Third/Fourth Semester B.E. Degree Examination, Jan./Feb. 2021
COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours
Note: 1.Answer any one question from each of the parts A,B,C
2.Use FIRST ANGLE projection only.
3.Missing data if any may suitable be assumed
4.All the calculations should be on answer sheet supplied
5.All the dimensions are in mm
6. Part C Assembled View should be in 3D and the other 2 views in 2D

## PART-A

Q. No. 1 Figure shows a machine component. Draw the following:
(25 Marks)
(a) Front view
(b) Top view and
(c) Side view from/left

Q. No. 2 Draw two views of Square headed bolt with nut of size M25 X 100
(25 Marks)

## PART-B

Q. No. 3 Draw two views of socket and spigot cotter joint of diameter of shaft 25 mm .
(25 Marks)
Q. No. 4 Draw two views of a split muff coupling of diameter of shaft of 25 mm .
(25 Marks)

## PART-C

Q. No. 5 Figure: 1 Shows the details of "Machine Vice". Assemble the parts and draw the following: a) Sectional front view b) Top view
(50 Marks)
Q. No. 6 Figure: 2 Shows the details of "Lever safety Valve". Assemble the parts and draw the following: a) Sectional front view b) Top view



Figure 1: Details of Machine Vice

(9)


(5)

(10)

(11)


8
(8)
Parts list

| Part No. | Name | Matl | Qty | Part No. | Name | Matl | Qty |
| :---: | :--- | :---: | :---: | :---: | :--- | :---: | :---: |
| 1 | Body | Cl | 1 | 8 | Toggle-pin | MS | 1 |
| 2 | Valve seat | GM | 1 | 9 | Lever guide | MS | 1 |
| 3 | Valve | GM | 1 | 10 | Lever | FS | 1 |
| 4 | Cover | Cl | 1 | 11 | Fulcrum pin | MS | 1 |
| 5 | Cover bush | Brass | 1 | 12 | Weight | CI | 1 |
| 6 | Spindle | MS | 1 | 13 | Lever pin | MS | 1 |
| 7 | Toggle | MS | 1 | 14 | Stud with nut M20 | - | 6 |

Figure 2: Details of Lever safety Valve

