



Subject Code: **12016**

SUMMER – 13 EXAMINATION
Model Answer

Important Instructions to examiners:

- 1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
- 2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
- 3) The language errors such as grammatical, spelling errors should not be given more Importance (Not applicable for subject English and Communication Skills).
- 4) While assessing figures, examiner may give credit for principal components indicated in the figure. The figures drawn by candidate and model answer may vary. The examiner may give credit for any equivalent figure drawn.
- 5) Credits may be given step wise for numerical problems. In some cases, the assumed constant values may vary and there may be some difference in the candidate's answers and model answer.
- 6) In case of some questions credit may be given by judgement on part of examiner of relevant answer based on candidate's understanding.
- 7) For programming language papers, credit may be given to any other program based on equivalent concept.



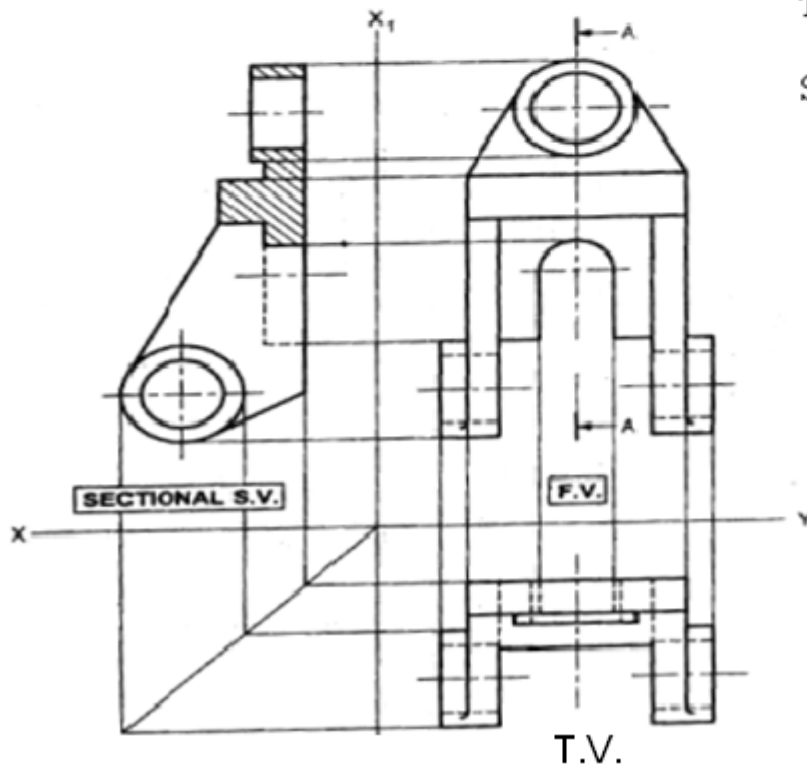
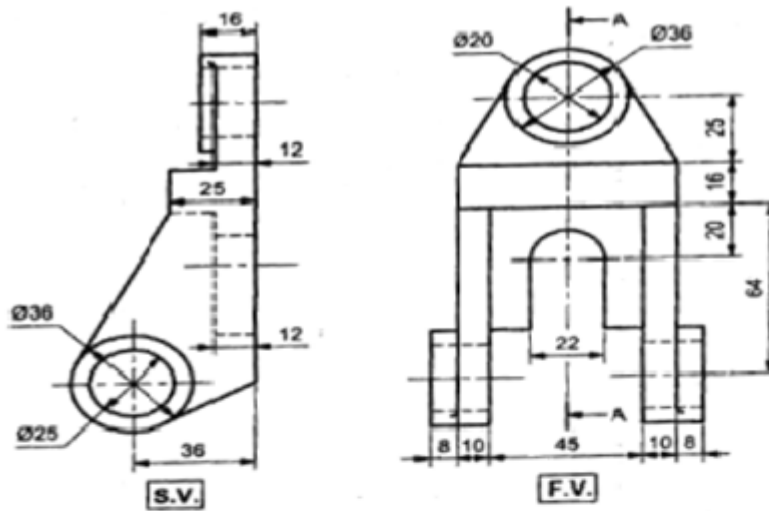
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Q1 a) Draw plan & sect S.V.

Only for dimensions refer given views



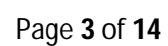
Top view=04 marks

Sec.S.V. = 04 marks



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For Step 1 : 3 Marks Step 2 : 3 Marks



