

**IES GROUP OF INSTITUTIONS BHOPAL**  
**ASSIGNMENT 1**  
**CE-301-TBT**

Date of Assign:16/07/14

Date of Submission.24/07/14

1	Find the Laplace transform of $te^{-2t}\sin 2t$	2008
2	Solve the equation by the transform method: $d^2y/dt^2 - 3dy/dt + 2y = 4t + e^{3t}$ when $y(0) = 1$ and $y'(0) = -1$	2010
3	Find the Inverse Laplace Transform of $1/s^3 - a^3$	2007
4	Find the Laplace Transform of $t^2\sin at$ .	2008
5	Solve the equation by the transform method: $d^2y/dt^2 - 3dy/dt + 2y = 4t + e^{3t}$ when $y(0) = 1$ and $y'(0) = -1$	2008

**IES GROUP OF INSTITUTIONS BHOPAL**  
**ASSIGNMENT 1**  
**CE-302-TBT**

Date of Assign:16/07/14

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Q-1	Discuss the various types of TRACTIVE RESISTANCES which a locomotive has to overcome on a railway track?	5
Q-2	Explain the various factors affecting selection of RAILWAY ALIGNMENT?	5
Q-3	Name the different type of SLEEPERS. Explain any two in detail.	5
Q-4	How will you fix Alignment of railway track	5

**IES COLLEGE OF TECHNOLOGY, BHOPAL**

BE (Third Semester) Assignment-I

(Branch-CIVIL ENGG)

**SOM ( CE-303)**

**Date of issue: 17/07/2014**

**Date of submission: 24/07/2014**

1	Explain stress and strain.
2	Write Hooke's law. And explain young's modulus.
3	Draw stress-strain curve for ductile material and brittle material.
4	Explain thermal stresses in composite section with example.
5	Explain following: (a) Strain energy. (b) Resilience. (c) Proof Resilience.

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**B.E. (Third Semester) Assignment-I  
(Civil Eng. Branch)**

**Engineering geology (CE-304)**

**Date of issue: 17/07/2014**

**Date of submission: 24/07/2014**

1	Define the scope of geology in civil engineering?
2	Write the uses of the construction job in civil engineering?
3	Write short note on a. Crust    b. mantle    c. core    d. ozone layer
4	<i>Describe briefly the structure of the atmosphere around the earth. explain its significance on the life systems existing on this planet ?</i>
5	Describe the age of earth and structure of the earth (Dec 2013)

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**B.E. (3<sup>rd</sup>SEM) Assignment -1  
Building Design and Drawing (CE-305)**

**Date of Assign: 16 july 2014**

**Date of Submission: 24 july 2014**

Q.1	Define foundation and different type of foundation	
Q.2	Define superstructure and various part of superstructure in brief.	
Q.3	A wall 50 cm and 7 m high has a roof load of 3000 kg/m run. Weight of masonry is $2.25 \text{ gm/cm}^3$ Weight of earth is $1.75 \text{ gm/cm}^3$ . The angle of repose 30 degree. Find width and depth of foundation. Bearing capacity of soil is 10 tone sq. meter. Assume suitable weight of foundation.	
Q.4	Define various type of roof with neat sketches	
Q.5	Write the classification of stairs with neat sketches	