

Total number of printed pages-3

53 (CE 603) TREN

2016

TRANSPORTATION ENGG-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) Write the role played by Indian Railways in the social, cultural and economic development of country. 5
- (b) Explain the factors affecting choice of railway gauge. 5
2. (a) What are the requirements of ideal rail alignment. 5
- (b) Explain Traffic and Reconnaissance survey in engineering surveys for railway alignment. 5

Contd.

3. (a) Explain railway track or permanent way with a neat sketch. 5
- (b) What are the requirements of a good railway track? 5
4. (a) Give the comparison between different rail sections. 5
- (b) Explain the different types of rail failures. 5
5. (a) Explain the different types of rail joints. 5
- (b) Explain different methods of welding of rails. 5
6. (a) What are the limitations of air transportation *vs.* other modes of transport. 5
- (b) Explain the surveys for airport site selection. 5
7. (a) What are the assumptions made in the determination of Basic runway length? 5
- (b) Explain the various types of corrections to be applied to Basic runway length. 5

8. (a) Give the geometrical standards of taxiway. 5
- (b) What factors govern the layout of taxiways? 5
9. (a) Explain Satellite system of parking of aircrafts. 5
- (b) What are the advantages and disadvantages of Metal Sleepers? 5
10. (a) Explain wave action theory and percussion theory of creep. 5
- (b) What are the remedies for creep? 5
-