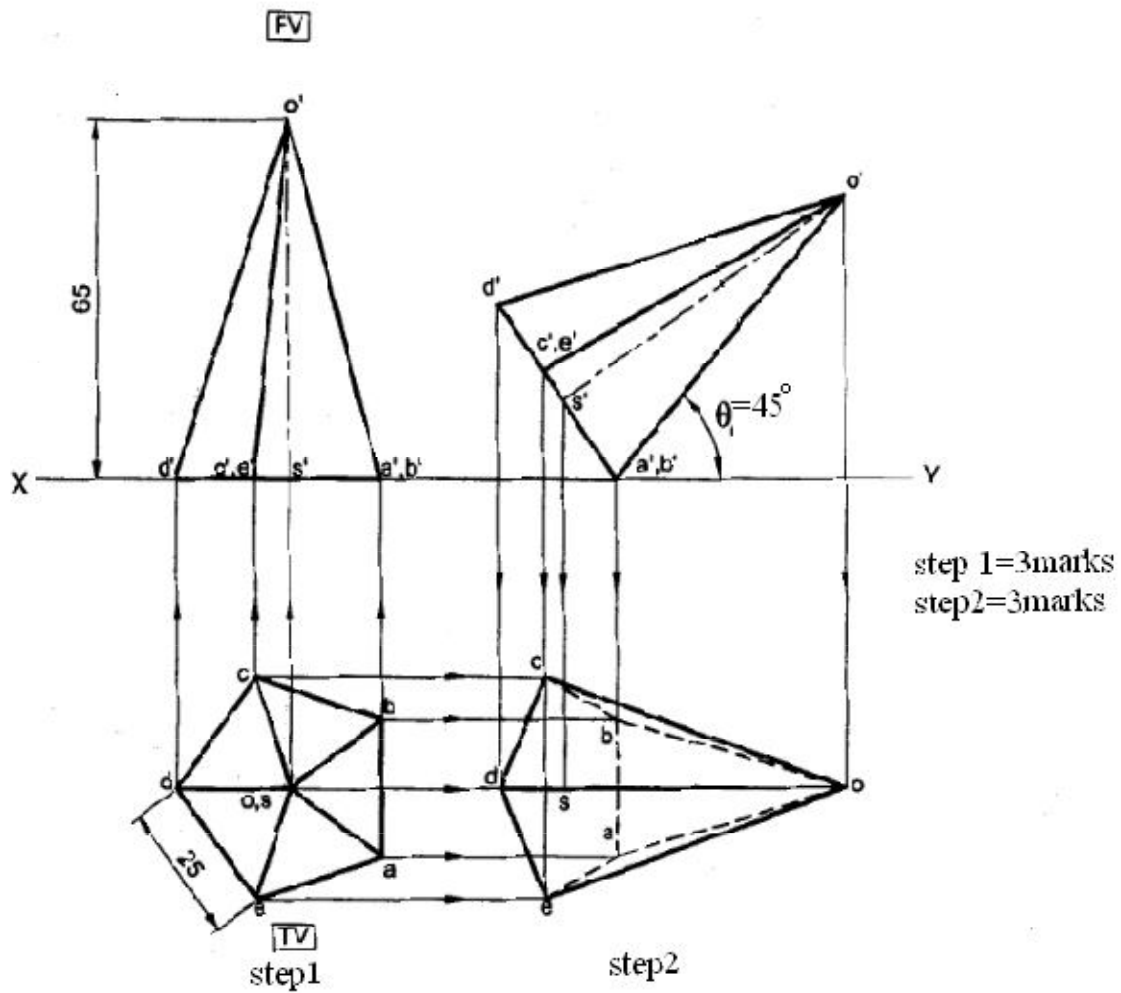


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Model Answer

Q 1 b ii) Problem on Pentagonal Pyramid





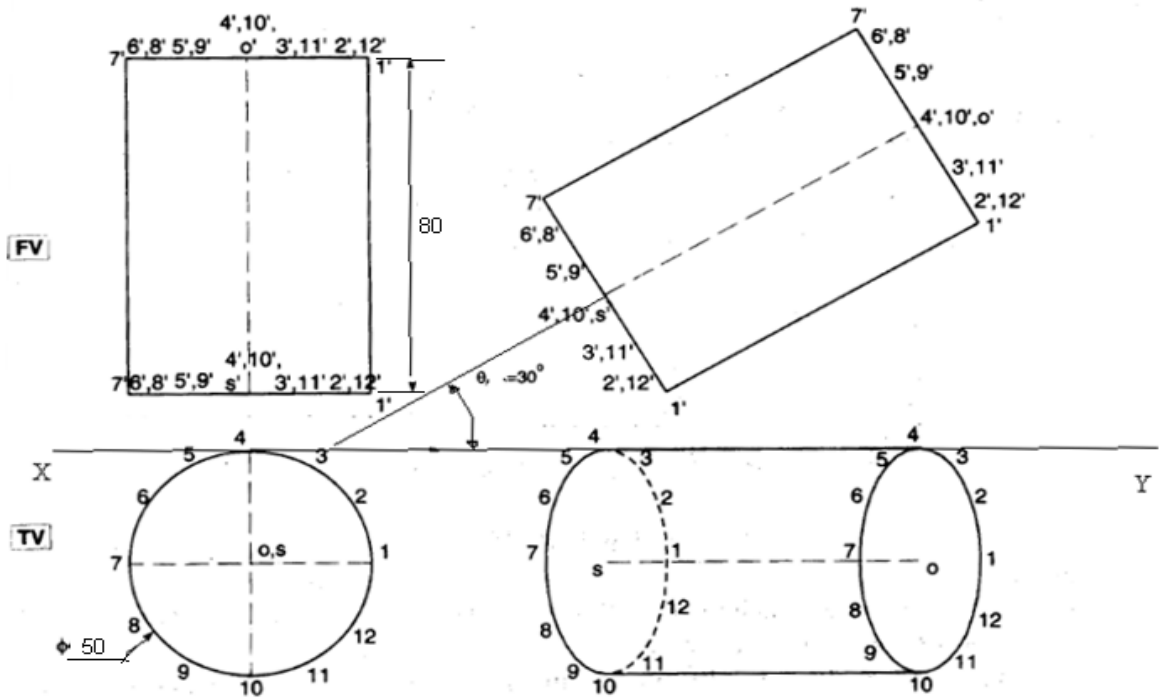
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Q1 b iii) Problem on Cylinder

