Code No: R1622035

**R16** 

**SET - 1** 

# II B. Tech II Semester Regular/Supplementary Examinations, April/May – 2019 MACHINE DRAWING

(Com to ME, AME)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any TWO questions in Part-A

3. Answering **Part-B** Compulsory

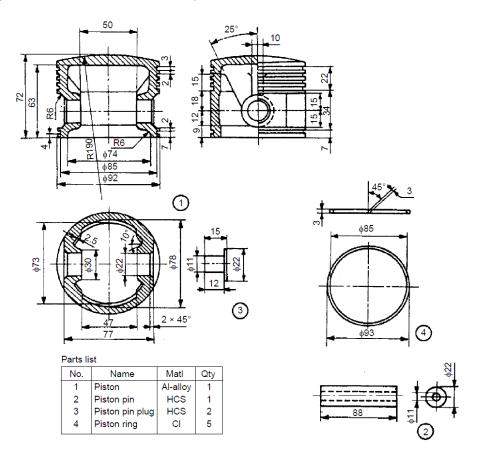
# PART -A

1. Draw the front, top, side views of a hexagonal bolt of diameter 35mm. (10M)

- 2. Draw the sectional front view and top view of two 20 mm thick plates fastened together by means of 20 mm diameter stud, a hexagonal nut and a washer. Insert important dimensions.
- 3. Draw Sectional view from front and view from above of a double riveted (10M) zigzag lap joint to join plates of thickness 18mm and provide all dimensions.

## **PART-B**

- 4. The details of Petrol Engine Connecting Rod are shown in Fig. below. (50M) Assemble all the parts and draw the following views to 1:1 scale:
  - i) Full sectional Front view
- ii) Half sectional side view



Code No: R1622035

**R16** 

**SET - 2** 

# II B. Tech II Semester Regular/Supplementary Examinations, April/May - 2019 MACHINE DRAWING

(Com to ME, AME)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any TWO questions in Part-A

3. Answering **Part-B** Compulsory

### PART -A

- 1. Draw to 1:1 scale the top view and sectional front view of a single riveted butt joint with double cover plates. The thickness of plates is 9mm. Show at least three rivets in each row. Indicate all dimensions.
- 2. Draw the following thread profiles and mark proportions.

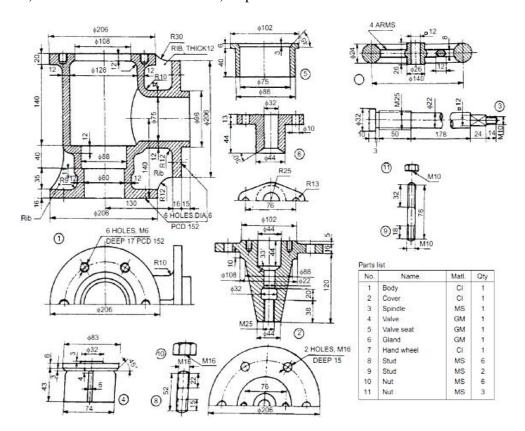
  i) Witworth thread

  ii) Buttress thread

  iii) ACME thread.
- 3. Draw the half sectional front view and side view of a journal bearing which can (10M) accommodate 40 mm diameter shaft.

## PART-B

4. Draw the following assembled views of the feed check valve is shown below. (50M) i) Full sectional front view ii) Top view



Code No: R1622035

**R16** 

**SET - 3** 

# II B. Tech II Semester Regular/Supplementary Examinations, April/May - 2019 MACHINE DRAWING

(Com to ME, AME)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

- 2. Answer any TWO questions in Part-A
- 3. Answering **Part-B** Compulsory

## PART -A

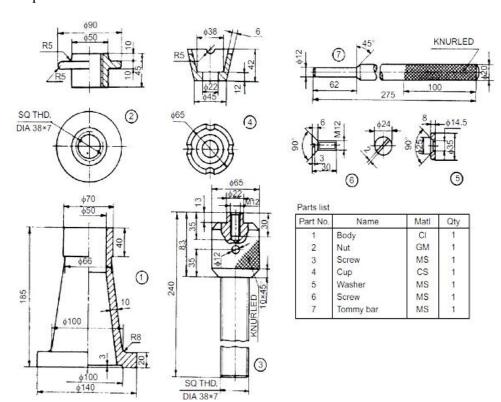
1. Sketch the conventional representation of the following materials:

(10M)

- i) Steel
- ii) Lead
- iii) Glass
- iv) Asbestos
- 2. Draw the sectional front and side view of a cotter-joint with two sleeves and each sleeve is having a width of 32 mm and thickness 6 mm and the clearance is 3 mm and taper as 1 in 30.
- 3. Draw to 1:1 scale full sectional front view and top view of a knuckle joint (10M) whose rod diameter is 20mm.

### PART-B

4. The fig. below the detailed drawings of a screw jack. Assemble all the parts and draw the following assembled views. i) Half Sectional front view. ii) Top view. (50M)



1 of 1

Code No: R1622035

**R16** 

**SET - 4** 

# II B. Tech II Semester Regular/Supplementary Examinations, April/May - 2019 MACHINE DRAWING

(Com to ME, AME)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any TWO questions in Part-A

3. Answering **Part-B** Compulsory

#### PART -A

1. Sketch the conventional representation of the following:

(10M)

- i) Semi elliptic leaf spring ii) Cylindrical tension spring
- iii) Square on shaft
- iv) Bearings
- 2. Taking the diameter of rods d = 20 mm, draw the front view showing Top half in section of a Socket & Spigot Cotter Joint. Add a view looking from the socket end. Show all dimensions in terms of 'd'.
- 3. Draw 1:1 scale the sectional front view and side view of a solid muff coupling. (10M) Assume diameter of the shaft as 30mm.

### PART-B

4. The below gives all the parts of a Tail stock. Assemble all the parts and draw the following views. i) Sectional front view ii) Full sectional side view.

