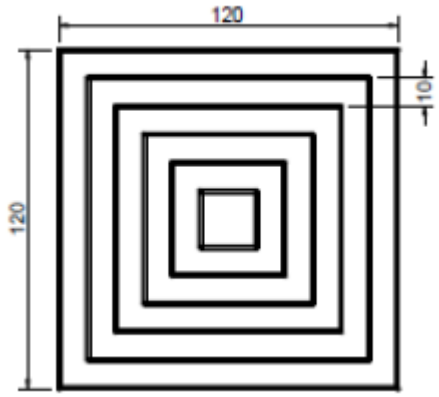
University of Salahaddin
College of Science
Environmental Science and Health Department

Practical Environmental Engineering
3rd Class exam
Date: Time: 45 min

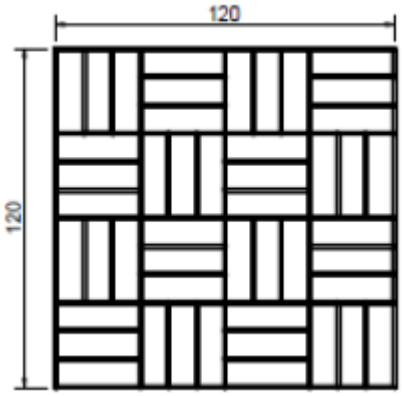
Q1/What is the difference between technical drawing and engineering drawing?

Q2/ Mention types of lines used in engineering drawing?

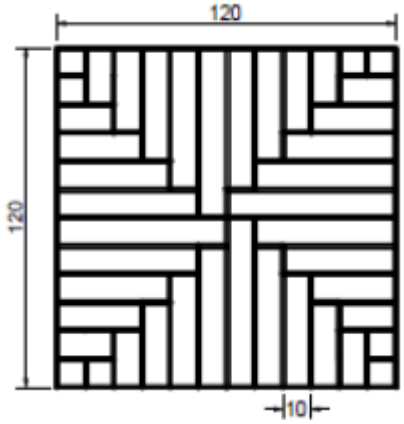
Q3/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



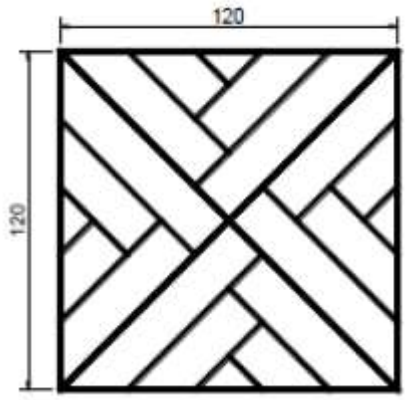
Q4/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



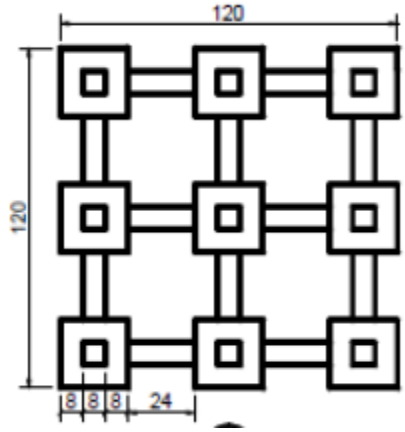
Q5/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



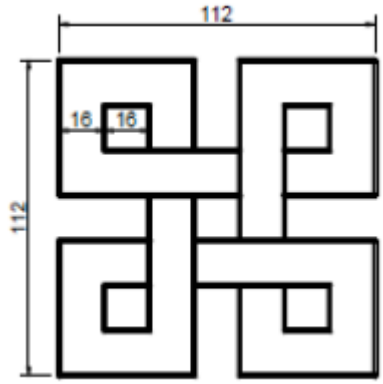
Q6/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



Q7/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



Q8/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



Q9/ How to bisect the straight line AB?

A **B**

Q10/ Dividing a straight line into a given number of equal parts.

Q11/ Drawing a straight line parallel to another line.

Q12/ Drawing a straight line // to another using T-square & triangle.

Q13/ Draw an angle and bisect it into two equal parts.

