TA 101: Engineering Graphics 2014-15 II

END-SEM-SOLUTIONS-GRADINGPOLICY-STATISTICS

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- PLEASE FIND THE SOLUTIONS AND GRADING POLICY FOR THE END SEM EXAM.
- PLEASE SUBMIT ONLY GENUINE REQUESTS FOR REGRADING.
- REMBER THAT DURING REGRADING MARKS MAY ALSO GO DOWN.
- IF SUBMITTING FOR REGRADING, COMPLETELY AND CLEARLY SPELL OUT THE CONCERN
- TERMS LIKE “RECONSIDER”, “RECHECK” WITHOUT PROPER REASONING ARE MEANINGLESS AND WILL NOT BE CONSIDERED

STATS for END-SEM

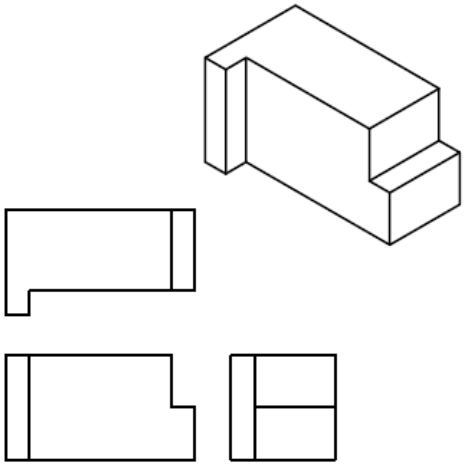
Average = 68.7

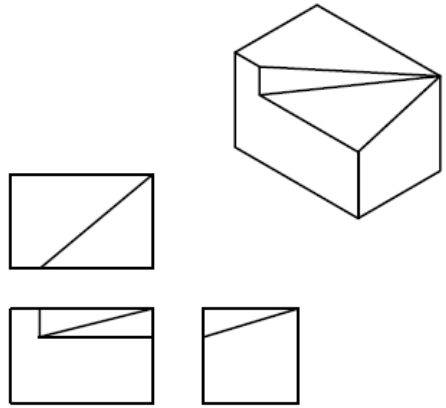
Standard Deviation = 26.3

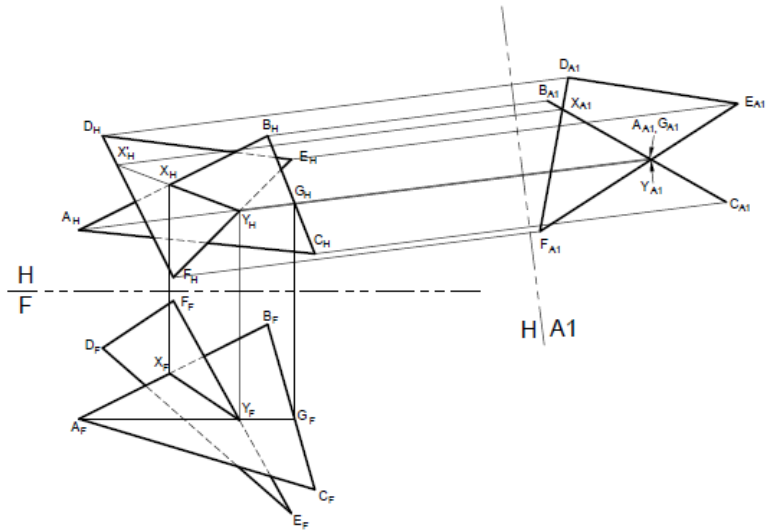
n = 403

Max. Marks = 117/120

Min = 04/120







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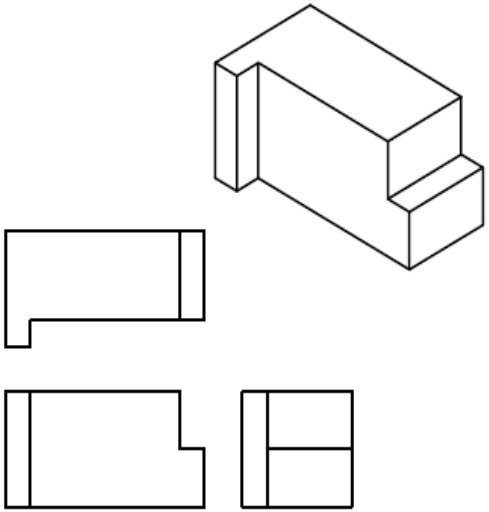

