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## ENGINEERING DRAWING-I

$1^{\text {st }}$ Exam/Civil/Comp/Elect/Minor trades/2655/Dec-2011
Duration: 3 Hrs.
Max. Marks: 100
Note: Attempt any five questions.

## Section-A

Q1 (a) Show five different types of lines used in engineering drawing giving their purpose.
(b) Print the following sentence in upper case, single stroke, and vertical letters in the ratio of 7:4. Take height of letters $=12 \mathrm{~mm}$
"TRUTH IS GOD"
Q2 (a) With neat sketches, show how the following are dimensioned: Circles, holes chamfered surfaces, angles, curves.
(b) Sketch the following systems of placing dimensions: (i) Aligned system (ii) Unidirectional system

Q3. Construct a diagonal scale to read up to $1 / 10$ of a mm , long enough to read up to 60 mm , taking R.F=3/1. Show a distance of 47.8 mm on this scale.

Q4 Pictorial view of an object is shown in fig.1. Draw its front view, top view and side view. 20
Q5 (a) Draw projections of the following points:
(i) Point A, 50 mm in front of VP and 30 mm above HP.
(ii) Point B, 40 mm behind $V P$ and 20 mm below HP.
(b) A line $\mathrm{AB}, 35 \mathrm{~mm}$ long is perpendicular to HP. Its end B is 15 mm from HP and 20 mm from VP. If the whole line lies in third quadrant, draw its projections. The line is parallel to VP
Q6 Show the following types of sections:
Half section, Partial or broken art Section, offset section, revolved section, removed section.
Q7 A right circular cone of 30 mm base diameter and 40 mm height rests centrally on a square block of 50 mm sides and 20 mm thickness. Draw isometric view of the assembly.
Q8 (a) Fig 2 shows front and top views of an object, draw its side view.
(b) Three views of an object are shown in fig. 3 with some missing lines. Complete the views by inserting the missing lines.


Fig. 1


Fig. 2


Fig. 3

Duration: 3 Hrs.
Note: All questions are compulsory.

## Section-A

Q1. Fill in the blanks

1) A drawing is a $\qquad$ of rear thing.
2) $\qquad$ is a drawing instrument
3) Scales are used to draw the figure in $\qquad$
4) A line representing the path of point called $\qquad$
5) $\qquad$ is a thin line with arrow heads at ends.
6) Thickness of arrow head $=$ $\qquad$ -
7) Three strokes arrow head is also called $\qquad$
8) R.F means $\qquad$ _-
9) A rectangular object has normally $\qquad$
10) In first angle projection object placed in $\qquad$


Fig (A)
11) Isometric projection is a type of $\qquad$
12) The size of $\mathrm{A}_{2}$ drawing sheet is $\qquad$
13) Scale $1: 2$ means $\qquad$
14) Angle of set square are $\qquad$
15) $\qquad$ method is generally used for drawing isometric projection of these objects in which non isometric lines lie in isometric planes

## Section-B

Q2. Attempt all questions

1) Give the abilities to write a letter correctly
2) What is single stroke lettering?

## OR

What are ascenders and decenders?
3) Differentiate between straight line lettering and curved letters.

## OR

Name different type of scales.
4) Give different step of construction of scale.
5) What do you mean by Isometric Projection?
6) What do you mean by missing lines and missing views?

## Section-C

Q3. Attempt all questions
$11 \times 5=55$

1) Construct a plain scale of $\mathrm{RF}=1 / 250$ to measure 0 to 40 m . Measure a distance of 27 m on the scale.
2) Write the following in single strike vertical capital letters 20 mm high DRAWING IS THE ANGUAGE OF ENGINEERS.
3) Draw the isometric view of wedgs block shown in Fig (A).
4) Draw the Orthographic Projection of BLOCK given in fig (B).
5) Fig (C) shows the front side views of an object. Draw the following in scale 1:1. Draw the top view of an object. Draw the top view and mark the dimensions fully.


Fig (C)

