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Internal Assessment Test 1 – Sept. 2019

Sub:	Railways, Harbours, Tunnels and Airports					Sub Code:	15CV552	Branch:	CIVIL
Date:	08/ 09 / 19	Duration:	90 mins	Max Marks:	50	Sem/Sec:	V-A/B	OBE	

	Question 1 is compulsory, attempt any 4 from questions 2-6.	MARKS	CO	RBT
1 (a)	Draw and Explain a right hand turn-out.	[10]	CO1	L1
2	During the scheduled maintenance it was noticed by the gang-men that the rail has moved around 8.5 cms in the direction of movement of the trains.			
(a)	What is the possible reason for this movement?	[01]		
(b)	What might be the theory behind this problem? Explain any 1.	[04]	CO1	L3
(c)	Can you suggest any 3 good solutions for this problem?	[01+02+02]		
3. (a)	What are the three spheres of sustainability?	[05]	CO2	L2
(b)	How can sustainability in transport systems be achieved? Explain with an example.	[05]		

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3. (a)	What are the three spheres of sustainability?	[05]	CO2	L2
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4. (a)	Write any 4 functions of rail.	[4]	CO3	L3
(b)	Write any 4 requirements of an ideal rail.			
5. (a)	Draw and explain about coning of wheels.	[5]	CO3	L1
(b)	Derive a relationship between Radius of a railway curve and the Degree of a railway curve.	[05]	CO2	L3
6. (a)	Compare bull headed and flat footed rails.	[05]	CO1	L1
(b)	What do you mean by preliminary surveying and Detailed surveying. Explain.	[05]		

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