ID No. _____

A.D. Patel Institute of Technology

Subject: ELEMENTS OF CIVIL ENGINEERING

INTERNAL TEST

30-03-2009 **SECOND SEMESTER, 2008-09** **Total Marks 20**

8:00 am to 9:00 am **(EE, EC, ME, AE)**

(Assume any suitable data if required)

Q -1 (A) **Give answers of any TWO** **[06]**

1. Explain Critical Path Method (CPM) of Civil Engineering.
2. Explain Various types of Design Load of Buildings.
3. Write the advantages of framed structure over load bearing structure.
4. Explain Any three Principles of Building Planning in detail.

(B) Draw a Plan of a room measuring 6.0 m x 4.0 m with the following details: **[04]**
Wall thickness -30 cm
One door – 10DT24
One Window – 12WT16, One Window – 10WT16
Two Ventilator – 10V5
RCC beam – 20 cm x 30 cm
Provide steps in front of the Door and 60 cm weather sheds on all the openings
Consider a plinth height of 45 cm. **Take Scale 1:50**

Q-2 (A) Define Plane & Geodetic Surveying. **[02]**

OR

(A) Define Plans & Maps. **[02]**

(B) Calculate the included angles for the given close traverse. **[05]**

Line	FB
AB	$35^0 30'$
BC	140^0
CD	$255^0 30'$
DA	$335^0 30'$

OR

(B) A Line was measured with a steel tape which was exactly 30 m at a pull of 6 kg and the measured length was 240 m. The pull applied during measurements was 17 kg and the tape was uniformly supported. Find the true length of the line if the cross-sectional area of tape was 0.02 cm^2 and the Modulus of Elasticity = 2.1 x 10^6 kg/cm^2. **[05]**

(C) Explain Obstacles in Chaining. **[03]**

OR

(C) Give the Difference between Whole Circle Bearing (WCB) & Quadrant Bearing (QB).

*** BEST OF LUCK ***