Subject : Pavement Design (PEC-CVE450-T) Sem- 7th sem

Week	Theory		Topic Covered Date and Remarks		
	Lecture Day	Topic (Including Assignment/Test)	Date	HOD	Director-principal
1st	1.	Introduction: Types and component parts of pavements			
	2.	Factors affecting design and performance of pavements			
	3.	Highway and airport pavements			
2nd	4.	Stresses and Deflections in Flexible Pavements: Stresses and deflections in homogeneous masses			
	5.	Burmister's two layer theory			
	6.	Three layer and multi-layer theories			
3rd	7.	Wheel load stresses			
	8.	Various factors in traffic wheel loads; ESWL of multiple wheels.			
	9.	Repeated loads and EWL factors; sustained loads.			
4th	10.	Pavement behaviour under transient traffic loads			
	11.	Flexible Pavement Design Methods For Highways and Airports: Empirical, semi-empirical and theoretical approaches			
	12.	Flexible Pavement Design Methods For Highways and Airports: Empirical, semi-empirical and theoretical approaches			
5th	13.	Development, principle,			
	14.	Design steps, advantages;			
	15.	Design of flexible pavements as per IRC			
6th	16.	Design of flexible pavements as per IRC			
	17.	Stresses in Rigid Pavements: Types of stresses and causes			
	18.	Factors influencing the stresses			
7th		**----------Ist Minor Test----------**			
8th	19.	General considerations in rigid pavement analysis			
	20.	EWL; wheel load stresses			
	21.	Warping stresses			
9th	22.	Frictional stresses			
	23.	Combined stresses			
	24.	Rigid Pavement Design: Types of joints in cement concrete pavements and their functions, j			
10th	25.	Rigid Pavement Design: Types of joints in cement concrete pavements and their functions, j			
	26.	Joint spacing			
	27.	Design of CC pavement for roads as per IRC			
11th	28.	Design of CC pavement for runways as per IRC			
	29.	Design of joint details for longitudinal joints, contraction joints and expansion joints.			
	30.	Design of joint details for longitudinal joints, contraction joints and expansion joints.			
12th	31.	IRC method of design by stress ratio method			
	32.	IRC method of design by stress ratio method			
	33.	Design of continuously reinforced concrete pavements			
13th	34.	Design of continuously reinforced concrete pavements			
	35.	Design of continuously reinforced concrete pavements			
	36.	Maintenance & repair of pavements			
14th		**----------2nd Minor Test----------**			
15th	37.	Rehabilitation of pavements s including design of bituminous and concrete overlays as per IRC.			
	38.	Rehabilitation of pavements s including design of bituminous and concrete overlays as per IRC.			
	39.	Rehabilitation of pavements s including design of bituminous and concrete overlays as per IRC.			