For Step 1 : 3 Marks Step 2 : 3 Marks





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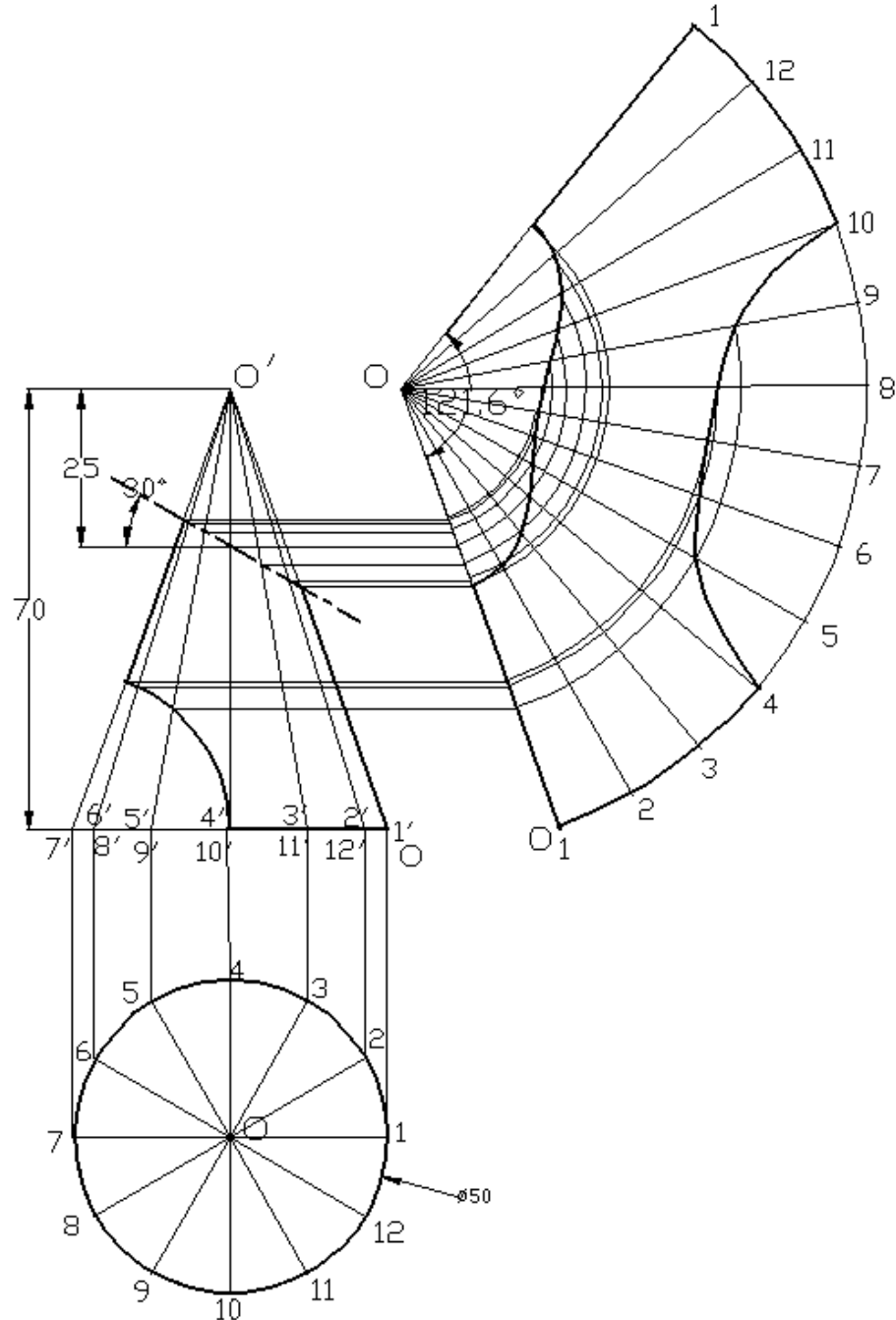
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Q2 i) Development of cone