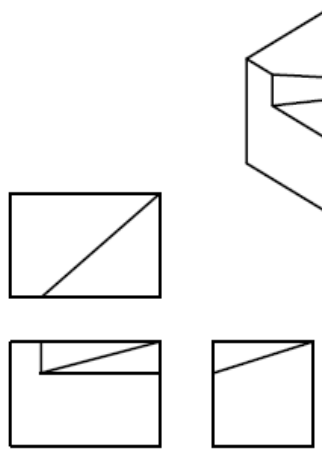

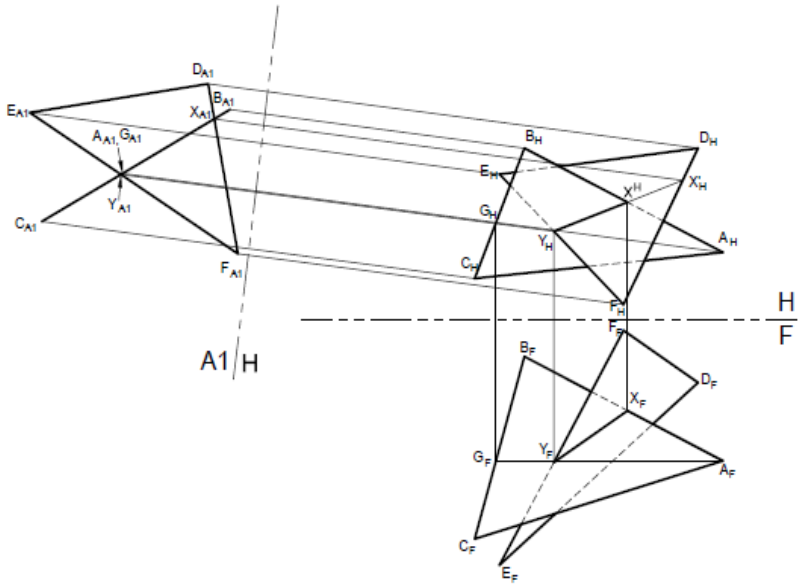

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SECTION: **SIG:**

Grading policy for Question no 1

Marks distribution:

- 7 marks for each question. 4M for correct isometric view and 3M for correct missing lines.

Marks deduction policy

- Incorrect lengths in isometric view: -2
- Each incorrect/absent missing line: -1
- Each extra line in missing views: -1
- Partially correct isometric view: -2
- Neatness and accuracy of the drawing : -1 or -2 depending on the drawing

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Grading Policy for Question 2:

(I) Edge View Method

(a) Edge View of a Triangle, the Corresponding View of Other Triangle and Locating the Intersection Points in This View — 5 Points

(b) Location of the Line of Intersection in the Adjacent View and its Projection in the Remaining View — 4+2 Points

(c) Visibility — 7 Points

Note: Even if the step (b) is partially wrong (i.e., only one point of intersection is correct), the step (c) may get zero points.

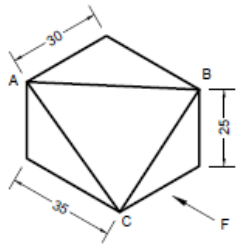
(II) Cutting Plane Method

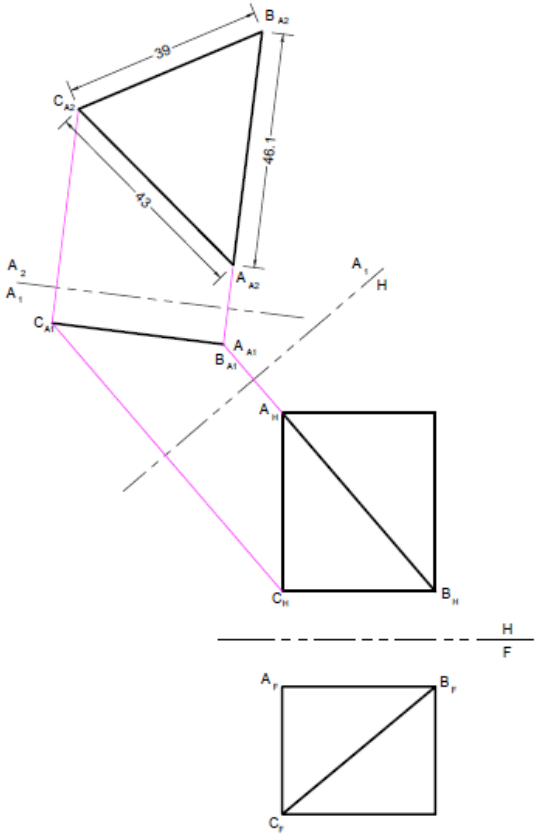
(a) Locating the Line of Intersection in One View and its Projection in the Other View — 9+2 Points

