Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: Final Year B.Tech	**School of Technology**	**Department: Civil Engineering**
Course Code: CET441	**Course Title: Pavement Materials**	**Semester : VII**
Day : Friday **Date : 05/03/2021**	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Question Paper

Instructions: 1) All Questions are compulsory.

2) Assume Suitable Data Wherever Necessary.

			Marks	Bloom's Level	CO
Q.1		**Answer the following (any Two)**–			
	a)	Explain various test on road aggregates.	8	L2	CO1
	b)	How would you evaluate strength of subgrade soil.	8	L2	CO2
	c)	Explain Marshall method of bituminous mix design.	8	L2	CO2
Q.2		**Answer the following (any two)** –			
	a)	Explain objectives and advantages of polymer modified bitumen.	8	L3	CO3
	b)	Write note on pavement composition.	8	L3	CO3
	c)	Design the pavement for construction of a new two lane carriageway for design life 15 years using IRC method. The initial traffic in the year of completion in each direction is 150 CVPD and growth rate is 7%. Vehicle damage factor based on axle load survey = 2.5 std. axle per commercial vehicle. Design CBR of subgrade soil=5%.	8	L4	CO3
Q.3		**Answer the following (any two)** –			
	a)	Write note on joint filler and sealer materials in rigid pavement.	9	L3	CO4
	b)	Enlist and explain commonly recovered construction materials.	9	L2	CO4
	c)	Write note on Challenges for Using Waste Materials in Pavements.	9	L2	CO4

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