For FV : 1 M, TV : 1M & Development : 6 M

Development surface Angle $\theta = 121.6^\circ$





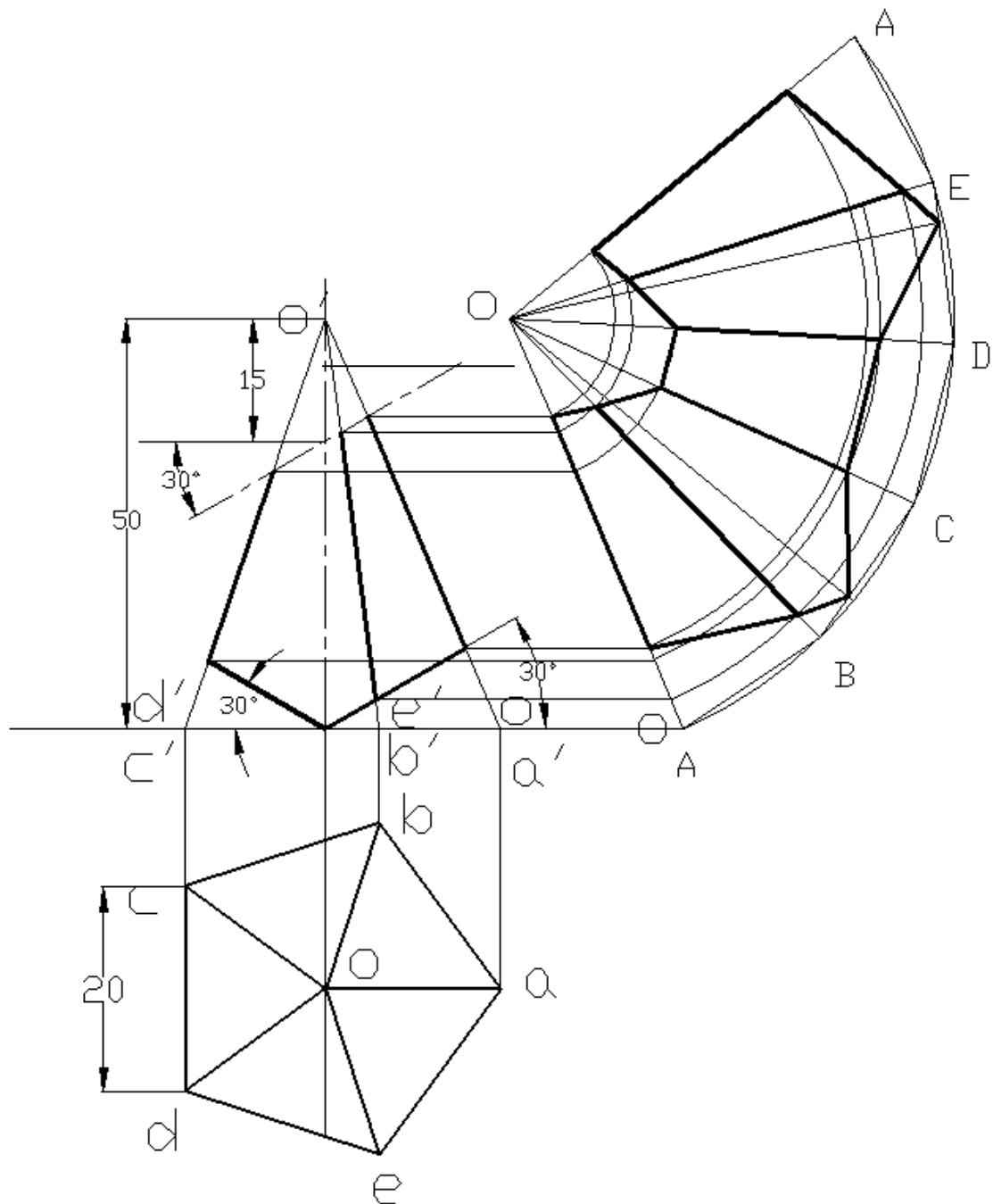
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Model Answer

Q2 ii) Development of Pyramid

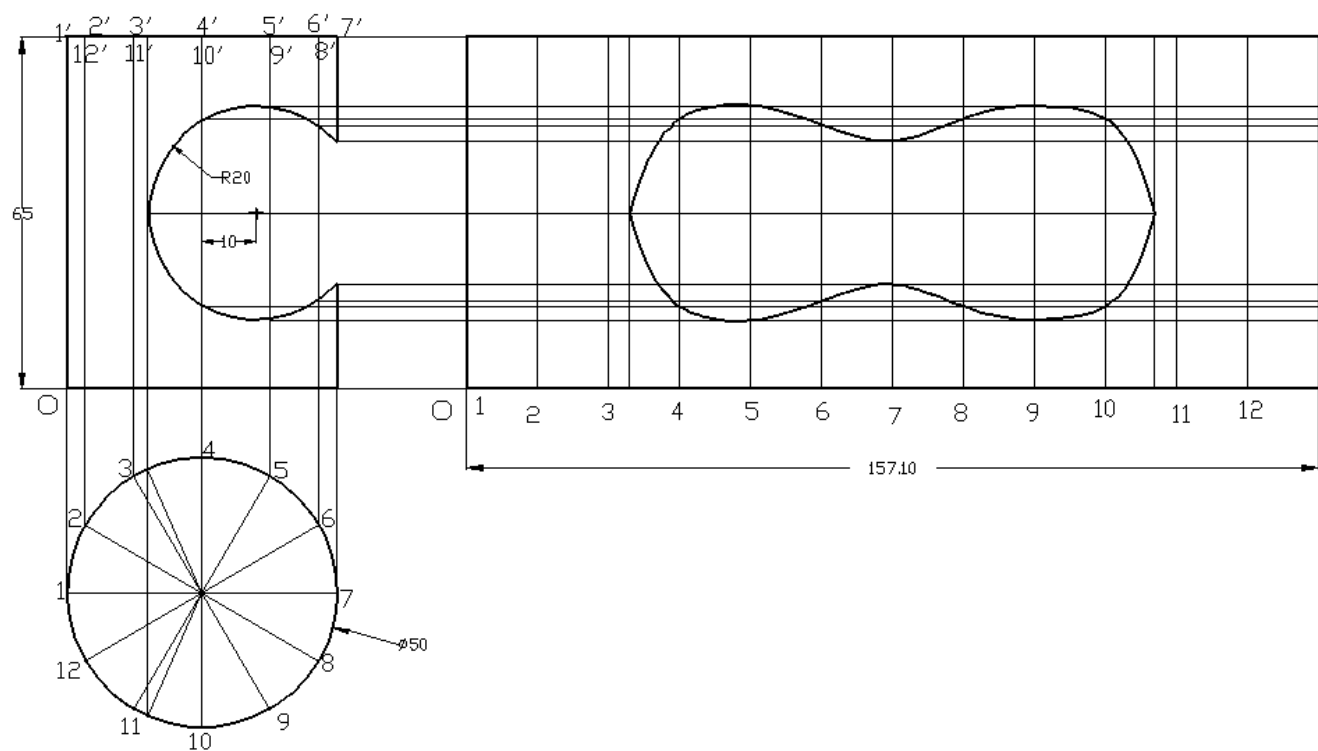
For FV : 1 M, TV : 1M & Development : 6 M