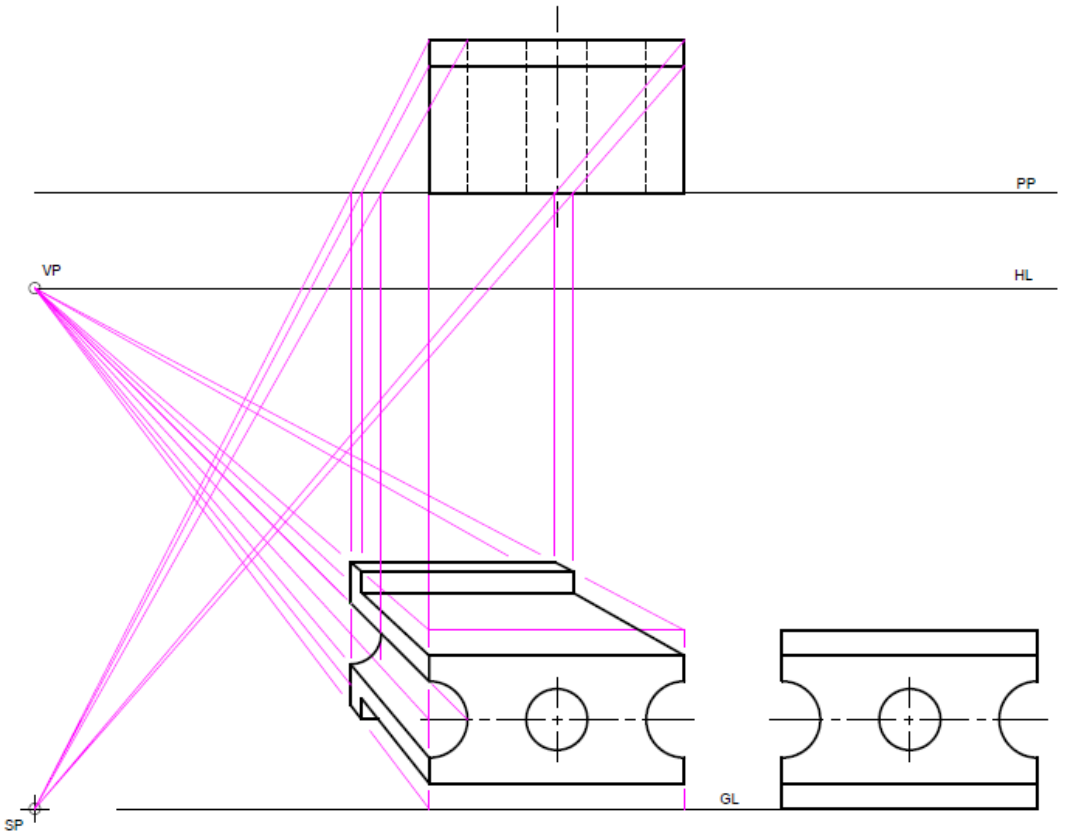
Note: If the construction lines are erased or missing for one point, -4 points and if they are erased or missing for both the points, -7 points.

(b) Visibility — 7 points

Note: Even if the step (a) is partially wrong (i.e., only one point of intersection is correct), the step (b) may get zero points.







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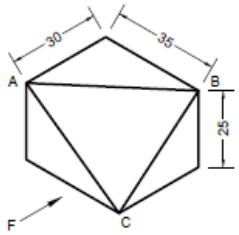

