Code No: RT22035 **R13** SET - 1

II B. Tech II Semester Regular Examinations, May/June - 2015
MACHINE DRAWING
(Com. to ME, AME, MM)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answer **TWO** question from **Part-A**
3. **Part-B** is compulsory

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PART-A

1. Draw the sectional front view and top view of knuckle joint with sleeves to connect shafts of 35 mm. [11]
2. Draw the sectional front view and top view of single riveted butt joint with double straps chain type to join two plates of 20 mm thickness each. [11]
3. Sketch the following thread profiles for a nominal diameter of 25 mm and pitch 3 mm and give their applications:
(*a*) BSW thread, (*b*) Buttress thread (*c*) Square thread,(*d*) ACME thread and (*e*) Worm thread. [11]

PART-B

4. Details of the petro engine connecting rod are shown in figure: Assemble all parts and draw
i) Front view.
ii) Sectional plan
iii) Right side view. [48]
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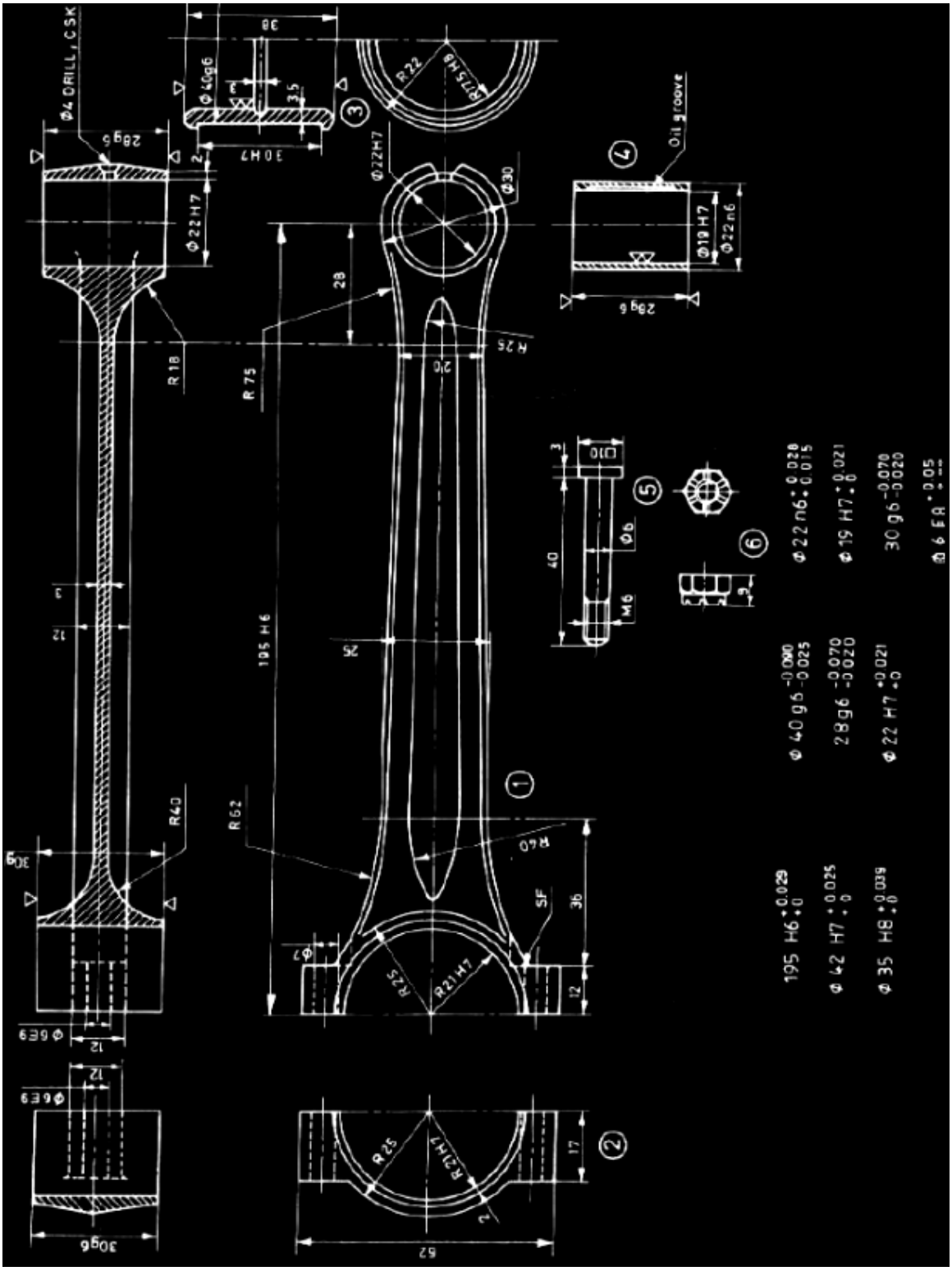
Code No: RT22035 **R13** SET - 1



