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$1{ }^{\text {st }}$ Exam/Mech/Auto/Prod./2655/Dec-2011

Duration: 3 Hrs.
M. Marks: 100

Note: Attempt any five questions

## Section-A

Q1.(a) Print the following, sentence in upper case single stroke, vertical letters with height $=8 \mathrm{~mm}$ in the ratio 7:4 "EARTH IS ROUND"" 10
(b) Show five different types of lines used in engineering drawing, giving their purpose. 10

Q2 (a) Show with sketches what are (i) Size dimensions (ii) Location dimensions
(b) Give sketches to show how the following are dimensional: threaded holes, angles, tapered surfaces, countersink holes, curves

Q3 Construct a diagonal scale of 1:50 to show meters, decimeters and centimeters, long enough to measure up to 6 meters. Indicate on this scale a distance of 4.65 meters.

Q4 (a) End A of line AB is 20 mm above HP and 35 mm in front of VP while end B is 15 mm behind VP and 30 mm below HP. Draw projections of the line taking distance between its end projective as 50 mm .
(b) Draw projections of a line $\mathrm{PQ}, 50 \mathrm{~mm}$ long lying with one of its ends touching VP. The line is parallel to HP and perpendicular to VP and is 25 mm above HP .

Q5 Isometric view of an object is given in fig.1. Draw its front view, top view and side view. 20
Q6. (a) Give conventions for showing section of (i) cast iron (ii) Gun metal (iii) White metal/lead (iv)Wood (v) Asbestos
(b) Show conventional breaks for the following:
(i) Rectangular Section
(ii) Round Section
(iii) Pipe or tubing
(iv) Rolled Section
(v) Channel Section

Q7 A cylinder of base diameter, 50 mm and height 100 mm rests centrally over a cube of 60 mm sides. Draw isometric view of the assembly.
Q. 8 (a) Two views of an object are given in Fig.2. Draw its third view.
(b) Three views of an object is shown in fig. 3 with some missing lines. Provide the missing lines and complete the views.


Fig. 1


Fig. 2


Fig. 3

