

Total number of printed pages-2

53 (CE 603) TREN-II

2019

TRANSPORTATION ENGINEERING-II

Paper : CE 603

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer **all** questions.

1. (a) What are the requirements of ideal permanent way? 10
(b) Draw the neat sketch of cross-section of a railway track and explain the roles of its various components. 10
2. (a) Explain the problems caused by Non-uniformity of gauges across the country. 10
(b) Explain various causes that results in horizontal movement of rails with respect to sleepers. 10

Contd.

3. (a) What are the requirements of ideal rail section? Explain various types of rail sections. 10
- (b) Explain various causes and remedial measures for wear of rails. 10
4. (a) What are the advantages of welding of rails? Explain different methods of welding of rails. 10
- (b) What are the functions of railway ballast? Explain the requirements of ideal ballast material. 10
5. (a) The length of runway under standard conditions is 2000m. The airport site has an elevation of 320m. Its reference temperature is 34°C. If the runway is to be constructed with an effective gradient of 0.2%, determine the corrected runway length. 10
- (b) Draw the neat sketch of typical layout of airport. Explain its various components. 10