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Code No: RT22035 **R13** SET - 2

II B. Tech II Semester Regular Examinations, May/June - 2015
MACHINE DRAWING
(Com. to ME, AME, MM)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answer **TWO** question from **Part-A**
3. **Part-B** is compulsory

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PART-A

1. Draw half sectional front view and the top view of an universal coupling connecting two shafts of 30 mm diameter each. [11]

2. Draw the sectional front view and top view of double riveted butt joint with single strap Zig-zag type to join two plates of 20 mm thickness each. [11]

3. a) Sketch the following forms of nuts, with proportions marked:
   i) flanged nut, ii) cap nut, iii) dome nut, iv) capstan nut
   b) Draw the three views of a hexagonal headed bolt of nominal diameter 25 mm and length 100 mm with a hexagonal nut and washer. [5+6]

PART-B

4. Assemble all the parts of screw jack shown in figure. Draw the following views. [48]
   a) Half sectional view from the front
   b) Top view
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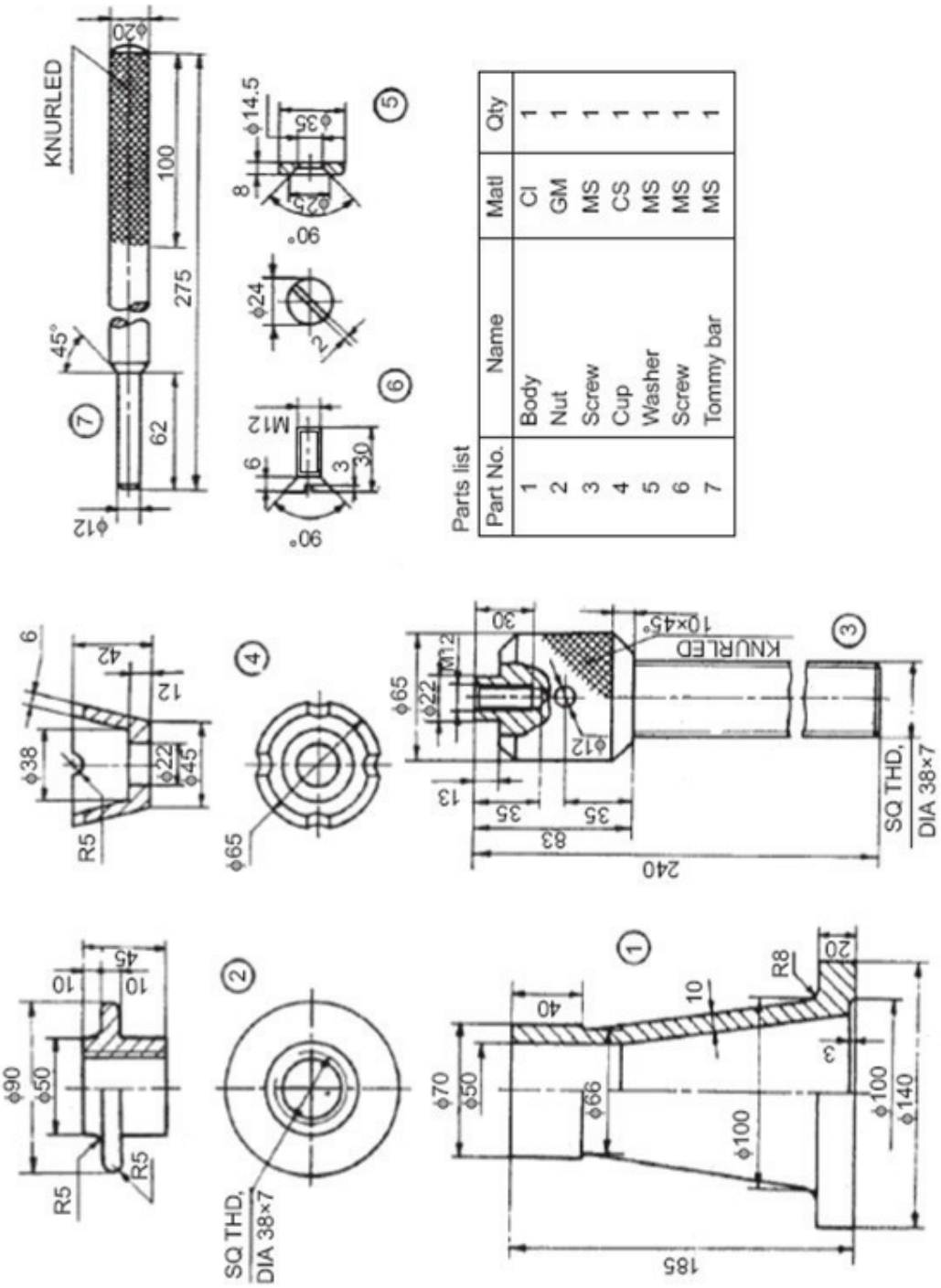
Code No: RT22035