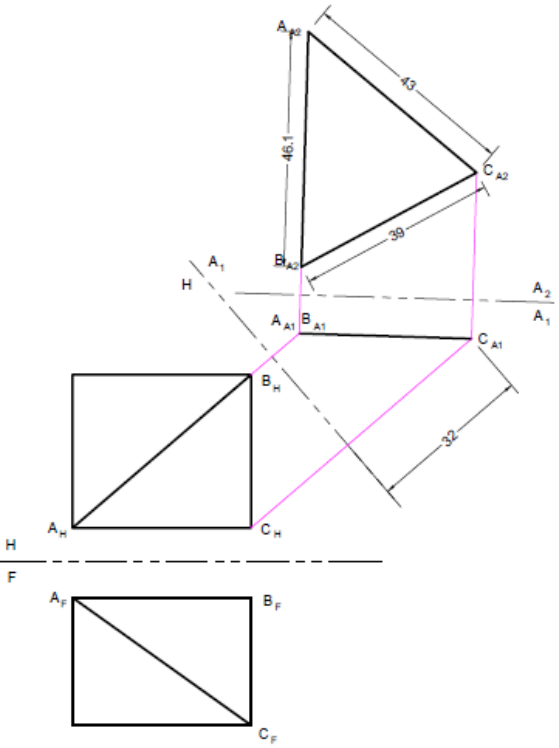

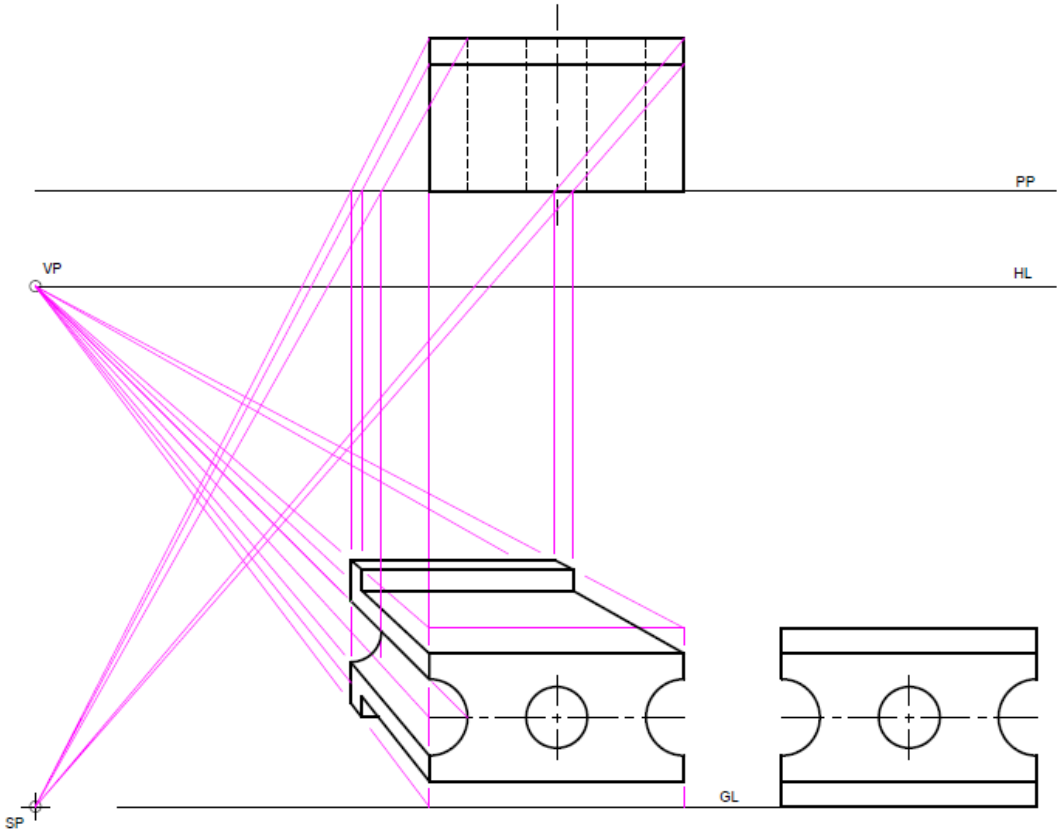

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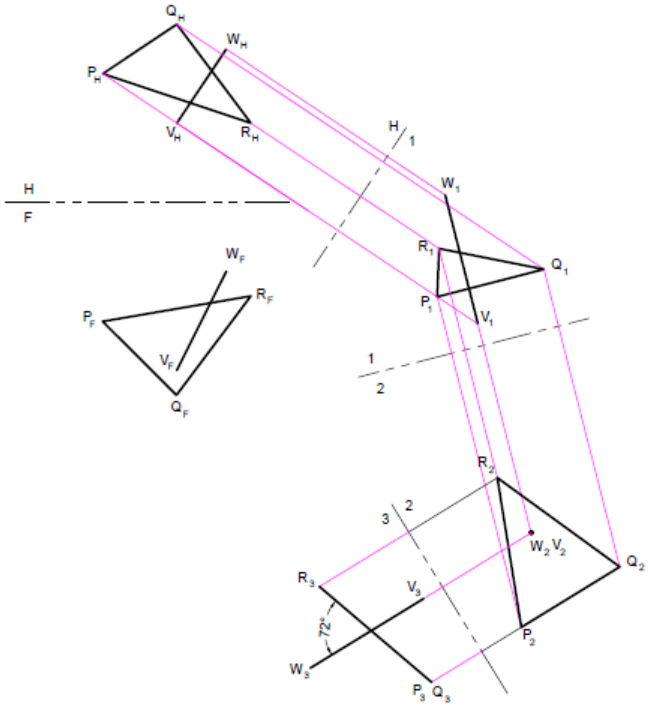
Marking scheme for question No. 3

