

R10

Set No. 1

Code No: **RT32015**

III B. Tech II Semester Supplementary Examinations, November/December – 2016

TRANSPORTATION ENGINEERING – II

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**

PART-A

- 1.a) List the types of rail joints. [4M]
- b) What are the objectives of providing super elevation on railway tracks. [4M]
- c) List the systems of controlling the movement of train. [3M]
- d) List the various visual aids in airports. [3M]
- e) What are time of concentration and time of flow, with reference to airport drainage? [4M]
- f) How are ports classified into? [4M]

PART-B

- 2.a) Write the functions of sleepers? [8M]
- b) Find the number of sleepers required for constructing a B.G. railway track 640m long, using a sleeper density of $M+5$, where M is the length of the rail in metres. [8M]
3. a) What is the need for providing transition curves on railways? Explain how the length of transition curve is decided. [8M]
- b) Explain the necessity of widening of gauge on curves. [8M]
4. a) Write short notes on Warner signal, Shunting signal, Disc signal and routing signal. [8M]
- b) Explain the working principle of centralized traffic control system and automatic train control system. [8M]
5. a) Write notes on corrections for elevation and temperature for a runway? [8M]
- b) Explain about the factors to be considered for selecting a site for an airport? [8M]
6. a) How is the maintenance and rehabilitation carried out for airfield pavements? [8M]
- b) Write the procedure to evaluate an airfield pavement and steps taken to strengthen it? [8M]
7. a) Differentiate between wharf, jetty and quay? [8M]
- b) List the navigational aids and explain their importance? [8M]

