SET - 1

II B. Tech II Semester Regular/Supplementary Examinations, April/May - 2019 MACHINE DRAWING
(Com to ME, AME)
Max. Marks: 70
Time: 3 hours
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 35 mm .
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 zigzag lap joint to join plates of thickness 18 mm and provide all dimensions.

## PART -B

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


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 9 mm . 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 accommodate 40 mm diameter shaft.

## PART -B

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

Parts list

| No. | Name | Matl. | Oty |
| :---: | :--- | :---: | :---: |
| 1 | Body | Cl | 1 |
| 2 | Cover | Cl | 1 |
| 3 | Spindle | MS | 1 |
| 4 | Valve | GM | 1 |
| 5 | Valve seat | GM | 1 |
| 6 | Gland | GM | 1 |
| 7 | Hand wheel | Cl | 1 |
| 8 | Stud | MS | 6 |
| 9 | Stud | MS | 2 |
| 10 | Nut | MS | 6 |
| 11 | Nut | MS | 3 |

1 of 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. Sketch the conventional representation of the following materials:
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 whose rod diameter is 20 mm .

## 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.

Parts list

| Part No. | Name | Matl | Qty |
| :---: | :--- | :---: | :---: |
| 1 | Body | Cl | 1 |
| 2 | Nut | GM | 1 |
| 3 | Screw | MS | 1 |
| 4 | Cup | CS | 1 |
| 5 | Washer | MS | 1 |
| 6 | Screw | MS | 1 |
| 7 | Tommy bar | MS | 1 |

SET - 4

II B. Tech II Semester Regular/Supplementary Examinations, April/May - 2019 MACHINE DRAWING
(Com to ME, AME)
Max. Marks: 70
Time: 3 hours
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:
i) Semi elliptic leaf spring
ii) Cylindrical tension spring
iii) Square on shaft
iv) Bearings
2. Taking the diameter of rods $\mathrm{d}=20 \mathrm{~mm}$, 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.

Assume diameter of the shaft as 30 mm .

## 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.


1 of 1