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For FV : 1 M, TV : 1M & Development : 6 M





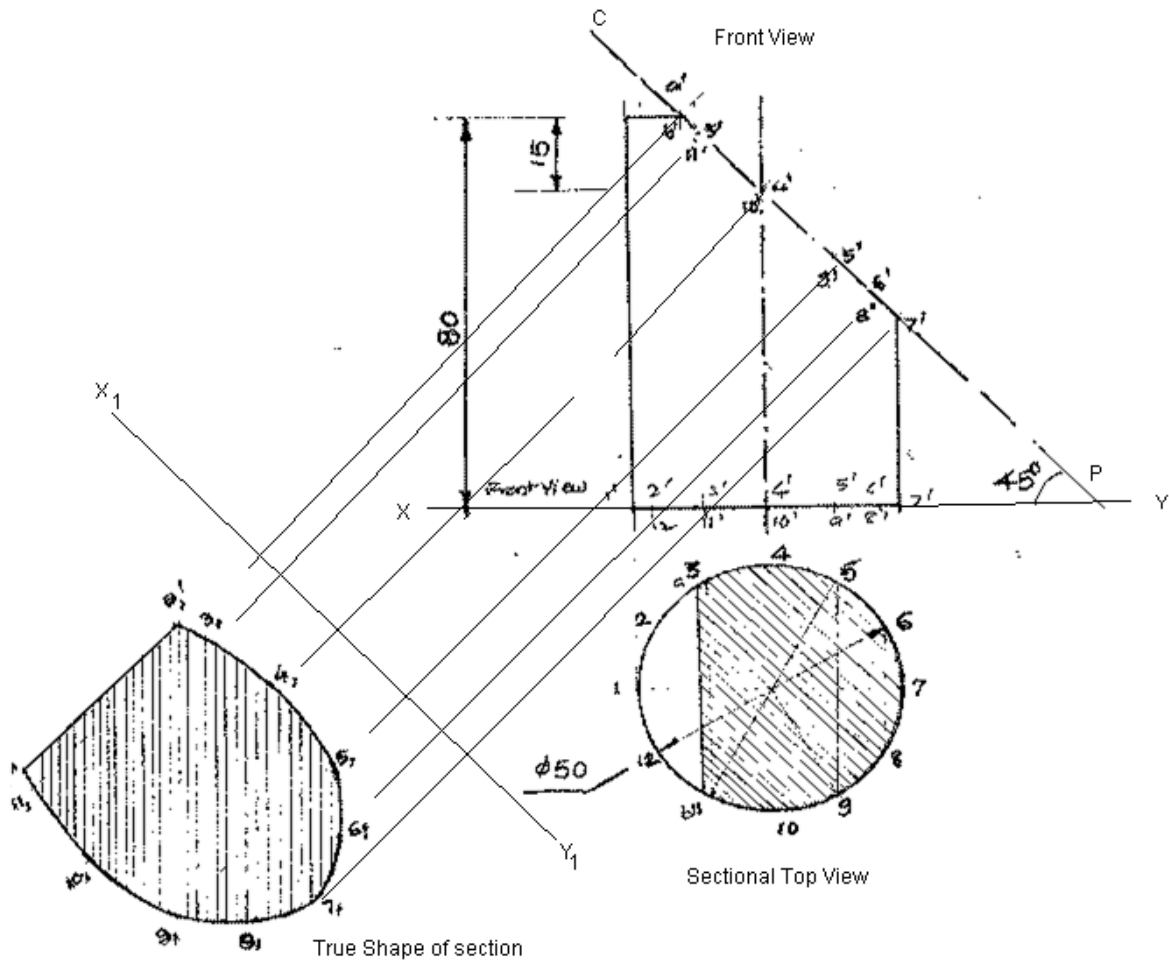
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Model Answer

