L.D.R.P. Institute of Technology & Research, Gandhinagar
Mid Semester Examination, B.E. - Sem-II – March'2014

Branch: Mech/Elect./Auto/IT Engineering   **Date:** 05/03/2014
Subject: Basic Civil Engineering   **Subject Code-**CC-103
Time: 12:00 to 13:30   **Marks:** 30

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q-1	(A)	Explain the role of Civil Engineer in brief.	[5]
	(B)	Explain the fundamental principles of surveying with sketch.	[5]
Q-2	(A)	Enlist principle of planning and explain any two in brief with sketch	[5]
	(B)	A 20.0 m chain was found to be 8.0 cm too long after chaining a distance of 250.0m It was found to be 12.0 cm too long at the end of one day's work after chaining the total distance of 750.0m Find true distance of chain if chain was correct before commencement of work	[5]

OR

(B) A Line was measured with a steel tape which was exactly 30.0 m at 14 ^{0}C & a pull of 50 N & measured length was 900 meter Temp during measurement was17^{0}C and pull applied was 90 N Find true length of line if it is uniformed supported during measurement.   [5]

> If modulus of elasticity =2.1x10^7 N/cm^2,
> Area of Tape =0.04 cm^2,
> Co-efficient of thermal expansion = 0.0000117 per ^{0}C,
> Weight of tape is 1.8 Kg.

Q-3	(A)	Enlist various instruments used for offsetting. Explain any one with sketch	[5]
	(B)	Differentiate load bearing structure and framed structure.	[5]

OR

(A) Explain Indirect method of chaining on sloping ground.   [5]

(B) Draw section of spread footing for 20 cm and 30 cm thick wall.   [5]