

End-Term Examination (November 2024)  
B.Tech 1<sup>st</sup> Sem. Section-E Subject: Engineering Graphics (ME 24104)

Max Marks- 40 (REGULAR)  
50 (EX-STUDENTS)

**Time – 02 hours (For Regular Students)  
03 hours (For Ex-Students)**

50 (EX-STUDENTS)

Attempt any four questions (For Regular Students). Attempt all the questions (For Ex-Students).

|  | Marks | C.C. |
|--|-------|------|
|--|-------|------|

| Attempt any four questions (For Regular Students). Attempt all the questions (For Special Students). |   | Marks | C.O & B.T    |
|--|---|-------|--------------|
| Question No.   | Questions   |       |              |
| 1  | A room is 6m x 5m x 4m high. An electric bulb B is above the centre of the longer wall and 1 m below the ceiling. The bulb B is 50 cm away from the longer wall. The switch S for the light is 1.25 m above the floor on the centre of the adjacent wall. Draw the projection and determine graphically, the shortest distance between the bulb B and the switch S. | 10    | C.O-2, B.T-4 |
| 2  | A pentagonal plate of 45 mm side has a circular hole of 40 mm diameter in its centre. The plate stands on one of its sides on the H.P. with its plane perpendicular to V.P. and $45^\circ$ inclined to the H.P. Draw the projections.   | 10    | C.O-3, B.T-3 |
| 3  | A hexagonal prism of base edge 30 mm and axis 60 mm rests on one of its base edges on the H.P. such that the axis is inclined at $30^\circ$ to H.P. and $45^\circ$ to the V.P. Draw its projections   | 10    | C.O-3, B.T-5 |
| 4  | A hexagonal prism of base side 30 mm and axis 70 mm has an edge of its base on the H.P. with axis parallel to the V.P. and inclined at $45^\circ$ to the H.P. It is cut by an A.V.P. inclined at $45^\circ$ to the V.P. and passing through a point on the axis, 15 mm from the top end. Draw its sectional front view and obtain true shape of the section.        | 10    | C.O-4, B.T-5 |
| 5  | <p>Pictorial view of an object is shown in figure below. Using first angle projection, draw its (i) front view, (ii) top view and (iii) side view.</p>  | 10    | C.O-2, B.T-5 |