Q3(i) Problem of Section of Cylinder

If the que is solved by third angle method full marks may also be given



Sectional top view	4M
Front view	2M
True shape of the section	2M



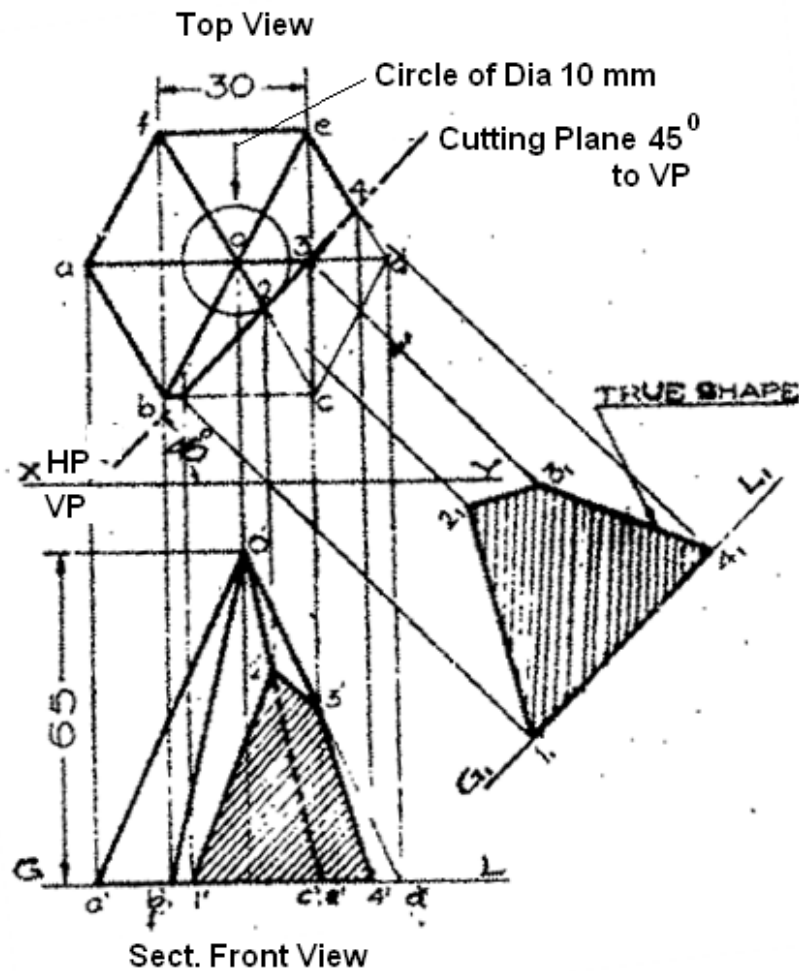
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Model Answer

Q3.(ii) Problem on section of Hexagonal Pyramid

Note : If solution is drawn by 1st angle method then also give marks



Sectional front view 4M

Top view 2M

True shape of the section 2M



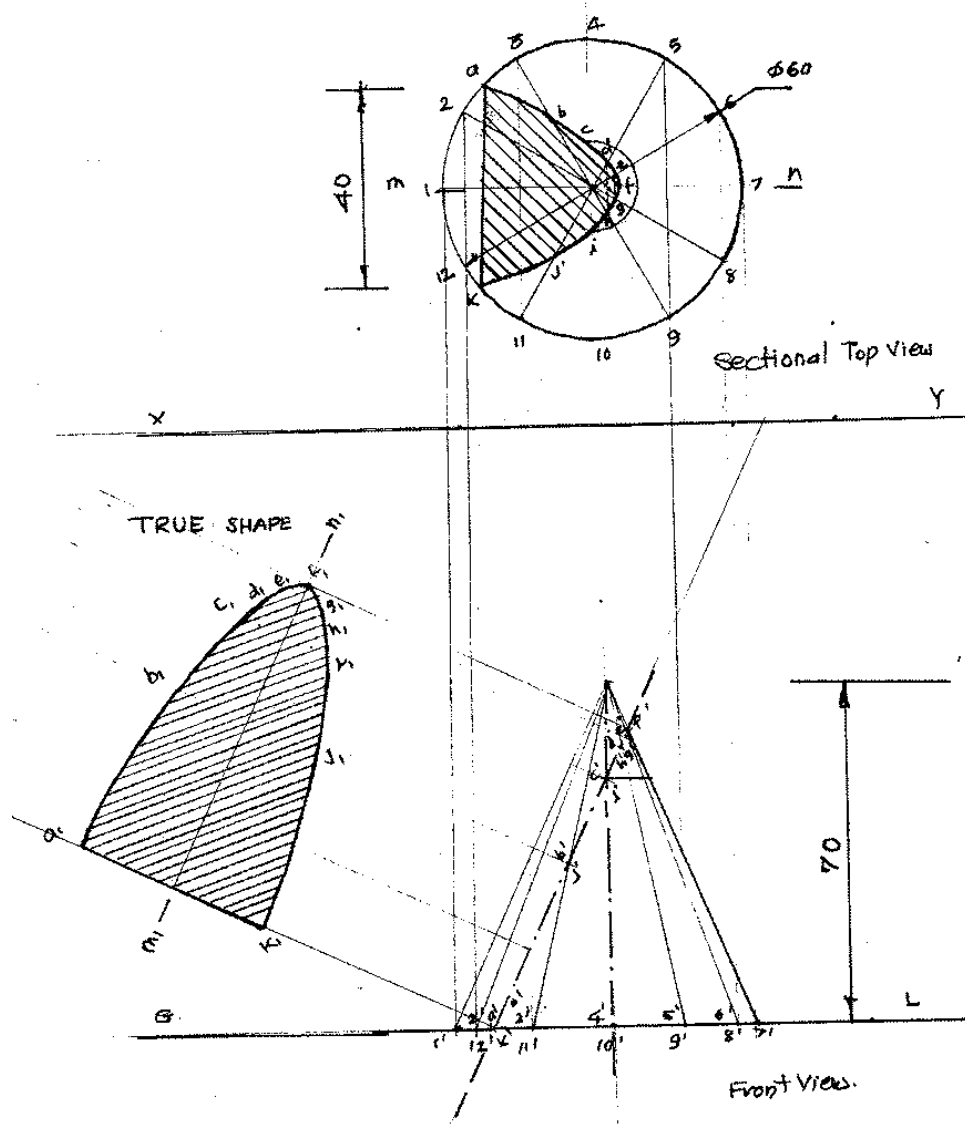
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Model Answer