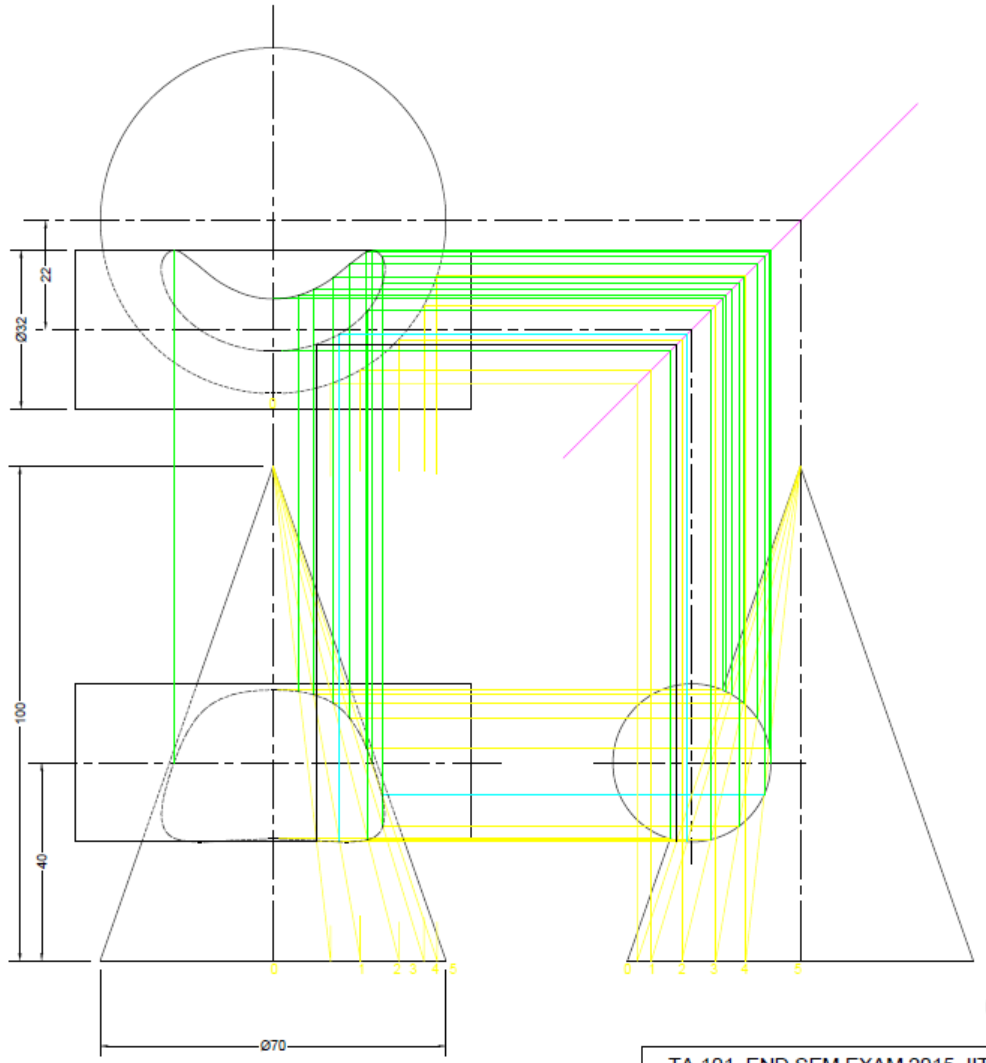
1. 2 marks for correct front view
2. 2 marks for correct front view
3. 4 marks for correct edge view
4. 4 marks for correct true shape If the above are correct, only then,
5. 1 mark each for writing the two true lengths
6. 2 marks for neatness

7. Exceptions: Some students have drawn true shape but in a wrong auxiliary plane. These solutions have been marked wrong.

8. Some students have just calculated the true lengths of the sides of the oblique plane by some method, and drawn the true shape of the oblique plane by completing a triangle of true lengths, as in development of surfaces. The TS may be correct in this case, but it is not shown in a correct plane in relation to the FV and TV. Such students have been given partial marks.

- Grading policy for Q4
- Appropriate Marks deducted if the exact shape of the object not shown, error in taking the lines from the picture plane or towards the fanishing point.





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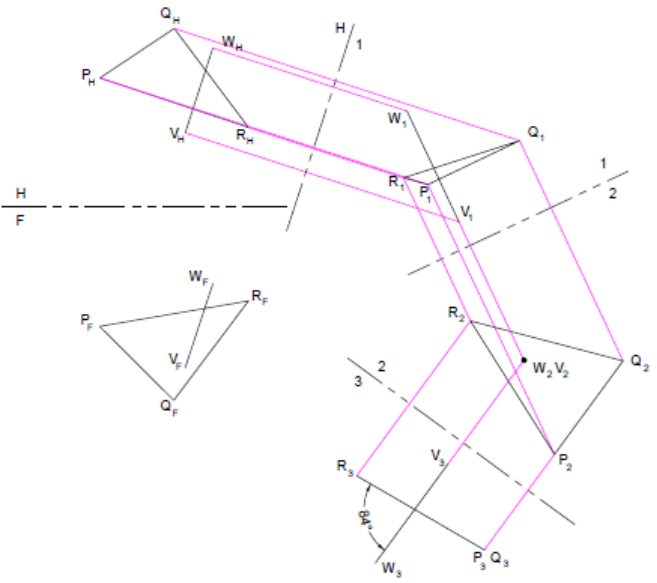

