Question 1. A trophy has the shape of a model truck made of solid material.
A pictorial view, the end elevation and plan of the trophy are given.
a) Using the necessary projection lines, draw the front elevation.
b) Label your drawing with neat block letters.
c) Use the given centre-lines to draw the symbol of projection.

Note: Do not show hidden details.

14 marks
Question 2. A dimensioned ring spanner is shown in isometric projection. On the start lines given below, draw the same spanner in **cabinet oblique projection**. 14 marks

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OBLIQUE PROJECTION

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Question 3. A simple drawing of a whale is shown below.

a) Using the given dimensions, continue a similar drawing started at the bottom, clearly showing how you obtain the centres of the arcs.

b) Mark two points of tangency on your finished drawing.

*Note: W, X, Y and Z are points of tangency.* 14 marks

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Sheet 2 of 4

Educational Assessment Unit

Name: ____________________ Class: __________
Question 4. A symmetrical ideogram indicates a baby nappy-changing facility.
Using the start lines given at the bottom, make a similar drawing to the given dimensions.
Notes: i) The 60° angle at P and the 45° angle at Q at the bottom must be constructed using the compass. All other angles may be drawn using the set-squares.
ii) Use the given faint horizontal lines as guidelines to your drawing.

14 marks

A ____________________________
B ____________________________
C ____________________________
D ____________________________
E ____________________________
F ____________________________

Question 5. a) Construct a regular octagon in the given square.
b) Construct a regular octagon in the circle given below on the left-hand side.
c) Construct a regular octagon around the circle given below on the right-hand side.

12 marks

a) 

b) 

c)
Question 6. A cardboard model of an archway made up of two hexagonal prisms (A and H) and six truncated hexagonal pyramids (B,C,D,E,F and G) all glued together to form the arch. A front elevation, an incomplete plan and the true shape of cut of the truncated pyramid G are given.

a) Complete the plan.
b) Using the given start lines and centre O, draw the development of the truncated pyramid including the base, assuming the joint line to be along A-A1.  

16 marks

Question 7.  

a) A simple drawing of a whistle is given. A similar but larger, incomplete drawing of the whistle is also drawn. Complete the whistle by constructing a tangent from W to the larger circle.

b) A rubber belt is fitted to five pulleys as shown below on the right.

Three of the pulleys are drawn again to a larger scale.

i) Complete the part of the belt between pulley A and pulley B, by constructing a tangent XY between the two equal circles.

ii) Draw the part of the belt RS by constructing a tangent to the circle C at point R.

Note: All construction work must be shown in all your answers.

16 marks