Q14/ Drawing a triangle with knowing the three sides; AB=7 cm, BC=5 cm, and CA=4 cm.

Q15/ Drawing a regular pentagon, given: One side length of pentagon AB=5 cm.

Q16/ Drawing hexagon inside the circle, given: Circle Radius = 3 cm.

Q17/ Drawing pentagon inside the circle, given: Circle with diameter = 5 cm.

Q18/ Dividing a circle into seven equal parts, given: a circle with diameter = 3 cm.

Q19/ Drawing an octagon, given: Distance between two sides = 4 cm.

Q20/Dividing circle into 8 equal parts, given: Circle with radius =3 cm.

Q21/ Drawing an arc tangent to two crossed the straight line.

Q22/ Drawing an arc tangent to another arc and also tangent to a straight line.

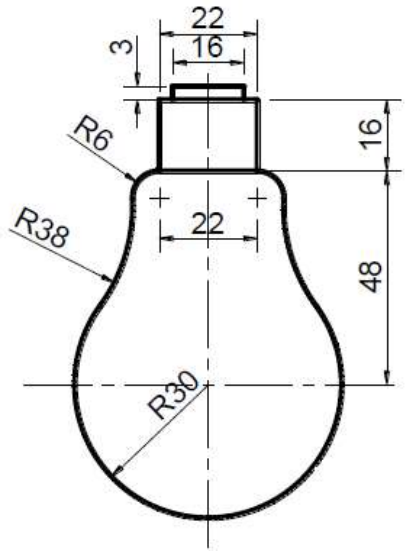
Q23/ Drawing an arc tangent to two arcs; out to out case.

Q24/ Drawing an arc tangent to two arcs; in to in case.

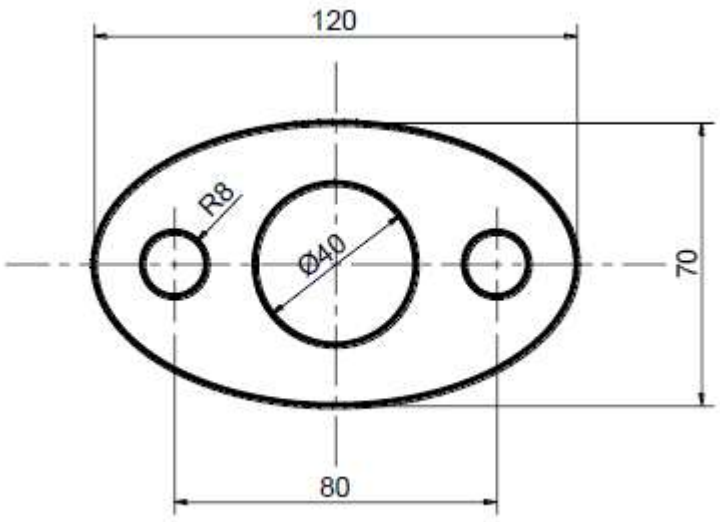
Q25/ Drawing an arc tangent to two arcs; in to out case.

Q26/ Draw ellipse; axis AB=12 cm and CD=8 cm.

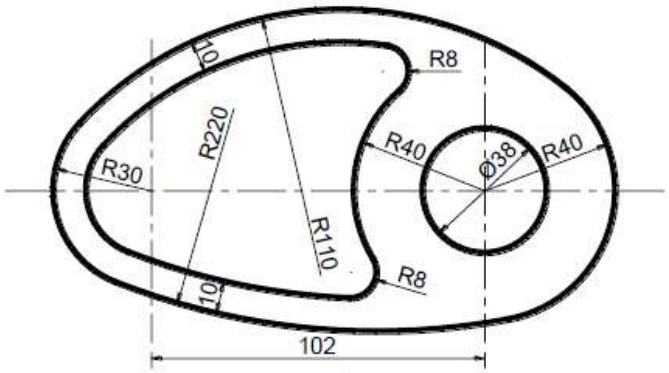
Q27/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