R13

SET - 2



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Code No: RT22035 **R13** SET - 3

II B. Tech II Semester Regular Examinations, May/June - 2015
MACHINE DRAWING
(Com. to ME, AME, MM)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answer **TWO** question from **Part-A**
3. **Part-B** is compulsory

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Answer any two of the following 2x11=22

1. a) Sketch the following forms of nuts, with proportions marked.
   i) Flanged nut ii) Capstan nut.
   b) Sketch the following conventional materials
   i) Bronze ii) Cast Iron iii) Concrete. [5+6]

2. Draw the half sectional front view and side view of bushed pin type flange coupling to connect two shafts each of diameter of 40 mm. [11]

3. Draw the half sectional elevation and side view of Cotter and sleeve joint used to connect two rods of 50 mm diameter. [11]

PART B

4. Assemble all the parts of machine vice shown in below. Draw the following views.
   a) Sectional front view [48]
   b) Top view.
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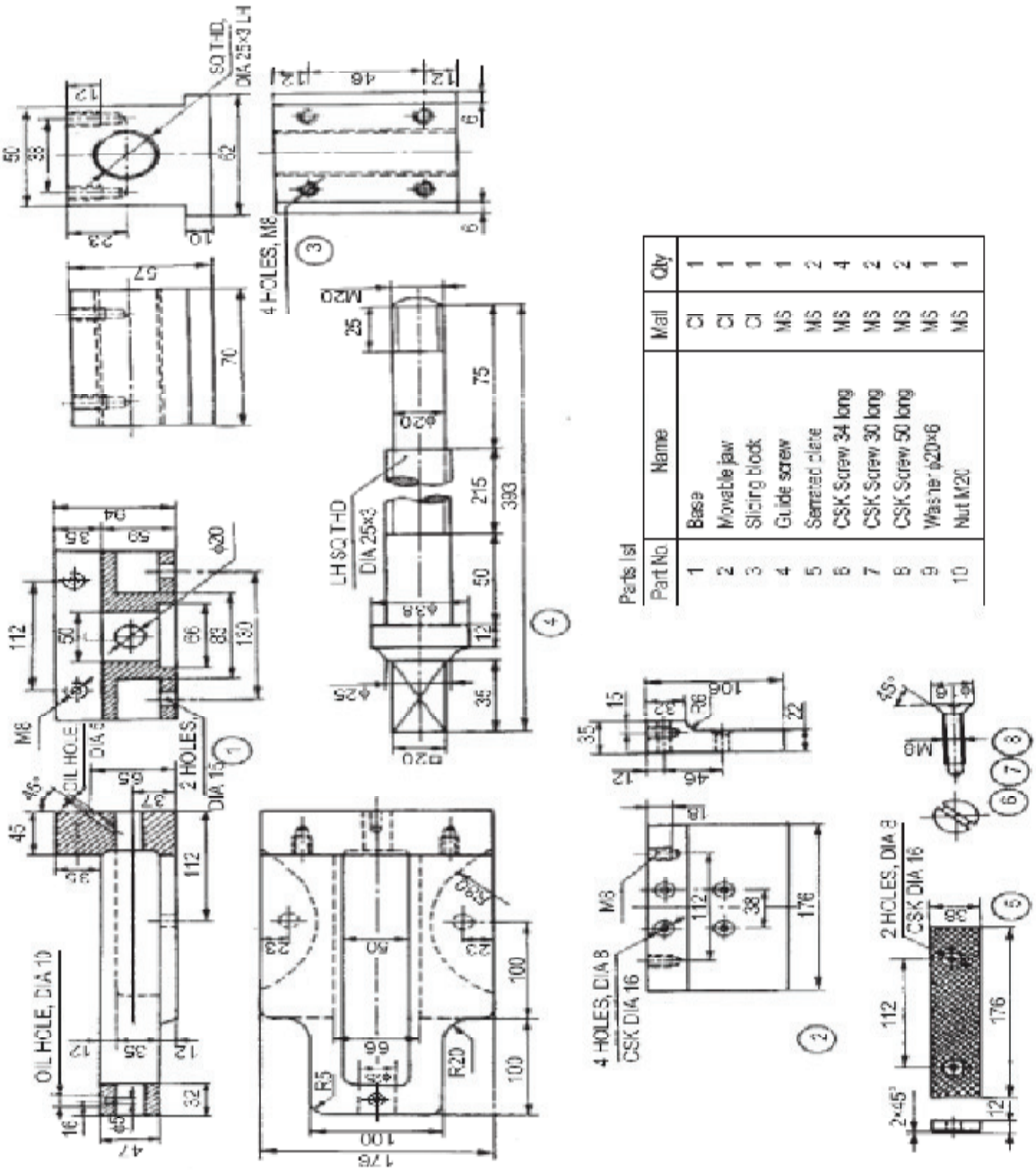
Code No: RT22035

R13

SET - 3



Parts list			
Part No	Name	Mat'l	Qty
1	Base	CI	1
2	Moveable jaw	CI	1
3	Sliding block	CI	1
4	Guide screw	MS	1
5	Serrated plate	MS	2
6	CSK Screw 34 long	MS	4
7	CSK Screw 30 long	MS	2
8	CSK Screw 50 long	MS	2
9	Washer ø20x6	MS	1
10	Nut M20	MS	1

Code No: RT22035 **R13** SET - 4

II B. Tech II Semester Regular Examinations, May/June - 2015
MACHINE DRAWING
(Com. to ME, AME, MM)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answer **TWO** question from **Part-A**
3. **Part-B** is compulsory

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1. Draw the sectional front view and top view of double riveted, double strap, chain butt joint with plate thickness 20 mm. [11]

2. Sketch neatly; giving proportionate dimensions the eye foundation bolts of diameter 25 mm. [11]

3. Draw half sectional front view with top half in section and side view of a muff coupling connecting two shafts of 40 mm diameter each. [11]

