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KADI SARVA VISHWAVIDYALAYA

LDRP INSTITUTE OF TECHNOLOGY & RESEARCH, GANDHINAGAR.

B.E. 6TH Semester

MID SEMESTER EXAMINATION

Date/Day: 06/03/2014,THURSDAY

Branch : CIVIL

Sub Code : 160603

Subject Name: RAILWAY, BRIDGE AND TUNNEL

ENGINEERING

Time

: 08:30 AM to 10:00 AM

Max. Marks : 30

Instructions:1) All questions are compulsory

- 2) Figures to the right indicate full marks.
- 3) Indicate **clearly**, the options you attempt along with its respective question number.

Q.1		Attempt any two	[10]
	(a)	Compare railway transportation with road transportation.	[5]
	(b)	Describe in brief the basic requirements of a good alignment.	[5]
	(c)	Explain coning of wheels.	[5]
Q.2	(a)	Draw a detailed sketch showing cross section of a B.G. track for single line.	[5]
	(b)	State the effects of creep	[5]
		OR	
	(a)	Define equilibrium cant and cant deficiency.	[5]
	(b)	What would be equilibrium cant on a M.G. track of 5 curves for a speed of 40 kmph.	[5]
		What would be the maximum permissible speed after allowing the maximum cant	
		deficiency?	
Q.3	(a)	Explain Needle beam method for tunneling with neat sketch.	[5]
	(b)	How are shafts classified?	[5]
		OR	
	(a)	Discuss with sketches ventilation in tunnel construction.	[5]
	(b)	Describe with sketches procedure of fixing alignment in short and long tunnel.	[5]

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B.E. 5TH Semester

MID SEMESTER EXAMINATION

Date/Day: 28/08/2014, Thursday Branch : CIVIL Sub Code: CV 505 Subject Name: RAILWAY, BRIDGE AND TUNNEL **ENGINEERING** Time : 08:30 AM to 10:00 AM Max. Marks : 30 Instructions:1) All questions are compulsory 2) Figures to the right indicate full marks. 3) Indicate clearly, the options you attempt along with its respective question number. Q.1 (a) Give importance of railway. [5] Advantages and disadvantages of tunneling (b) [5] State different types of surveys conducted before fixing railway alignment. Explain Q.2(a) [5] any two in detail. Draw cross section of permanent way for B.G. railway as per IRS for single line and [5] (b) double line with all labeling. OR (a) Write function of sleepers. [5] Classify tunnels based on shape. Explain circular and Egg shaped tunnel. [5] (b) Explain requirement of ideal railway. Q.3 [5] (a) Write short note on size of tunnel. (b) [5] OR Compare flat footed rail and Bull headed rail.

Define creep of rail and state the effects of rails.

[5]

(a)

(b)