S. V. National Institute of Technology
B. Tech-I (Division: F, G, H,I,J)
Engineering Drawing
Mid Semester Examination

Date- 13-3-2012 Total Marks: 30

Instructions:
1. Attempt both section on separate drawing sheet.
2. Use Separate drawing sheet for Section I and Section II.
3. Use both side of the drawing sheet.
4. Figure to the right indicate full mark.

SECTION I

Q-1 An area of 6.5 hectare on the field is represented by an area of 26 cm^2 on the map. Determine RF of the scale. Construct Diagonal Scale to measure upto 7 hactometre. Mark the distance 136 m, 371 m and 692 m on it.(1 Hectare = 10^4 sq. m) (06

OR

Q-1 An area of 5.12 cm^2 represents an equivalent area of 128 m^2 on the field. Determine RF and construct a Verneir scale to measure up to 80 m. Mark the distance of 18.2 m and 45.5 m on it. (06

Q-2 Attempt any **THREE** of the following : (09

(1) Draw the projections of the following points. Also mention quadrant
   a) Point A is 30 mm behind VP and 20 mm below HP.
   b) Point P is in VP and 25 mm above HP.
   c) Point N is having FV and TV both 25 mm above XY.

(2) A line CD 30 mm long is parallel to VP and perpendicular to HP. Point C is 35 mm above HP and 10 mm in front of VP. Draw its projections. Also show HT and VT.

(3) A line EF 45 mm long, in the third quadrant, is parallel to VP and inclined at an angle of 35^0 to HP. The end E is 25 mm away from both the planes. Draw the projections of line. Also show HT and VT.

(4) A line MN 60 mm long has its end M 15 mm above HP and 20mm in front of VP. Its front view is 40 mm long. Line is inclined to VP. Draw its projection and find the true inclination of the line with VP. Mark HT and VT.

SARDAR VALLABH BHAI NATIONAL ISTITUTE OF TECHNOLOGY.
MECHANICAL ENGINEERING DEPARTMENT

B-TECH-I SEM-II

SUBJECT:- ENGINEERING GRAPHICS AND ENGINEERING DRAWING

TIME- 60 MINUTES MARKS-30 DATE-13-03-12

INSTRUCTIONS:-

(1) Figure to the right indicates full marks.

(2)Assume suitable data if required.

(10)

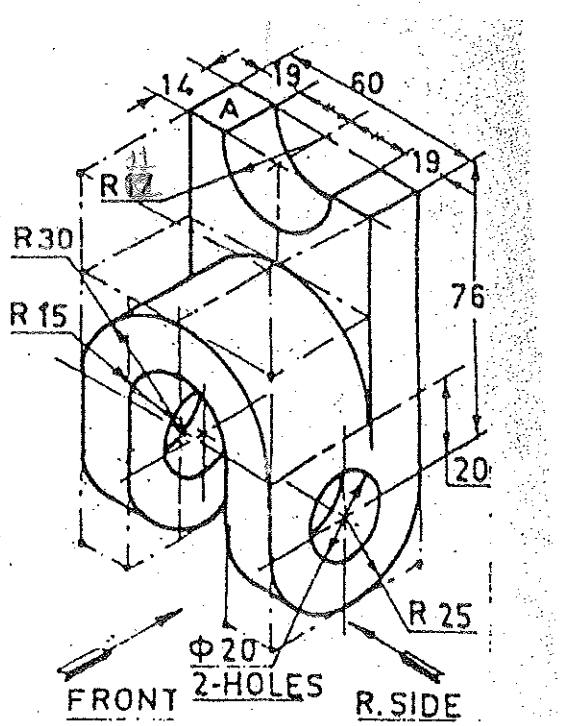
(1) A right regular pentagonal pyramid, edge of base 20 mm and height 45 mm, rest on its corner of base in H.P. Such that its axis inclined at 60° to the H.P. and parallel to V.P. Draw the projection of pyramid.

OR

(10)

(1) A right regular pentagonal prism, edge of the base 25 mm and length of the axis 60 mm, rests on its base on H.P. with one of its base edges perpendicular to the V.P. and inclined at 60° to the H.P. cuts the prism, meeting the axis at distance of 14 mm from its top end. Draw sectional top view, front view and true shape of the section.

(2) Draw the plan of given object in Fig.1 using first angle projection method. **(5)**



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