Q3.(iii) Problem on Section of Cone

Note : If solution is drawn by 1st angle method then also give marks



Sectional top view

4M

Front view

2M

True shape of the section

2M



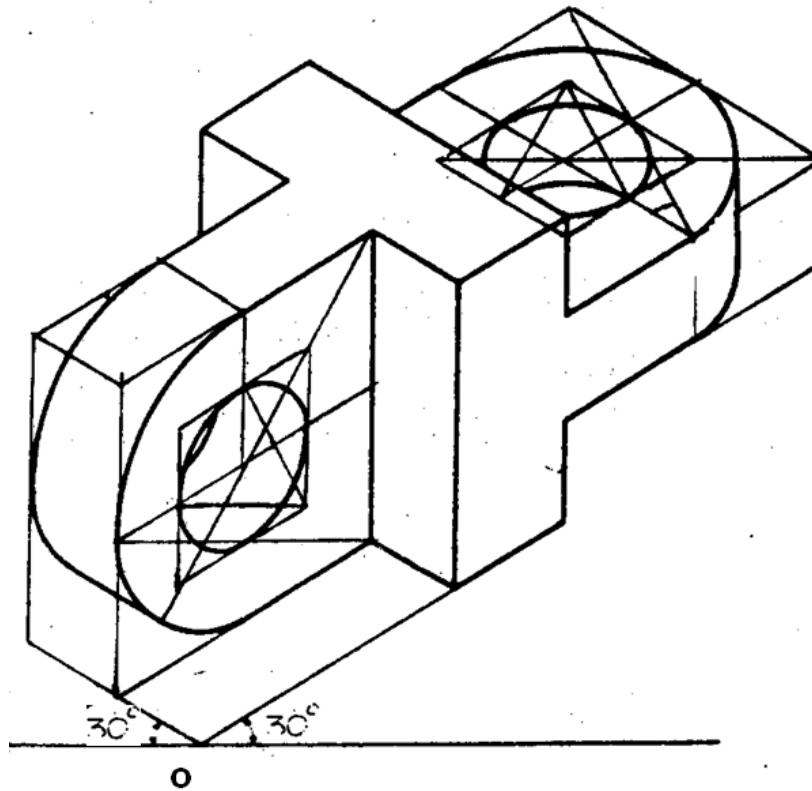
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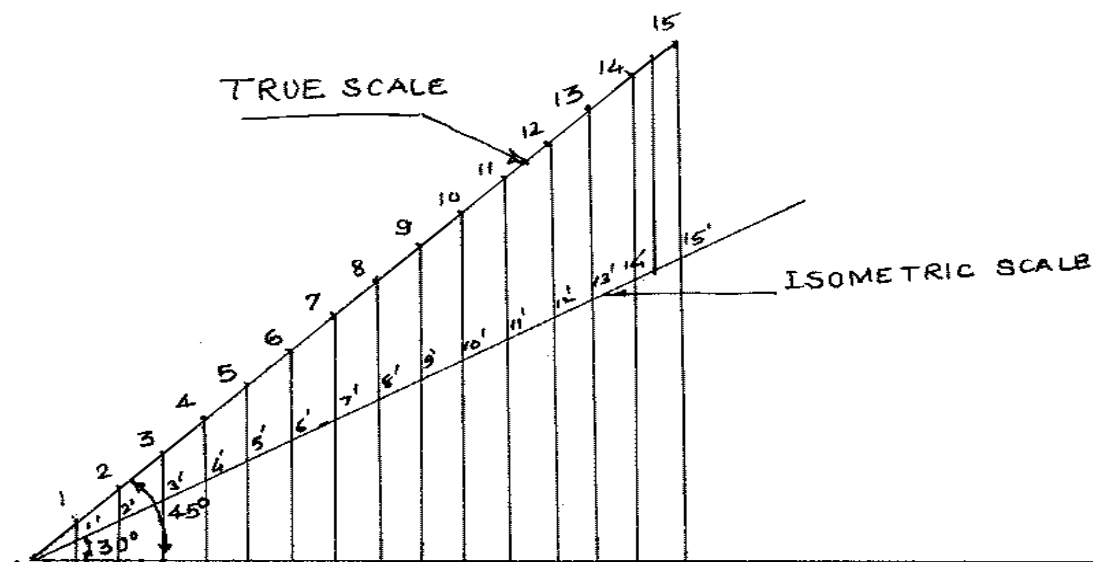
Q4 (a) Isometric View

(14 M)



Q4 (b) Isometric Scale

(02 M)



