



RV Educational Institutions  
RV College of Engineering

Autonomous  
Institution Affiliated  
to Visvesvaraya  
Technological  
University, Belagavi

Approved by AICTE  
New Delhi

*Go, change the world*

Academic year 2022-2023 (Odd Sem)

DEPARTMENT OF  
**MECHANICAL ENGINEERING**  
**CIE -Improvement test**

|              |                                     |               |            |
|--------------|-------------------------------------|---------------|------------|
| Date         | 21 March 2023                       | Maximum Marks | 50         |
| Course Code  | 22MED13                             | Duration      | 90 Minutes |
| Course Title | Computer Aided Engineering Graphics |               | Sem: 1     |

Instruction: Answer all questions- Manual drawing only.

| Q. No. | Questions  | M  | BT | CO |
|--------|--|----|----|----|
| 1a.    | Draw the projections of the following points on the same XY line.<br>a) P is 35mm in front of VP and 30mm below HP.<br>b) Q is 30mm above HP and in VP.<br>c) R is 30mm behind VP and 25mm below HP<br>d) S is 40mm behind VP and 50mm above HP<br>e) T is 30mm in front of VP and 20 mm above HP.   | 10 | 2  | 1  |
| 1b.    | i. A point 30mm below XY line is the top view of two points E and F. E is 35mm above HP and F is 40mm below HP. Draw the projections of the two points and state their positions with reference planes and the quadrants in which they lie.<br>ii. Point A is 20mm in front of VP, 25mm above HP and 30mm in front of LPP. Draw the projections. | 10 | 2  | 1  |
| 2      | The front view a'b' of a straight line is 70mm and makes an angle of $50^\circ$ to XY line. End A is 15 mm in front of VP and 25mm above HP. The difference between the distances of A and B in front of VP is 50mm. Draw the projections and determine the true length and true inclinations with HP and VP.                                    | 15 | 3  | 2  |
| 3      | The hexagonal lamina of 25mm sides resting on one of its corners on HP. The lamina makes $45^\circ$ with HP and the corner opposite to corner on which it rests is in front of VP and away from it. Draw its front view and top view   | 15 | 3  | 2  |

BT-Blooms Taxonomy, CO-Course Outcomes, M-Marks

| Marks Distribution | Particulars |       | CO1 | CO2 | CO3 | CO4 | L1 | L2 | L3 | L4 | L5 | L6 |
|--------------------|-------------|-------|-----|-----|-----|-----|----|----|----|----|----|----|
|                    |             | Marks | 20  | 30  | -   | -   | -  | 20 | 30 | -  | -  | -  |