3. B. Roll No..

ENGINEERING DRAWING-I
1st Exam/2655/0551/5405/Civil/Electrical/Comp/IT/CSc/Aerospace/Marine/LT_FLT/TT/Food/Nov'17
Duration: 3Hrs.   **M.Marks:100**

SECTION-A
Q1. Draw conventions signs of the following.   **6x1.5=9**
   - a. Short break line
   - b. Centre line
   - c. Long break line
   - d. Cutting plane line
   - e. Gun Metal
   - f. Copper

Q2. Fill in the blanks.   **6x1.5=9**
   - i. The Representative Fraction in scales is the ratio of ....and.................
   - ii. Section lines are generally drawn at ....degrees to the horizontal.
   - iii. A circle in isometric projection appears as........
   - iv. The isometric length is about .... of the true length of the line.
   - v. The object is placed above HP and In front of VP it is in ....quadrant.
   - vi. Gothic lettering has all the alphabets and numerals of............thickness.

SECTION-B
Q3. Attempt any four questions.   **4x8=32**
   - a. Write free hand in single stroke vertical capital letters using ratio 5:4 and taking height of letters 15 mm, the following statement
     PUNJAB STATE FARMERS COMMISSION
   - b. Differentiate between plain scale and diagonal scale.
   - c. Give a comparison between 1st angle and 3rd angle projection.
   - d. Explain Representative Fraction.
   - e. What are sectional views? Explain the objective of drawing sectional views

SECTION-C
Q4.. Attempt any two questions.   **2x25=50**
   - i. A right circular cone of base diameter 30 mm and height 60 mm rests centrally on a square block of 60 mm side and 30 mm thick. Draw isometric projection of the solid
   - ii. Construct a diagonal scale to show meters, decimeters, and centimeters to measure up to 6 meters when R.F. =1/40. Show on it a distance of
     a) 5.22 meters b) 3.54 meters
   - iii. **Figure 1** shows pictorial view of an object. Draw to a full size scale, the following views in third angle projection (all dimensions in mm)
      - a. Front View looking in the direction of X.
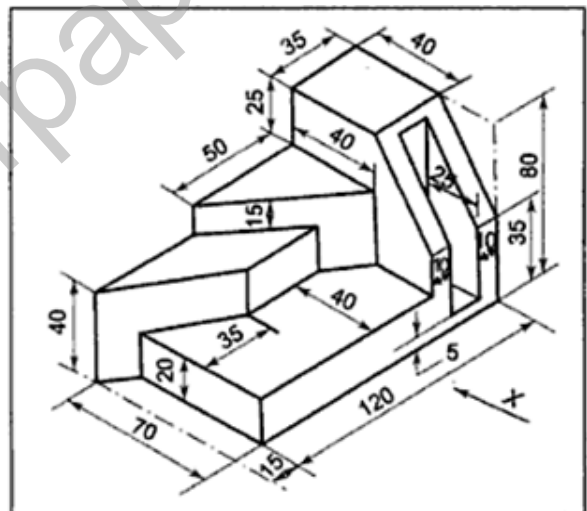   - b. Top View.
      - c. Left side View.

Figure - 1