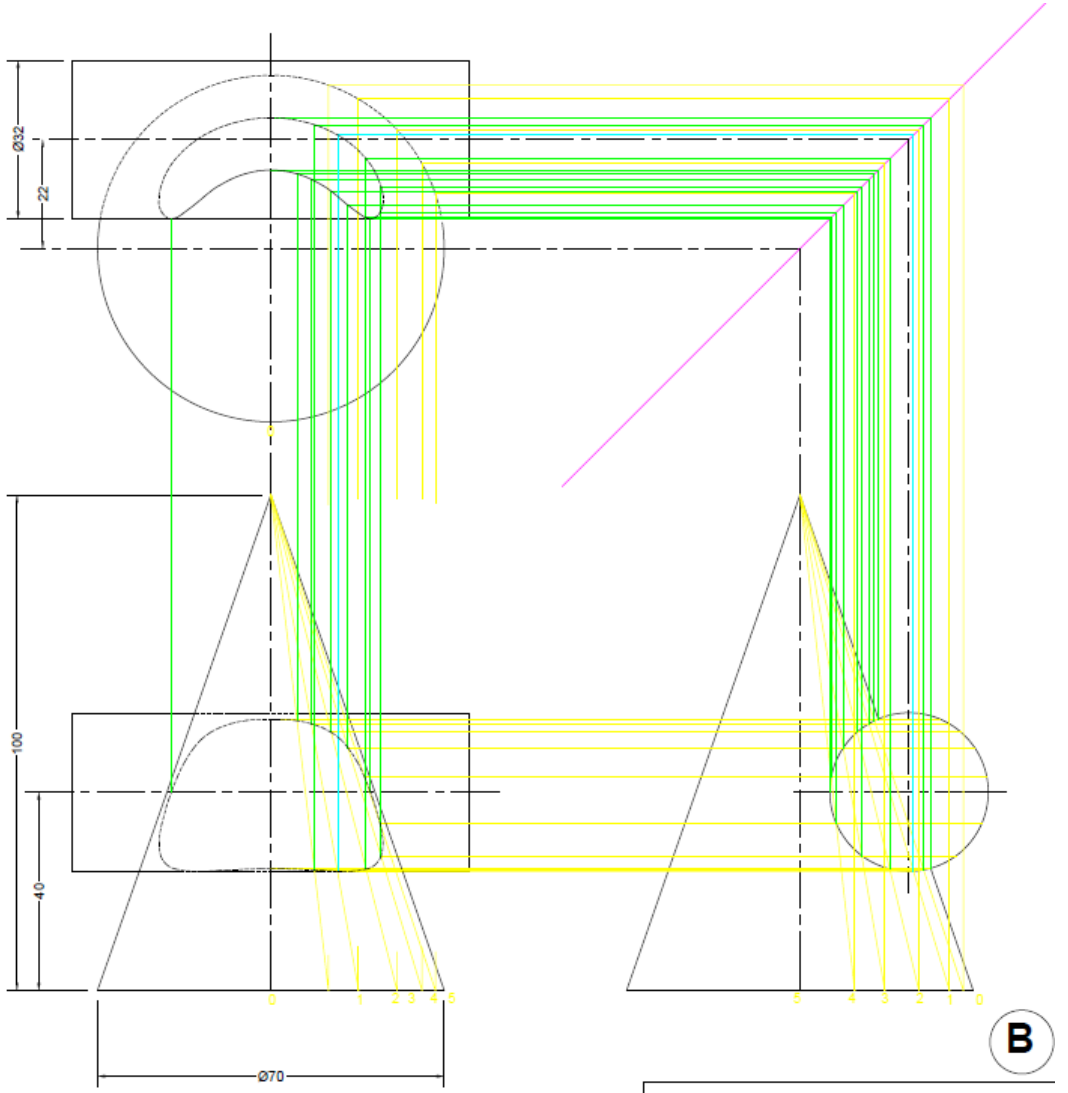

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Grading Policy for Question No 5:

1. First Auxiliary Plane A1 showing (a) plane in edge view and projection of line or (b) line in true length and projection of plane; Projection can be from front view or the top view: 4 Marks

2. Second Auxiliary Plane A2 showing (a) plane in true shape and projection of line or (b) point view of line and projection of plane: 4 Marks

3. Third Auxiliary Plane A3 showing (a) plane in edge view and line in true length, hinge line between A2 and A3 to be parallel to the projection of line in A2 or (b) line in true length and edge view of the plane, hinge line between A2 and A3 to be perpendicular to the true length line on projection of plane in A2: 4 Marks

4. True Angle between line and plane 72 +/- 1 for Set A and 84 +/- 1 for Set B: 4 Marks; If the entire procedure is correct but the value of the True Angle is incorrect or not given: 2 Marks instead of 4.

