

FACULTY OF ENGINEERING & TECHNOLOGY

T.E.(Civil) Examination - DEC – 2014

Transportation Engineering -I (Revised)

[Time: Three Hours]

[Max. Marks: 80]

“Please check whether you have got the right question paper.”

- N.B**
- 1) Q.No.1 from section –A and Q.No.6 from section-B is compulsory.
 - 2) Solve any two questions from remaining questions from each section.
 - 3) Figures to the right indicate full marks.

SECTION A

- Q.1 A) Explain the following terms (any five) 10
 a) Run-off b) Skew bridge c) Economic span
 d) Wing –wall e) Apron f) Deck bridge
 g) Free board h) Cause way
- Q.2 A) Describe the methods adopted for constructing well foundation in shallow water. 07
 B) Explain with neat sketches Abutment, piers and wing-walls for a Railway girder bridge. 08
- Q.3 A) What is coffer-dam? Where it is used? Describe with help of neat sketch the construction of any coffer-dam used in shallow water. 07
 B) Indicate the basic principle of design and construction features for a submersible bridge. 08
- Q.4 A) Discuss in brief the relationship between Aircraft and Airport. 07
 B) Explain in detail geometric design of Airfields. 08
- Q.5 Write a short notes on any three 15
 a) Friction piles and end bearing piles
 b) Abutment pier
 c) Alignment finalization for Bridges
 d) Strengthening of bridge
 e) Back water

SECTION B

- Q.6 A) Explain the following terms (any five) 10
 a) Signaling b) Platform c) Gradient d) Gauge e) Wear of Rails
 f) Creep g) Interlocking h) Packing of Ballast
- Q.7 A) Write short note on Equilibrium super elevation. 07
 B) Write a short note on signaling during track maintenance. 08
- Q.8 A) Explain briefly the different types of station yards with the aid of neat sketches. 07
 B) What are the functions of points and crossing in railway track? 08
- Q.9 A) What are the functions of railway sleepers? Explain any one type with neat sketches. 07
 B) What do you understand by term ‘station yard’? What are the different types of yards? Describe any one in detail. 08
- Q.10 A) Write short note on any three 15
 a) Spikes b) Renewal of Ballast c) Loading Gauge
 d) Characteristics of good ballast e) Sleepers