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Reg. No.:							

Question Paper Code: 73255

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Fifth Semester

Civil Engineering

CE 2303/CE 52/10111 CEE 49 – RAILWAYS, AIRPORTS AND HARBOUR ENGINEERING

(Regulations 2008/2010)

(Common to PTCE 2303/10111 CEE 49 — Railways, Airports and Harbour Engineering for B.E. – (Part-Time) Fourth Semester – Civil Engineering – Regulations 2009/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. List the various Track Fittings and Fastenings.
- 2. What is meant by Grade Compensation?
- 3. List the sources of moisture in a Railway Track.
- 4. What is meant by Track circuiting?
- 5. Define: Master plan
- 6. Classify Airports as per ICAO.
- 7. What is a terminal building? Give its functions.
- 8. Write the factors affecting the location of Exit Taxi ways.
- 9. What do you understand by Littoral Drift?
- 10. Differentiate Port and Harbour.

PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	Explain in detail about the modern and conventional methods of surveying for Track Alignment. (16)			
		Or			
	(b)	Describe the Permanent Way and its components with a neat Sketch. (16)			
12.	(a)	Illustrate with a neat sketch, the turnout, points and crossings and explain their working principles. (16)			
		Or			
	(b)	Enumerate the different types of Station and Yards. (16)			
13.	(a)	Explain in detail about the following: (8 + 8)			
		(i) Airport Zoning			
		(ii) Site Selection for Airport.			
		\mathbf{Or}			
	(b)	Discuss in detail about the Wind Rose Diagram and the procedure for the Orientation of Runway. (16)			
14.	(a)	Write in detail about the Runway markings with neat sketch. (16)			
Or					
	(b)	Describe the different systems of Parking in Apron of an Airport. (16)			
15.	(a)	With a neat sketch of a Layout, Explain briefly the various components of a Harbour. (16)			
		\mathbf{Or}			
	(b)	Describe the following with its types: (i) Docks and (ii) Break Waters. (8+8)			