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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2018

Program: B Tech Civil Engineering	**Semester – VI**
Subject (Course): Transportation Engineering -2	**Max. Marks : 100**
Course Code : CEEG332	**Duration : 3 Hrs**
No. of page/s: 02	

S No	Question	Marks	CO
Section A (Answer all questions)			
1.	What are the social factors considered during railway alignment	5	1
2.	What is the percentage of BG, MG and NG across the country? How they differ from Standard gauge	5	1
3.	Write a note on turning radius	5	5
4.	Sketch any two wheel arrangements of an aircraft	5	4
Section B (Answer all questions)			
5.	Write a note on coning and adzing	10	2
6.	How ballast arrangement plays an important role in permanent way development	10	2
7.	(a) Calculate the cant required for a BG track of radius 300 m for train permissible speed 60 kmph (b) What is the role of economy in airport development	5+5	3,4
8.	Label the airport layout given in picture 	10	5
Section C (Answer any two questions)			
9.	(a) Railway curve with T=320.00ft., Dc=4⁰00', and PI station 47+50.00 ft. trace the curve by finding the offsets (b) Write a note on cant deficiency	15+5	3
10.	(a) How wind-rose diagram is helpful in runway design (b) What are the considerations to be taken into account when planning a new airport at city of high altitude? Justify your	10+10	5

		answers.		
11.	(a)	What are the differences in development of a permanent way in embankment and cutting?	10+10	1,4
	(b)	Mention the key objectives of airport surveys and explain		