I A R E

IARE
INSTITUTE OF
AERONAUTICAL ENGINEERING
(An Autonomous Institute affiliated to JNTUH, Hyderabad)
Dundigal, Hyderabad - 500 043

LABORATORY WORK SHEET

Name of the Student :...

Class......Btech CSE...... Semester.........I.........

Course Code :.. AMED03 ......Course Name :.. Engineering Graphics

Name of the Course Faculty...Faculty ID :....

Exercise Number :.........06.........Week Number :.........06.........Date :......

Roll Number

DAY TO DAY EVALUATION:

Marks	Aim / Preparation	Algorithm / Procedure	Source Code	Program Execution	Viva - Voce	Total
		Performance in the Lab	Calculations and Graphs	Results and Error Analysis		
Max. Marks	4	4	4	4	4	20
Obtained						

Signature of Faculty

START WRITING FROM HERE :

＊ Sections of pyramids

Aim : To draw a section plane parallel to the base of the pyramid.

Apparatus : Laptop, mouse, AutoCAD

Procedure :

i) Draw the projections of the pyramid in the required position and show a line V.T. for the section plane, parallel to and 25mm above the base. All the five slant edges are cut.

ii) Project the points at which they are cut, on the corresponding edges in the top view. The point 2' cannot be projected directly as the line ob is perpendicular to xy. But it is quite 1/4 evident from the projections of

other points that the lines of the section in the top
view are parallel to the edges of th base.

iii) Hence, line 1-2 also will be parallel to ab and O2 will
be equal to o1, o3, etc. Therefore with o as centre and
radius o1, draw an arc cutting ob at point 2 which
will be th projection of 2'. Complete th sectional top
view in which th true shape of th section is also seen.

iv) Hence, when a pyramid is cut by a plane parallel to its
base, th true shape of the section will be figure, similar
to th base; the sides of the section will be parallel
to th edges of th base in th respective faces and
th corners of the section will be equidistant from th
axis.
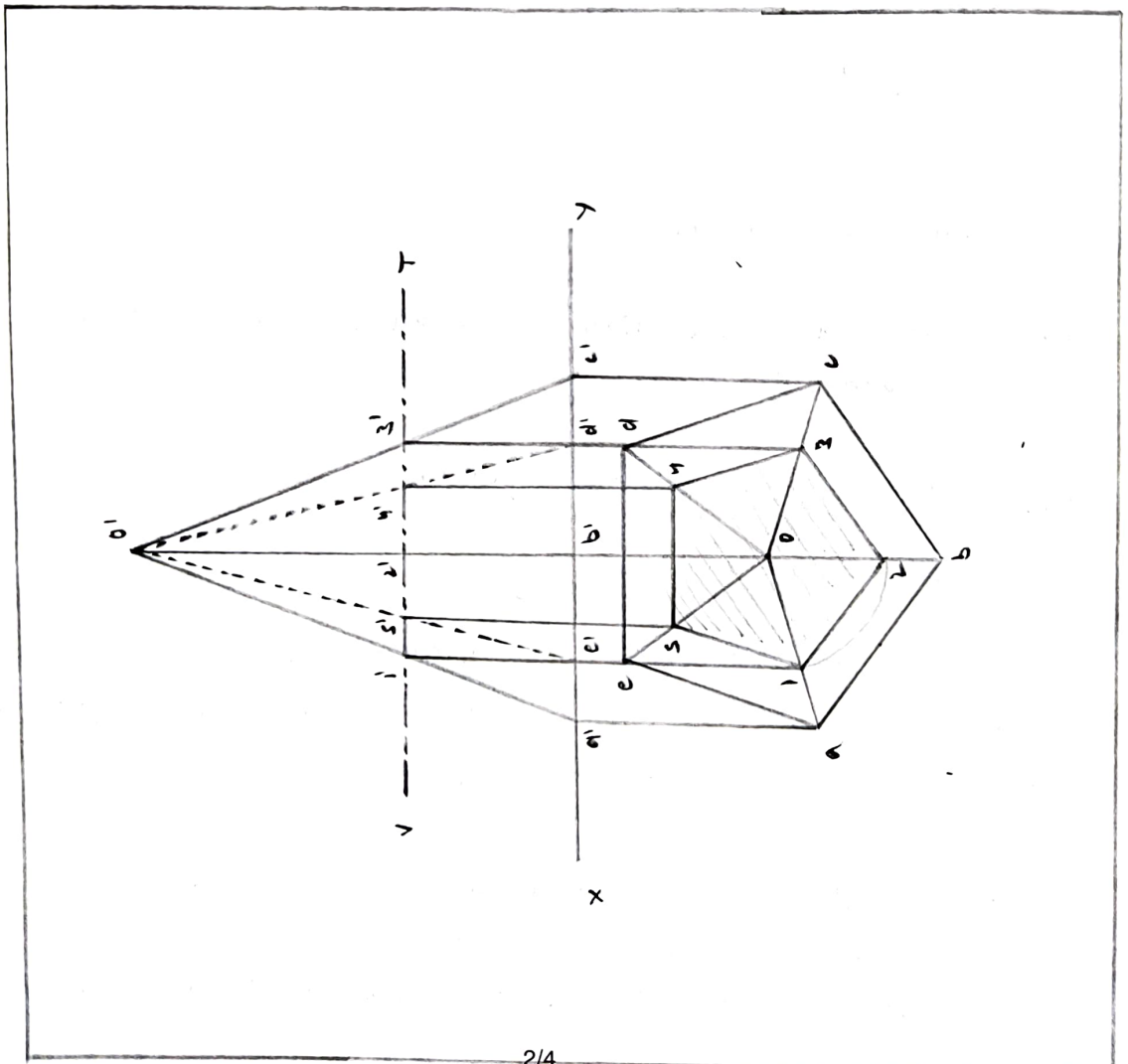
* Projections of solids

Aim : To draw th projection of a hexagonal prism cut by a vertical section plane HT making angle 45° with xy.

Apparatus : Laptop, Mouse, AutoCAD

Procedure :

i) Draw th front view and th top view of th prism and show the H.T of th section plane in th topview. Name in proper sequence, th points at which th lines cut.

ii) Project thm on th corresponding lines in th front view. Th positions of points 4 and 5 cannot be located directly. Hence, project thm on th first top view $\pm 4_1$ on ef and 5_1 on ed. From this top view, obtain tuir positions $4'_1$ and $5'_1$ on the corresponding lines in th first front view. As th two front views are identical, these points can now be transferred to th second front view by making $e'4'$ equal to $e'4'_1$ and $e's'$ equal to $e's'_1$. $4'$ and $5'$ are th projections of points 4 and 5 respectively. Complete th sectional front view as shown.

iii) obtain th true shape of the section on s_1y_1 as explained in problem 14-3, making $0''1''$ equal to $0'1'$, etc