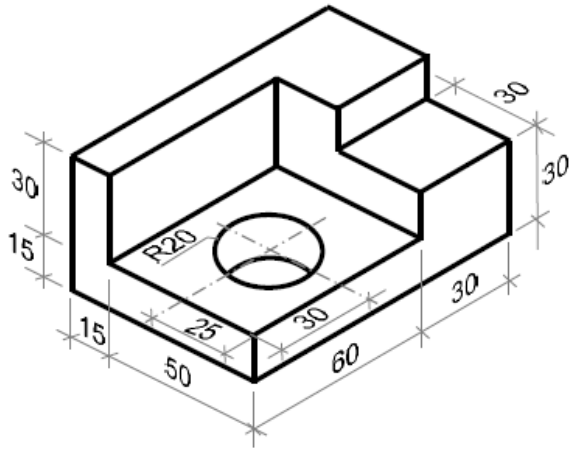
Q28/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



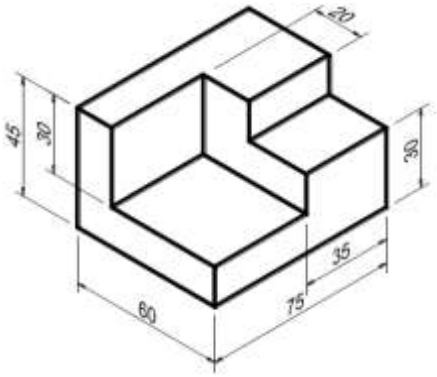
Q29/ Draw the engineering shape using the drawing instruments. (Note; scale 1:1).



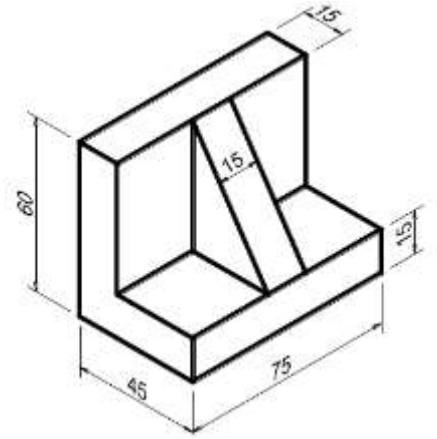
Q30/ Draw the projections of the following: (note; scale 1:1)



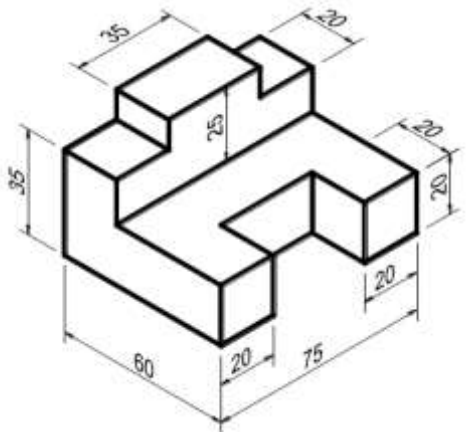
Q31/ Draw the projections of the following: (note; scale 1:1)



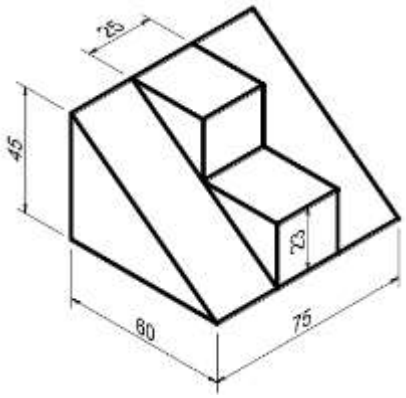
Q32/ Draw the projections of the following: (note; scale 1:1)



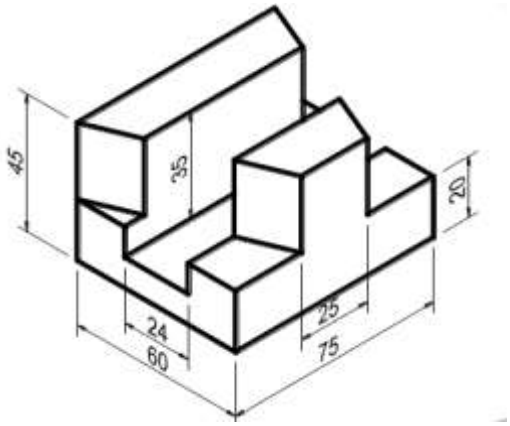
Q33/ Draw the projections of the following: (note; scale 1:1)



