IES COLLEGE OF TECHNOLOGY, BHOPAL

BE (Fifth Semester) Assignment-1

(Branch-CIVIL ENGG)

TRANSPORTATION ENGG. -2 **(CE-501)**

Date of issue: 24/07/2014 **Date of submission: 01/08/2014**

1	Explain road planning in india and financing of roads ?
2	Explain classification of road pattern with diagram ?
3	Explain the principle of highway planning?
4	What is extra widening of curves and sight distance?
5	Difference between horizontal and vertical curves?

.

IES COLLEGE OF TECHNOLOGY, BHOPAL

BE (Fifth Semester) Assignment-5

(Branch-CIVIL ENGG)

SURVEYING **(CE-502)**

Date of issue: 24/07/2014 **Date of submission: 01/08/2014**

1	Write the detail of digital lavel and theodolite ?
2	Describe the electronic distance measurements ?
3	Write the categories of EDM instruments ?
4	Describe the trignometrical leveling ?
5	Write in brief the total station and its advantages ?

IES COLLEGE OF TECHNOLOGY, BHOPAL

(Fifth Semester) Assignment-1

(Branch-CIVIL ENGG)

***Fluid Mech.-2*(CE-503)**

Date of issue: 24/07/2014 **Date of submission: 01/08/2014**

1	Explain the development of boundary layer along athin plate and smooth plate held parallel to uniform flow point out the salient features.
2	Explain different types of boundary layers thicknesses with the help of sketch.
3	Explain the term equivalent pipe also explain the siphon..
4	A submarine can be assumed to have cylindrical with rounded nose assuming its length to be 55m and diameter 6.0,determine the total power required to overcome boundary friction if its cruises at 8.0m/s velocity in sea water at 20^0($p=1030kg/m^3$ $v=1*60^{-6}m^2/s$)
5	Determine whether the pipe will act as hydrodynamically smooth,in transition or rough in the following cases: (1)D=300mm, L=50m, drop in pressure=$4.2KN/m^2$ K=0.02mm, $\rho=998kg/m^3$, $v=10^{-6}m^2/s$ (2)$t0=638.78n/m^2$ $\rho=998kg/m^3$ $v=10^{-6}m^2/s$ K=2.0mm for riveted steel pipe.

IES COLLEGE OF TECHNOLOGY, BHOPAL

(Fifth Semester) Assignment-1

(Branch-CIVIL ENGG)

***RCC-I*(CE-504)**

Date of issue: 24/07/2014 **Date of submission: 01/08/2014**

1	Discuss in details various assumptions limit state method
2	What do you mean by balanced section? Explain its significance.
3	What is the factor of safety? Why the value of factor of safety different for concrete and steel.
4	Find the moment of resistance of a RC beam 200mm wide and 450mm deep. The beam is reinforced with 3-12mm diameter bars in tension zone. The effective cover to the reinforcement is 35mm, grade of concrete is M20 and grade of steel is Fe250

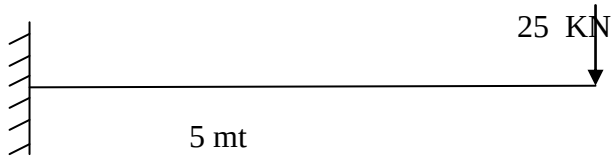
IES COLLEGE OF TECHNOLOGY, BHOPAL

BE (Fifth Semester) Assignment-1

(Branch-CIVIL ENGG)

***THEORY OF STRUCTURE* (CE-505)**

Date of issue: 24/07/2014 **Date of submission: 01/08/2014**

1	Define the strain energy and derive the expressions for the different loading conditions ?
2	Determine the deflection in the member due to strain energy ? 
3	Define castiglianos first and second theorem with explation ?
4	Explane reciprocal theorem and derive it ?
5	Derive total work done on a member ?