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18EG15/25

First Semester B.E. Degree Examination - 2018

ENGINEERING GRAPHICS

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks: 100

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- Note:**
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| 1. Answer three full questions | 2. Use A4 sheets supplied. |
| 3. Draw to actual scale | 4. Missing data, if any, may be assumed suitably. |
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1. A line PQ 85mm long has its end P 10mm above HP and 15mm in front of the VP. The top view and front view of line PQ are 75 mm and 80mm respectively. Draw the projections. Also determine the true and apparent inclinations of the line. **25 Marks**

OR

1. A square plate of 40mm side rests on HP such that one of the diagonals is inclined at 30° to HP and 45° to VP. Draw its projections. **25 Marks**
2. A hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its edges. Draw the projections of the prism when the axis is inclined to HP at 45° and appears to be inclined to VP at 45° . **45 Marks**
3. A square pyramid of 25 mm base edge and 50 mm height rests with its base on HP with all of its base edges equally inclined to VP. It is cut by a plane perpendicular to VP and inclined to HP at 60° , passing through the extreme right corner of the base. Draw the development of the lateral surface of the pyramid. **30 Marks**

OR

3. A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projections of the combinations of solids. **30 Marks**

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