

ANNA UNIVERSITY OF TECHNOLOGY, COIMBATORE  
B.E. / B.TECH. DEGREE EXAMINATIONS : NOV / DEC 2011  
REGULATIONS : 2008  
FIFTH SEMESTER - CIVIL ENGINEERING  
080100026 - RAILWAYS AND AIRPORT ENGINEERING

Time : 3 Hours

Max.Marks: 100

PART - A

(10 x 2 = 20 MARKS)

ANSWER ALL QUESTIONS

- 1) What are the types of survey which are used for track alignment?
- 2) What are the disadvantages of Coning of Wheels and how they rectified?
- 3) Write the Function of rails?
- 4) What are the Purpose of signaling?
- 5) What are the disadvantages of Timber Sleepers?
- 6) What is a Marshalling Yard?
- 7) Define cross Wind Component and Wind Coverage?
- 8) What is an Exit Taxiway?
- 9) Define ATC.
- 10) What is a Hanger?

PART - B

(5 x 16 = 80 MARKS)

ANSWER ALL QUESTIONS

- 11) (a) Briefly explain the different types of Rails their Advantages and Disadvantages.

(OR)

- 11) (b) What are the objects of providing Transition Curve in Railways? Explain briefly how the length of the Transition Curve is decided.
- 12) (a) Explain the different Systems of Controlling Train Traffic.  
(OR)  
(b) Discuss the modern methods of construction and maintenance of Railway Track. Indicate the equipment used.

- 13) (a) Explain in detail about Interlocking and its Principle.  
(OR)

- (b) What are the Points and Crossings? Draw a neat sketch of a Left-Hand Turnout and indicate the components.

- 14) (a) Summarise the Different Taxiway Geometrics as recommended by ICAO.  
(OR)

- (b) Calculate the Actual Length of the runway from the following data:

Airport Elevation	: R.L. 100
Airport reference Temperature	: 28°C
Basic length of runway	: 600m
Highest point along the length	: R.L.98.2
Lowest point along the length	: R.L.95.2

- 15) (a) Give the Sequence of Activities of a Passenger at a Modern Terminal Building.

(OR)

- (b) Draw and explain in detail about the Runway Marking.

\*\*\*\*\*THE END\*\*\*\*\*