PART B

4. Assemble all parts of the stuffing box shown in Figure and draw [48]
   i) Half sectional view from the front (left half in section).
   ii) Half sectional view from the right.
   iii) Top view.
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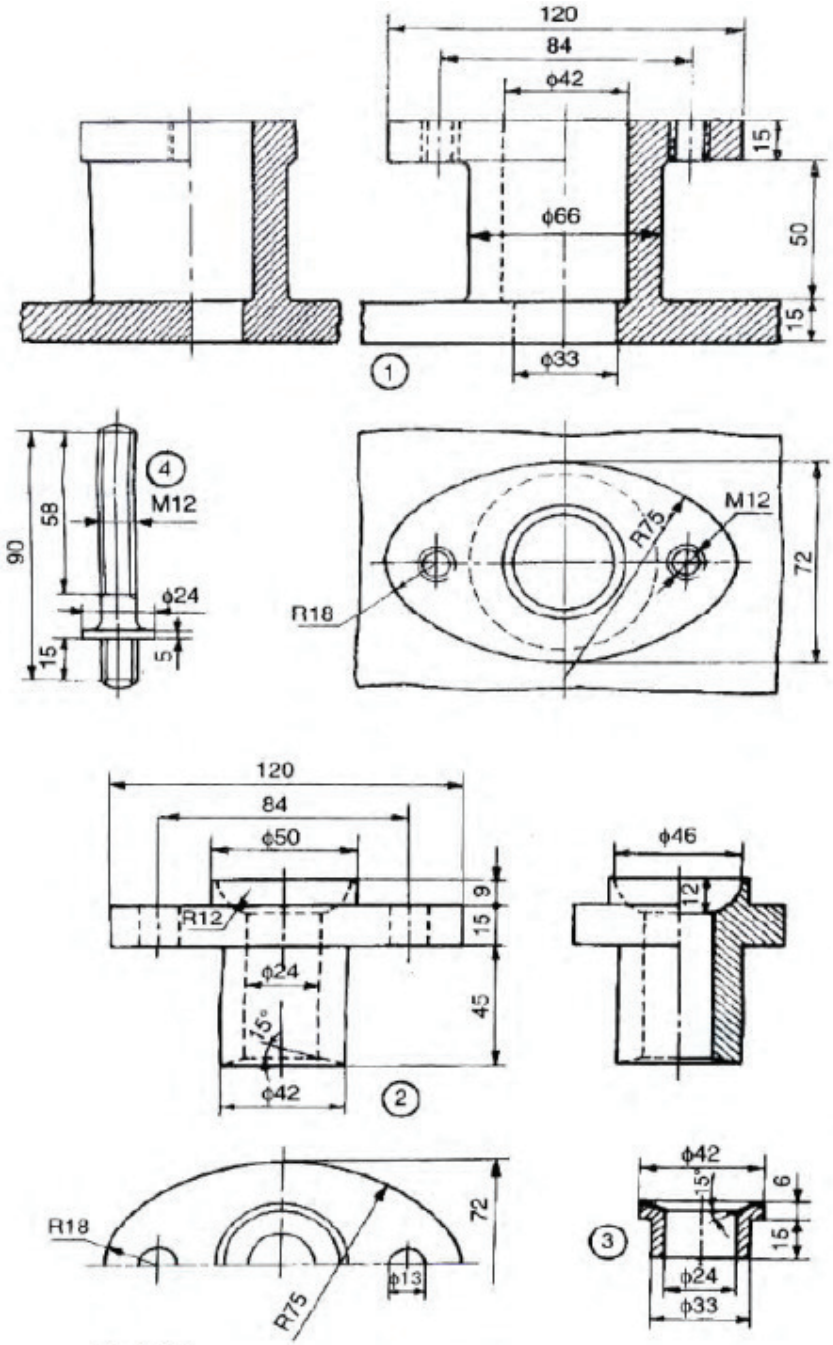

Parts list

Part No.	Name	Matl	Qty
1	Body	CI	1
2	Gland	Brass	1
3	Bush	Brass	1
4	Stud	MS	2
5	Nut, M12	MS	2