

PCCI5304 **TRANSPORTION ENGINEERING-II** (3-0-0)

Module-I

History of Indian railways, component parts of railway track, problems of multi gauge system, coning of wheels, alignments and survey, permanent way track components , Type of rail sections ,creep of rails, wear and failure in rails , Ballast requirements, sleeper requirements, types of sleepers, various train resistances

Module-II

Geometric design: Gradients and grade compensation, various speeds on a railway track, super-elevation, horizontal and vertical curves,
Points and crossings, Design of simple turn-out, Signalling and interlocking,

Module-III

Airport site selection, Air craft characteristics, various surface of an airport, Wind rose diagram, Geometric elements of run way and taxiway , holding apron, parking configuration , terminal building , visual aids, air traffic control, airport marking and lighting.

Reference Books:

1. A text book of railway engineering , By S.C.Saxena and M.G.Arora
2. Air-port Engineering by S.K.Khanna and M.G.Arora
3. Railway Engineering by Satish Chandra & MM Agrawal, Oxford University Press.