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10AU36A/46A

**Third/Fourth Semester B.E. Degree Examination, December 2016**  
**(Automobile Engineering)**

**COMPUTER AIDED MACHINE DRAWING**

Time: 3 Hours

Max. Marks: 100

- Note:** 1. Answer any ONE question from each of the parts A, B and C.  
2. Use **FIRST ANGLE** projection only.  
3. Missing data if any may suitably be assumed.  
4. All the calculations should be on answer sheet supplied.  
5. All the dimensions are in mm.  
6. Drawing instruments may or may not be used for sketching  
7. **Part C Assembled View should be in 3D and other 2 views in 2D.**

**PART-A**

- 1) A pentagonal pyramid side of base 40mm and altitude 70mm is rests with its base on the HP and with a side of base parallel to VP and 25mm from it. It is cut by a horizontal cutting plane and is bisecting the axis. Draw the front view and the sectional view looking from the top. [20 Marks]
- 2) Draw two views of a square headed bolt with nut for a 30mm diameter bolt. Take the length of the bolt equal to 125mm. [20 Marks]

**PART-B**

- 3) Draw the side view and sectional front view of an assembled knuckle joint assuming the diameter of rods to be 20mm. [20 Marks]
- 4) Draw the side view and sectional front view of an Oldham's coupling by taking the shaft diameter as 20mm. [20 Marks]

**PART-C**

- 5) Figure 1. Shows the details of a Multiplate friction clutch. Assemble the parts and draw the following views. Dimension the drawings.
  - a) Half sectional view from the Front View, with top half in section.
  - b) The view from the right side. [60 Marks]

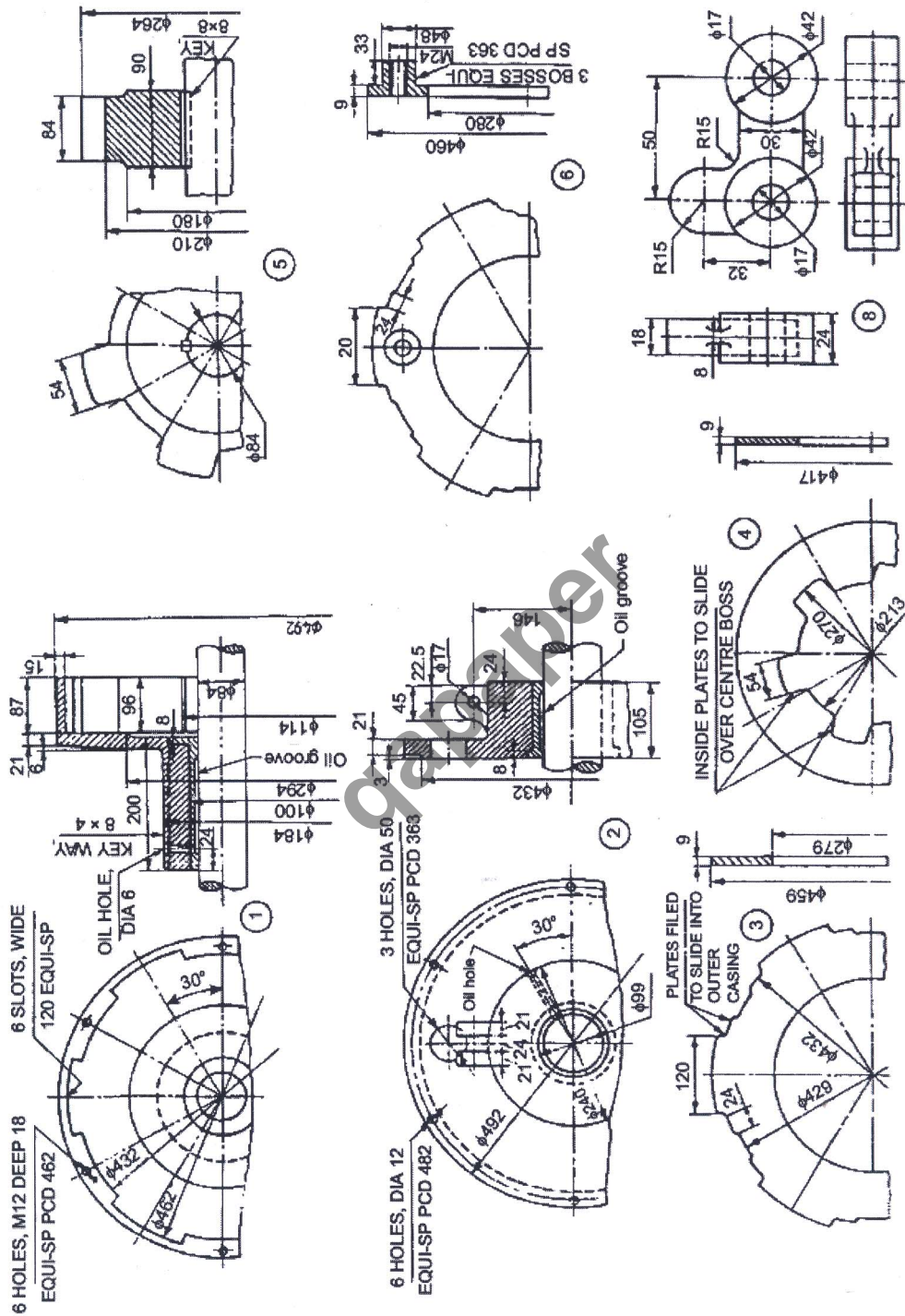


Fig. 1 Details of multiplate friction clutch (condt)



