

**DIPLOMA IN CIVIL ENGINEERING (DCLE(G)) /
DIPLOMA IN ELECTRICAL AND MECHANICAL
ENGINEERING (DEME) / DCLEVI / DMEVI /
DELVI / DECVI / DCSVI / ACCLEVI / ACMEVI /
ACELVI / ACECVI / ACCSVI**

Term-End Examination

00958

June, 2016

BET-016 : ENGINEERING DRAWING

Time : 2 hours

Maximum Marks : 70

Note : *Questions no. 1 and 2 are compulsory and are to be attempted on the Answer Script and others on drawing sheet. Answer any two questions from the remaining four questions.*

1. Attempt any **seven** questions. All the questions carry equal marks. $7 \times 2 = 14$
- (a) Explain the use of French-curves and lengthening-bar.
- (b) Mention *True* or *False*.
- (i) Eccentricity of a parabola is always equal to one.
- (ii) When drawing is prepared to a size greater than the actual size of the object, full size of the scale is to be used.

- (c) Enlist four types of lines used in engineering drawing practice. (Only name)
- (d) Define Representative Fraction.
- (e) Make a list of different types of planes.
- (f) Give the formula to calculate the subtended angle for the development of a curved surface of a cone.
- (g) Distinguish between Cone and Cylinder through a simple sketch.
- (h) Fill up the blanks with appropriate words selected from the list :
 - (i) Trace of a line is obtained in the form of _____ (line or point).
 - (ii) Line of a plane is obtained in that references plane where it is to be _____ (parallel or perpendicular).

2. (a) Draw the projections and state the quadrants to which the following points belong :

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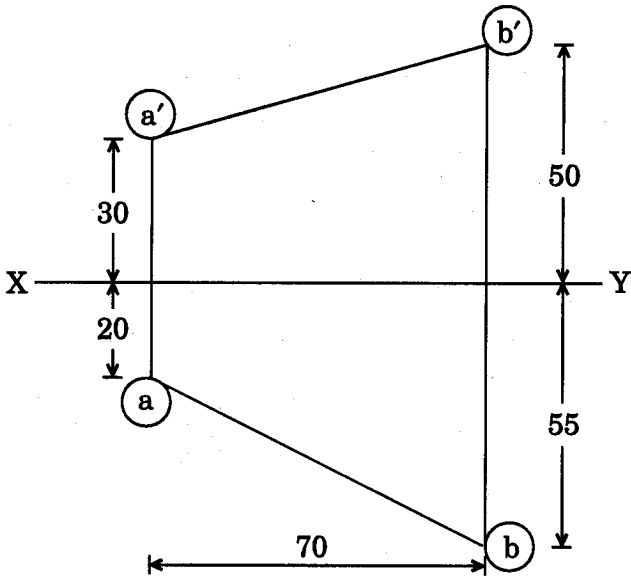
- (i) Point 'A' 50 mm above the H.P. and 50 mm behind of V.P.
- (ii) Point 'B' in V.P. and 40 mm below H.P.

(b) Calculate the length of scale when $R.F. = \frac{1}{400}$ and to measure up to 500 metres.

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- (c) Define Trace of a line. Find out the relative traces in the following figure :

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OR

Construct isometric scale and explain the relation between isometric length and actual length.

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3. Draw the projections of a regular pentagonal plane of 40 mm side, having its surface inclined at 45° to H.P. and perpendicular to V.P. It rests in H.P. with one of its corners.

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4. A square pyramid of base edge 40 mm and axis 70 mm long rests in H.P. with one of its base edges. Draw its projections when its axis is inclined at 30° to H.P. and parallel to V.P.

21

5. Construct a diagonal scale of R.F. = $\frac{1}{2500}$ and to read up to 500 metres. Show a length of 468 metres on this scale. 21
6. Draw the following views of the given block (Use First Angle Projection method) : 21
- (a) Top-view
- (b) Front-view
- (c) Side-view

