



Amar Sewa Mandal's

GOVINDRAO WANJARI COLLEGE OF ENGINEERING & TECHNOLOGY
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DEPARTMENT OF CIVIL ENGINEERING
BTECH 5TH SEMESTER
LEARNING MANAGEMENT SYSTEM (LMS)

S.N	NAME OF SUBJECT	CO'S	NOTES
1.	Design of Steel Structures (BTCVC501)	<i>CO1:Analyze and design the various connections and identify the potential failure modes.</i>	UNIT 1
		<i>CO2:Analyze and design various tension, compression and flexural members.</i>	UNIT 2
		<i>CO3: Analyse and design various gantry girder and roof trusses.</i>	UNIT 3
		<i>CO4: Make use of knowledge to design column bases.</i>	UNIT 4
		<i>CO5:Use the knowledge of structural properties in assessing its strength and understand design philosophy.</i>	UNIT 5
2.	Geotechnical Engineering (BTCVC502)	<i>CO1:Introduction to the soil engineering and its application.</i>	UNIT 1
		<i>CO2:Understand different soil properties and behaviour.</i>	UNIT 2
		<i>CO3:Explain permeability of soil and seepage aspects.</i>	UNIT 3
		<i>CO4:Understand stresses in soil and application of shear stress parameters in the field.</i>	UNIT 4
		<i>CO5:Develop ability to take up soil design of various foundations.</i>	UNIT 5
3.	Structural Mechanics – II (BTCVC503)	<i>CO1:Have a basic understanding of concept of influence line and will be able to Analysis of trusses.</i>	UNIT 1
		<i>CO2:Have a basic understanding of Cable, Suspension Bridges and arches and will be able to analyze three hinged and two hinged arches</i>	UNIT 2
		<i>CO3:Have a basic understanding of fundamental concepts of flexibility method of analysis.</i>	UNIT 3
		<i>CO4:Have a basic understanding of matrix method of analysis and will be able to analyze the determinant structure.</i>	UNIT 4
		<i>CO5:Have a basic understanding of the principles and concepts related to finite difference and finite element methods</i>	UNIT 5
4.	Concrete Technology (BTCVC504)	<i>CO1: Understand the various types and properties of ingredients of concrete</i>	UNIT 1
		<i>CO2: Understand the properties of Fresh concrete</i>	UNIT 2
		<i>CO3: Understand effect of admixtures on the behaviour of the fresh and hardened concrete</i>	UNIT 3
		<i>CO4: Understand the desired Properties of Concrete</i>	UNIT 4
		<i>CO5: Formulate concrete design mix for various grades of concrete</i>	UNIT 5
5.	Project Management (BTHM505)	<i>CO1:Understand various steps in project Management, different types of charts.</i>	UNIT 1
		<i>CO2: Construct network by using CPM and PERT method.</i>	UNIT 2
		<i>CO3: Determine the optimum duration of project with the help of various time estimates.</i>	UNIT 3
		<i>CO4: Know the concept of engineering economics, economic comparisons, and linear break even analysis problems.</i>	UNIT 4
		<i>CO5: Understand the concept of total quality Management including Juran and Deming's philosophy.</i>	UNIT 5
6.	Advanced Environmental Engg. (BTCVPE506)	<i>CO1: Determine the sewage characteristics and design various sewage treatment plants.</i>	UNIT 1
		<i>CO2: Understand municipal water and wastewater treatment system design and operation.</i>	UNIT 2



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		<i>CO3: Apply environmental treatment technologies and design processes for treatment of industrial waste water.</i>	<u>UNIT 3</u>
		<i>CO4: Understand the environmental sanitation.</i>	<u>UNIT 4</u>
		<i>CO5: Understand the rural sanitation schemes.</i>	<u>UNIT 5</u>