Code: 13A03303

R13

B.Tech II Year I Semester (R13) Regular & Supplementary Examinations December 2015

MACHINE DRAWING

(Mechanical Engineering)

Time: 4 hours Max. Marks: 70

All answers should be on the drawing sheet only
Answers on the drawing sheet only will be valued
First angle projections to be adopted

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Section – I

Answer any two of the following (2 × 4 = 08 Marks)

1 Draw any four types of lines and mention their names and applications

2 Sketch the convetional representation of the following materials:
(a) Aluminium.
(b) Zinc.
(c) Glass.
(d) Porcelain.

3 Draw the convetional representation of the following:
(a) Straight knurling.
(b) Cylindrical tension spring.

Section – II

Answer any two of the following (2 × 10 = 20 Marks)

4 Draw at least four types of thread profiles taking pitch as 20 mm.

5 Draw the sectional front and top views of a double riveted double strap chain butt joint for plates of 12 mm thickness.

6 Draw half sectional front view and top view of a 25 mm bushed bearing.

Section – III

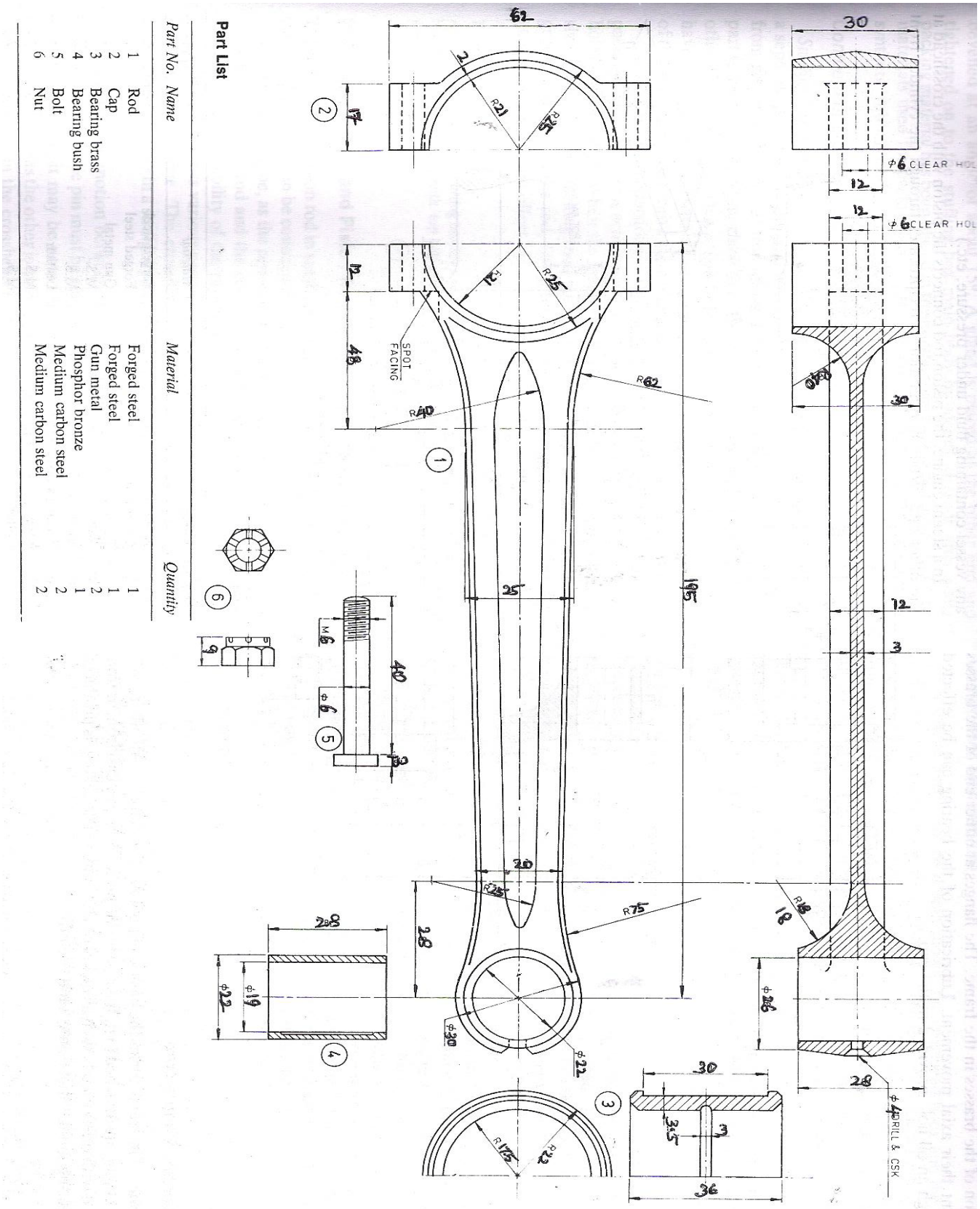
Answer the following (1 × 42 = 42 Marks)

7 Draw the sectional top view and front view of the petrol engine connecting rod for the below figure and part list. The parts of the connecting rod are given in third angle projection.

Contd. in page 2

Part List

Part No.	Name	Material	Quantity
1	Rod	Forged steel	1
2	Cap	Forged steel	1
3	Bearing brass	Gun metal	2
4	Bearing bush	Phosphor bronze	1
5	Bolt	Medium carbon steel	2
6	Nut	Medium carbon steel	2



Petrol engine connecting rod

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