Regarding the Q 6 (intersection of Cone and Cylinder):

Step 1: Draw Profile view correctly

Step 2: Draw Generators of cone. Show them both in front view and top view Step 1 and 2: 5 Marks

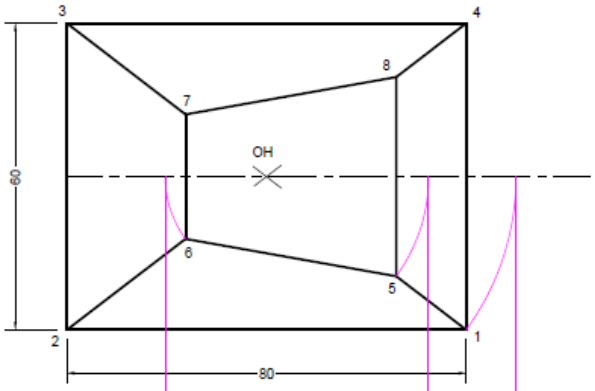
Step 3: The generators which intersect edge view of Cylinder in profile view should be projected to front view. (Take at least 10 to 12 lines intersecting the circle)

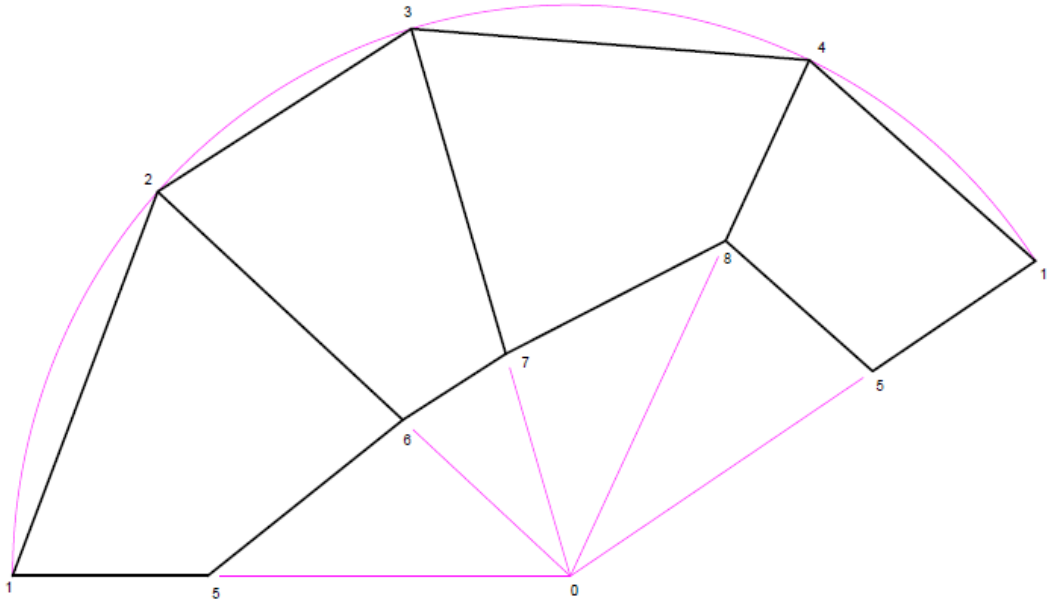
Step 4: Complete a smooth curve of intersection in front view Step 3 & 4: 8 marks

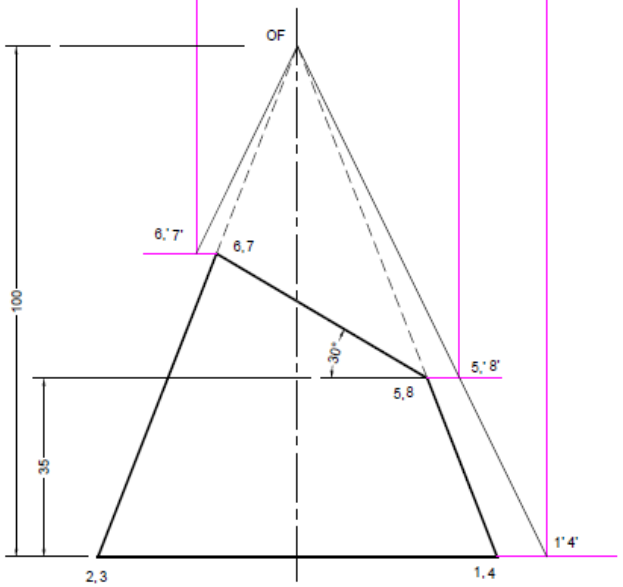
Step 5: Similarly they should be projected to top view directly from profile view or from front view.

