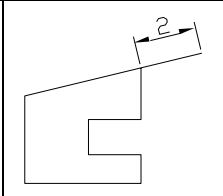
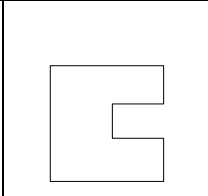
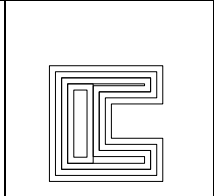


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6. Choose the correct statement (1.5pts):

- Which of the following commands is used to **remove** part of an object?
 CHAMFER ☐ TRIM☐ OFFSET ☐ EXTEND ☐
- What is the purpose of the **POLYLINE** command?
 - ☐ To create a connected series of line and arc segments as a single object
 - ☐ To create circles and ellipses
 - ☐ To draw multiple separate line segments
- Which of the following is the primary purpose of using the "**Layer**" function?
 - ☐ To print the drawing
 - ☐ To draw 3D objects
 - ☐ To resize objects
 - ☐ To manage and organize drawing objects

7. Fill in the table below by specifying the command required to create drawing in column (2) based on the drawing in column (1).(/3pts)

1	2	1	2	1	2
					
.....		

M^{me} MAGRI-DJENANE Sahar

Model answer

8. Name the different types of coordinates used for 2D drawing and their format. (/4pts)

- **Absolute Cartesian coordinates. x,y**
- **Relative Cartesian coordinates. @ x,y**
- **Absolute polar coordinates. Distance<Angle**
- **Relative polar coordinates. @Distance<Angle**

9. In AutoCAD, some keyboard keys are used specifically. What are the functions of the following keys (3pts):

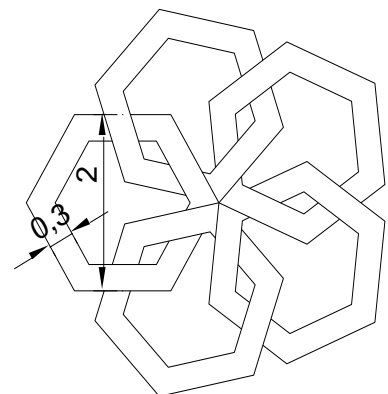
- **F8: Toggles Ortho Mode on or off.**
- **F9: Toggles Snap Mode on or off.**
- **F3: Turns Object Snap (OSNAP) on or off.**

10. What are the characteristics that define elements in the same layer? (1.5pts)

Color, Line Type and Line Weight

11. Give the steps (commands and data) to create the following drawing (/4pts):

- **Polygon/ Number of Sides:06/Center/Circumscribed about Circle/Radius : 1.**
- **Offset (Décaler) / distance :0.3**
- **Polar Array/Number of items:05/ Angle:360**
- **Trim.**



12. Give the name and function of the commands corresponding to the following icons (/3p):



- **Fillet (Raccord), used to create a rounded corner (arc) between two objects.**



- **Offset (Décaler), creates a parallel copy of selected objects at a specified distance. .**



- **Scale (Échelle), used to change the size of selected objects.**

13. Choose the correct statement (1.5pts):

- Which of the following commands is used to **remove** part of an object?

CHAMFER ☐

TRIM ☒

OFFSET ☐

EXTEND ☐

- What is the purpose of the **POLYLINE** command?

☒ To create a connected series of line and arc segments as a single object

☐ To create circles and ellipses

☐ To draw multiple separate line segments

- Which of the following is the primary purpose of using the "**Layer**" function?

☐ To print the drawing

☐ To draw 3D objects

☐ To resize objects

☒ To manage and organize drawing objects

14. Fill in the table below by specifying the command required to create drawing in column (2) based on the drawing in column (1). (/3pts)

1	2	1	2	1	2
Stretch (Étirer)		Lengthen (Modifier la longueur)		Offset (Décaler)	