6) Figure 2. Shows the details of an I.C. Engine Connecting Rod. Assemble the parts and draw the following views. Dimension the drawings.

- a) Front View with top half in section.
- b) Top view.

[60 Marks]

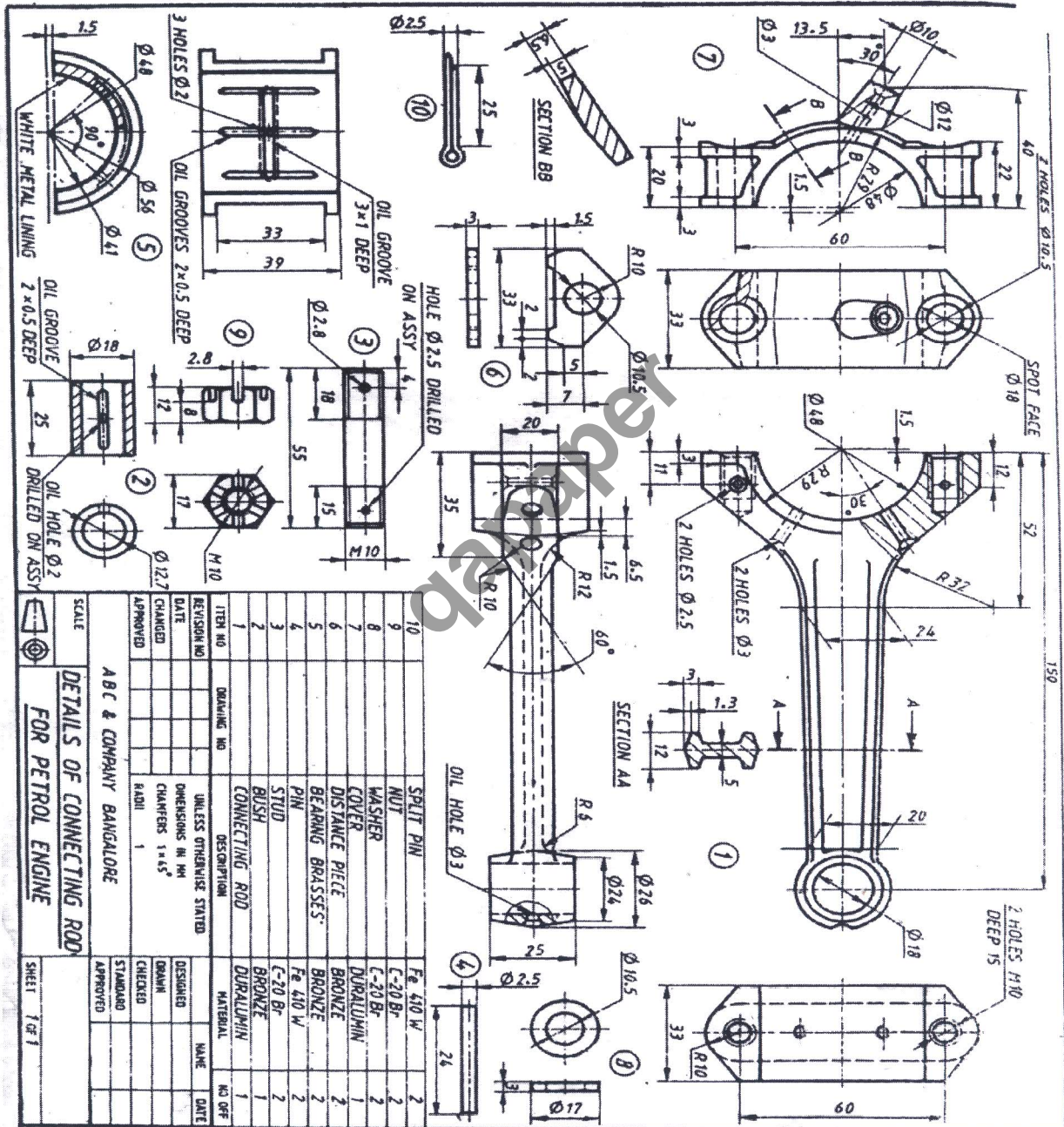


Figure 2