

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch :B.E - AERO/M&P/MECH

Title of the Paper :Machine Drawing

Max. Marks :80

Sub. Code :6C0067

Time : 4 Hours

Date :17/11/2009

Session :FN

Answer ALL the Questions

(Give neat sketches. Credit will be given for neatness)

1. Draw the conventional representation of the following. (10)
 - (a) Internal threads
 - (b) Ratchet and pinion
 - (c) Spiral spring unwound
 - (d) Bevel gears
 - (e) Holes in linear pitch

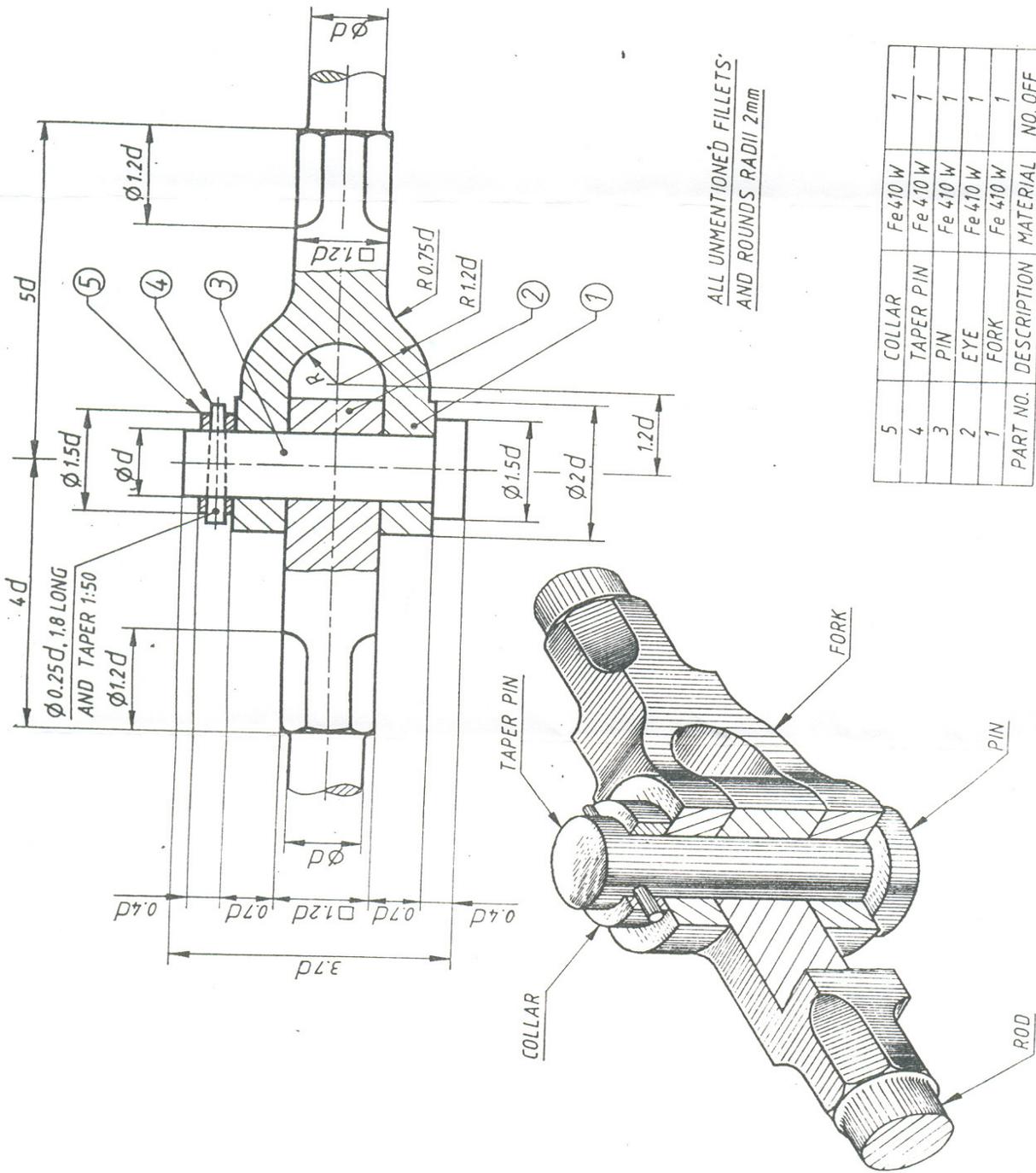
2. (a) Classify the different types of fits with examples. (3)
(b) By using letters and numerals, Dimension a Hole of basic 40mm and grade 7 with lower deviation zero. (2)

3. Sketch the symbols for the following characteristics used for form tolerances. (5)
 - (a) Symmetry
 - (b) Circularity
 - (c) Coaxiality

4. Fig.1. Shows the assembled view of the PIN JOINT in full section with the proportion expressed in terms of diameter 'd' of the rods. Prepare the working drawings for fork end, eye end, pin, collar and taper pin with minimum of two views each. Indicate the appropriate dimension with the tolerances wherever necessary. (10)

5. Details of 'TAIL STOCK' are as shown in Fig-2. Draw the following assembled views to 1:2 scale (50)

- (a) Sectional Front view
- (b) Side view looking from 'Dead centre'.



Assembly of Knuckle Joint

FIG. 1.

