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: T.Y B.Tech	**School of Technology**	**Department: Civil Engineering**
Course Code: CET302 R1	**Course Title: Infrastructure Engineering**	**Semester : V**
Day : Wednesday **Date : 16/12/2020**	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

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 the Coning of wheel with Labeled Diagram.	8	L_2	CO1
b)	Explain maintenance of surface of rails and maintenance of rolling stock.	8	L_2	CO1
c)	For 12.8m rail length of B.G. track, calculate the quantities of materials required for 1 km length of track. Assume sleeper density to be equal to (M+4). Type of rail 90R i.e. weight=44.7 kg/m.	8	L_2	CO1
Q.2	**Answer the following (any two) –**			
a)	Explain the Components of Bridge with neat sketch mentioning their Functions.	8	L_2	CO2
b)	With neat line diagram explain the various Runway Patterns.	8	L_2	CO3
c)	Explain the components of Aircraft with neat sketch.	8	L_2	CO3
Q.3	**Answer the following (any two) –**			
a)	Explain the methods of Tunneling in Hard Rock.	9	L_2	CO4
b)	Define the Following Technical Terms in Dock and Harbour Engineering. • Tide • Wave • Littoral Drift	9	L_2	CO4

• Break Water
• Jetties

c)	With Labeled Diagrams Explain Natural, Semi natural and Artificial Harbours	9	L_2	CO4

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