# F. FirstRanker.com <br> Firstranker's choice <br> www.FirstRanker.com 

## B.Tech II Year II Semester (R15) Regular Examinations May/June 2017 <br> ENGINEERING GRAPHICS

(Electronics and Communication Engineering)
Time: 3 hours
Max. Marks: 70
(Answer all five units, $5 \times 14=70$ Marks)
All questions carry equal marks

## UNIT - I

 Draw a rectangular hyperbola if a point on it is 70 mm and 85 mm from the asymptotes.OR

A line $A B, 90 \mathrm{~mm}$ long, is inclined at $45^{\circ}$ to the HP and its top view makes an angle of $60^{\circ}$ with the VP. The end $A$ is in the HP and 12 mm in front of VP. Draw its front view and find its true inclination with the VP.

## UNIT - III

A circle of 50 mm diameter is resting on HP on end $A$ of its diameter $A C$ which is $30^{\circ}$ inclined to HP while its TV is $45^{\circ}$ inclined to VP. Draw its projections.

OR
A cone of base diameter 50 mm and a 70 mm long axis is freely suspended from a point on the rim of its base. Draw the FV and the TV when the plane containing its axis is perpendicular to the HP and makes an angle of $35^{\circ}$ with the VP.

## UNIT - IV

A cube of 70 mm long edges has its vertical faces equally inclined to VP. It is cut by an AIP in such a way that the true shape of the cut part is a regular hexagon. Determine the inclination of the cutting plane with the HP. Draw FV, sectional TV and true shape of the section.

## OR

A cone of base diameter 40 mm and slant height 60 mm is kept on the ground on its base. An AIP inclined at $45^{\circ}$ to the HP cuts the cone through the midpoint of the axis. Draw the development.

Contd. in page 2

A sphere of diameter 40 mm rests centrally on top of a cube of side 50 mm . Draw the isometric projection of the solids.

OR
For the object shown in figure below, draw FV (in direction X), TV and RHSV.