Step 6: Complete a smooth curve of intersection in top view Step 3 & 4: 7 marks

Note: Taking 8 to 10 points is necessary to get smooth curve. 3 marks in each view is given for smooth and precise curve.







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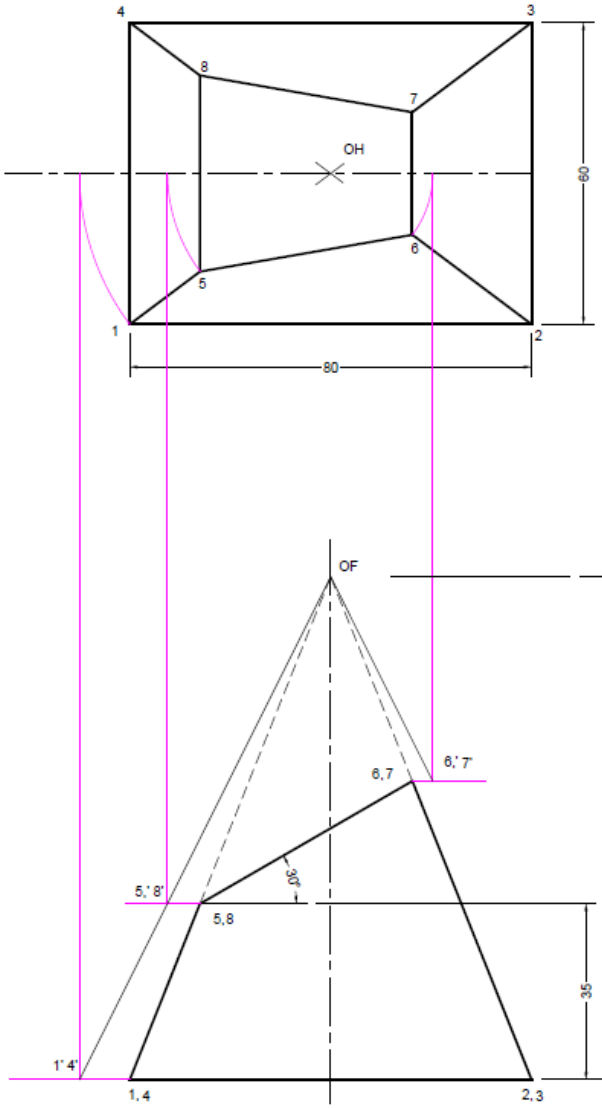

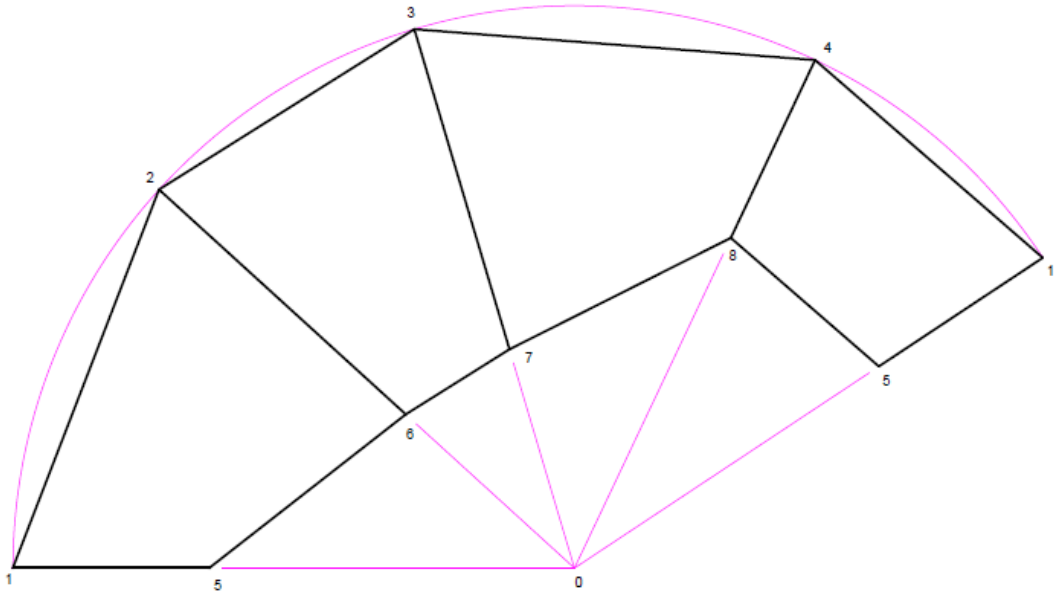

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grading policy for question no. 7 is given below:

1) For finding the true lengths of the two slant edges (four out of which two are the same) as well as the true distance of base from the apex point of the pyramid using top and front views (6+6=12 marks)

2) Properly developed lateral surfaces with edges drawn as "object lines" (6 marks)