YEAR 13C & 13D TD WORKSHEETS # 1

QUESTION 1

(a) The diagram below shows two views of a **MULTI-GRIP BRACKET abcd** drawn to a scale of 1:50.The bracket consists of two plates that are welded together at ac.
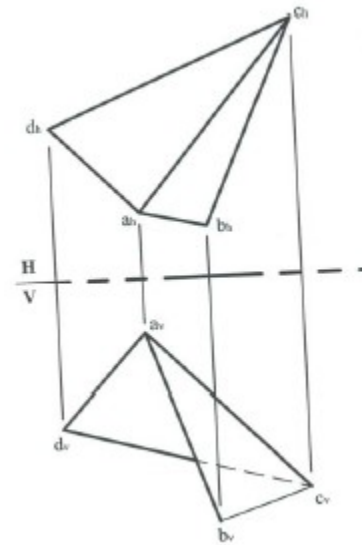
(i) Find the true length of the weld. _____

(2½ marks)

(ii) Project the true shape of the bracket **abcd.**

(4½ marks)

(iii) What is the dihedral angle between the two plates ?
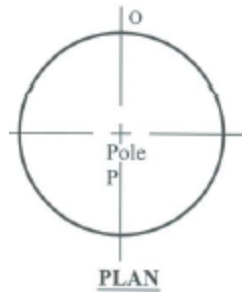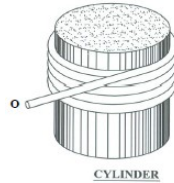
(½ marks)

QUESTION 2

(a) The Pole P and the end of a string **O** which is attached to the cylinder is shown on the plan below. The angle between the vectors is 30º.

(i) Draw the locus of the curve so that it unwinds from point O for three quarters of a revolution in an anticlockwise direction.
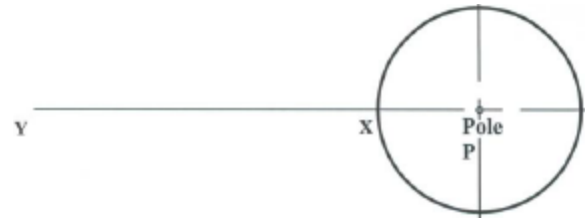
(5 marks)

(ii) Name the curve in (i) _____
(1 mark)

(a) The Pole P, first vector X, second vector Y of a special curve are shown below. The angle between the vectors is 30º. **(8 marks)**

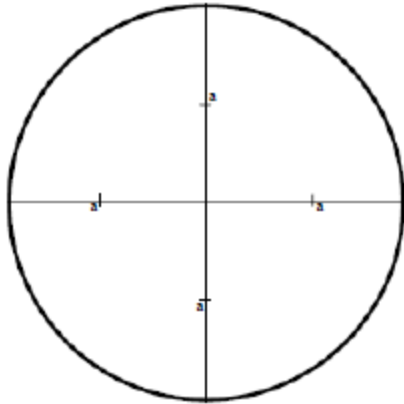(i) Draw the curve starting at X and to unwind in a clockwise direction for **one complete** revolution.

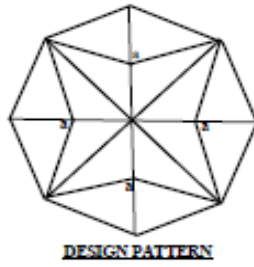(ii) Name the curve _____

CYLINDER

PLAN

QUESTION 3

(a) **Given:** A picture of a design pattern below.
Required: Redraw the design pattern inside the circle given below.

(b) Name the following safety attire/equipment given below.

DESIGN PATTERN

Safety Equipment