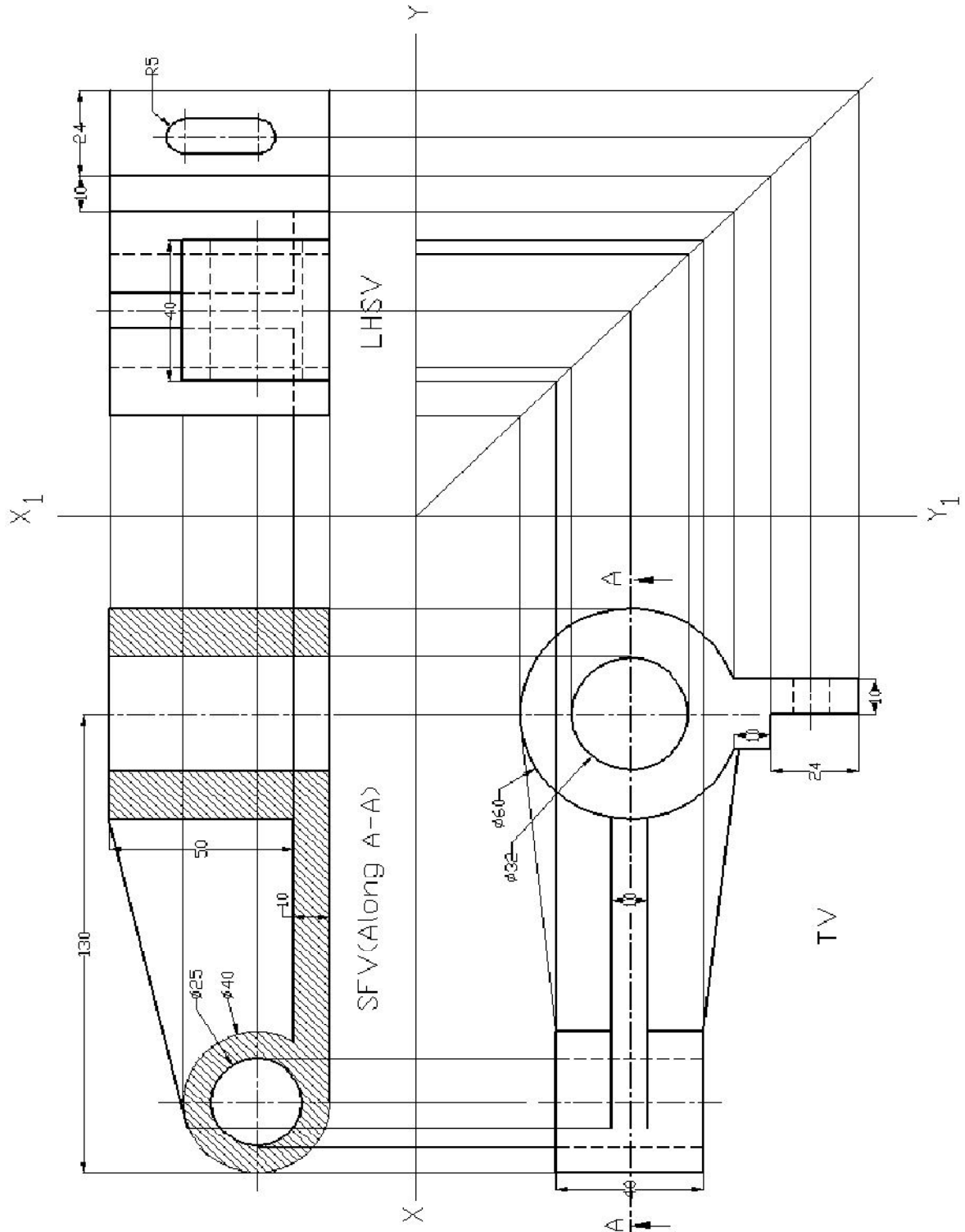


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Q5) Problem on Sect. Orthographic (For SFV: 6 M , TV: 6M, LHSV: 4M)



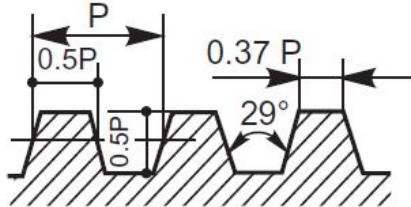
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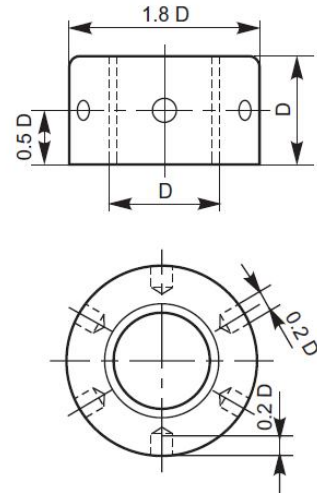
Model Answer

Q6) Any FOUR (04 marks each)

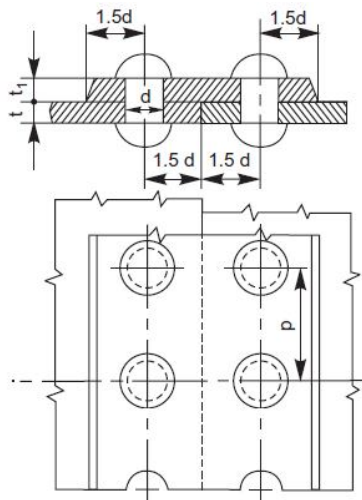
i) Acme Thread



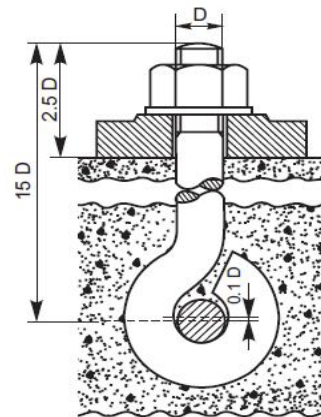
ii) Capstan Nut



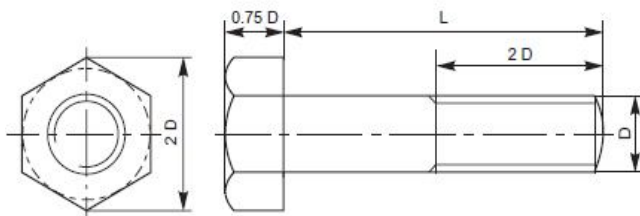
iii) Single riveted butt joint



iv) Eye foundation bolt



v) Hexagonal Headed Bolt



vi) Box / Muff Coupling

