### SHANTILAL SHAH ENGINEERING COLLEGE, BHAVNAGAR

#### **APPLIED MECHANICS DEPARTMENT**

#### **Student Notice:**

All students for BE Sem - 4th Civil Engineering are informed to prepare & submit power point presentation for the subject of Strucural Analysis -I (3140603) as a part of active learning assignment as per the following allotted topics latest by 21/03/2025, which will be considered as a part of submission for progressive assessment.

#	Roll No.	Enrollment No.	Name of Student	Topic of PPT
1	1001	230430106001	BANSIEWDOR MARBOH	Types of statically determinate & indeterminate structures, static and kinematic indeterminacy, stability of structures
2	1002	230430106002	BARAD SHREYANSH BHAVESHBHAI	Principle of superposition, Maxwell's reciprocal theorems. Computation of internal forces in statically determinate structures such as plane truss
3	1003	230430106003	GOHIL PRADIPBHAI HAMIRBHAI	Principle of superposition, Maxwell's reciprocal theorems. Computation of internal forces in statically determinate structures such as plane frame
4	1004	230430106004	KAKAN DESAN R MARAK	Principle of superposition, Maxwell's reciprocal theorems. Computation of internal forces in statically determinate structures such as Grids
5	1005	230430106007	VADHIYA KRUSHAL ARASIBHAI	Explain Arches, Cables and Suspension Bridges.
6	1006	230430106008	BHALIYA DARSHAN SAMATBHAI	Solve two Numerical of Three Hinge arches with circular and parabolic shapes subjected to various types of loading
7	1007	230430106009	DOLASHIYA JAYDEEPBHAI CHHAGANBHAI	Forces and end actions in cables due to various types of loading.
8	1008	230433106016	GOHIL ABHIJEETSINH GULABSINH	Solve two Numerical of Cable subjected to various types of loading.
9	1009	230433106042	RATHOD YASH NARESHKUMAR	Drive the equation of Hoop and Longitudinal Stress for Thin Cylindrical Shell
10	1010	240433106001	BARAIYA BHAVIN PRAVINBHAI	Drive the equation of Change in Dimensions and Volumn for Thin Cylindrical Shell
11	1011	240433106002	CHAVADA SHEETALBEN MANJIBHAI	Drive the equation of Change in Dimensions and Volumn for Thin Spherical Shell
12	1012	240433106004	DODIYA ROHIT VIKRAM	Solve two Example based on Thin cylindrical Sheel
				Difference between axial load and Eccentric load Definition of

13	1013	240433106005	DUMRALIYA KRUNAL RAGHUBHAI	Eccentricity. Effect of axial load and eccentric load on column
14	1014	240433106006	GOHIL AKSHAR SHANTILAL	Stress distribution in column by using maximum and minimum stresses equation and its sign convention, Limit of eccentricity with no tension condition.
15	1015	240433106007	GUJARATI JENIL SHAILESHBHAI	To draw the Core Or KERNEL of the section 1. Rectangular, 2. Hollow Rectangular, 3. Circular Section, 4. Hollow Circular Section, 5. I - Section, 6. T - Section
16	1016	240433106008	KURESHI AAFTAB RAJUBHAI	Maximum and Minimum stress in rectangular section with two Numerical
17	1017	240433106010	PARMAR PRACHI RAKESHBHAI	Definition of Column and Strut, columns end conditions and its effective length
18	1018	240433106011	RATHOD HIMANSHU ARVINDBHAI	Drive the Euler's Formula and its application with assumptions also write the Rankine's Formula
19	1019	240433106012	RATHOD JAYESH HASMUKHBHAI	Drive the Euler's Formula and its application with assumptions for both ends are fixed.
20	1020	240433106014	SOLANKI ANISHKUMAR AJITBHAI	Numerical Based upon Euler's and Rankin's Formula (Two for Each)

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#	Roll No.	Enrollment No.	Name of Student	Topic of PPT
21	1021	240433106015	SOLANKI ARTI RAMBHAI	Basic Concept of Strain Energy, different types of Resilience and all terminology related to Strain Energy.
22	1022	240433106016	TRIVEDI HARSH MUKESHBHAI	Study of Strain energy due to gradual, sudden and impact loading with any one numerical based on it.
23	1023	240433106017	VAGHELA BINAL JAGADISHBHAI	Study of Strain energy due to Shear, Bending and Torsion with any one numerical based on it.
24	1024	240433106018	UJENIYA HARSH JAGDISHBHAI	Differential equation of elastic curve, relation between moment, slope and deflection and sign conventions
25	1025	240433106019	VEGAD SHREYASRAJ RAVIRAJSINH	Macaulay's method and its application to beams. (SOLVE TWO EXAMPLE)
26		210430106014	VYAS YAGNA	Moment Area Method and its application to beams. (SOLVE TWO EXAMPLE)
27	1027	210430106022	PAL SURAJ A.	Conjugate Beam Method and its application beams. (SOLVE TWO EXAMPLE)

All Students should mentioned all details like Name of College with LOGO, Name of Students along with Enrollment Number, Roll Number, and Department in very Frist Slide of PPT

Prof. K. A. Mehta



# Shantilal Shah Engineering College, Bhavnagar (A State Government Institute)



## **Applied Mechanics Department**

### **Presentation of Active Learning Assignment (ALA)**

on TOPIC alloted to each student

Presented By: Write Full Name Of Student Enrollment No. - Write Enrollment <u>Number</u> Roll No. – Write Roll Number allotted by Student section