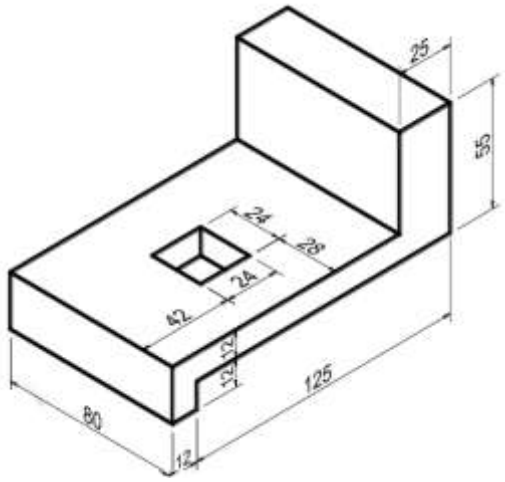
Q34/ Draw the projections of the following: (note; scale 1:1)



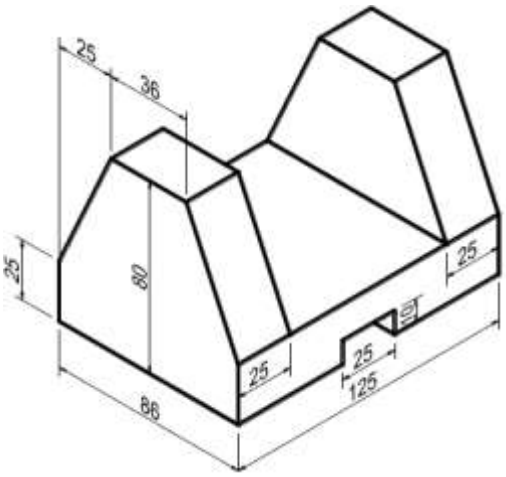
Q35/ Draw the projections of the following: (note; scale 1:1)



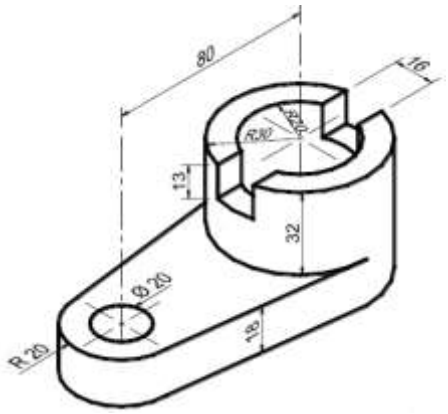
Q36/ Draw the projections of the following: (note; scale 1:1)



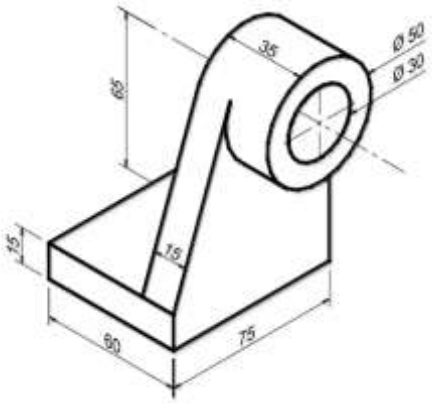
Q37/ Draw the projections of the following: (note; scale 1:1)



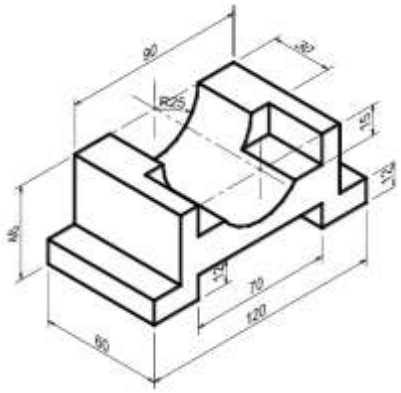
Q38/ Draw the projections of the following: (note; scale 1:1)



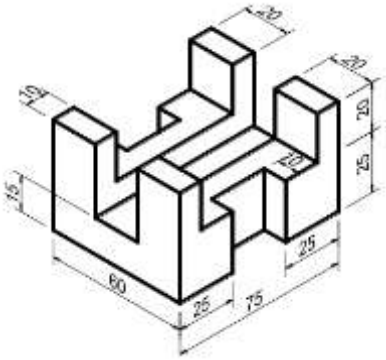
Q39/ Draw the projections of the following: (note; scale 1:1)



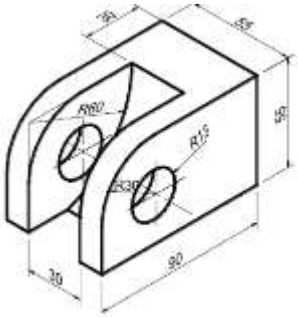
Q40/ Draw the projections of the following: (note; scale 1:1)



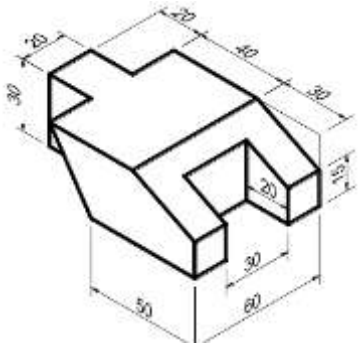
Q41/ Draw the projections of the following: (note; scale 1:1)



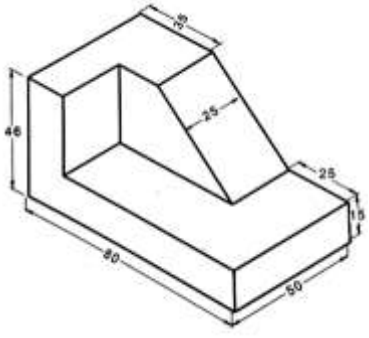
Q42/ Drawthe projections of the following: (note; scale 1:1)



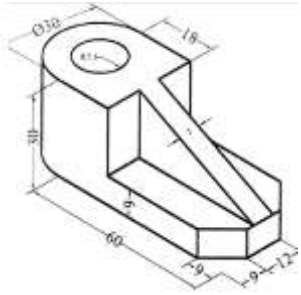
Q43/ Draw the projections of the following: (note; scale 1:1)



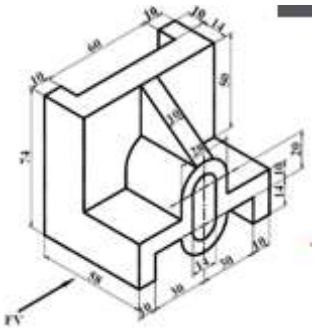
Q44/ Draw the projections of the following: (note; scale 1:1)



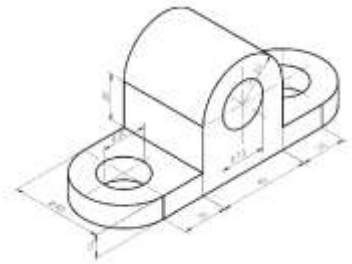
Q45/ Draw the projections of the following: (note; scale 1:1)



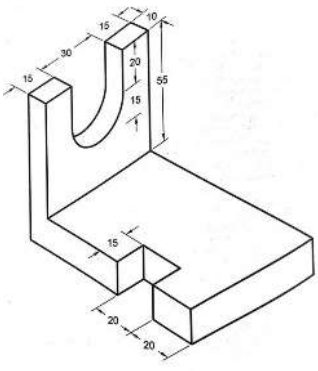
Q46/ Draw the projections of the following: (note; scale 1:1)



Q47/ Draw the projections of the following: (note; scale 1:1)

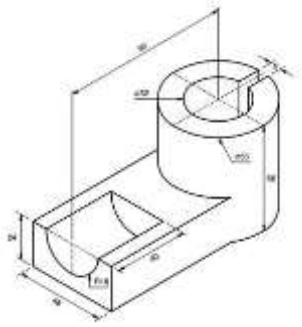


Q48/ Draw the projections of the following: (note; scale 1:1)



Q49/ Draw the projections of the following: (note; scale 1:1)

Q50/ Draw the projections of the following: (note; scale 1:1)



Good Luck

Lecturer

Nihal S. Hanna