

Total No. of Printed Pages:02

SUBJECT CODE NO:- H-383
FACULTY OF SCIENCE AND TECHNOLOGY
T.E. (Civil)
Transportation Engineering-I
(OLD)

[Time: Three Hours]

[Max. Marks: 80]

- N.B
- Please check whether you have got the right question paper.
- i) **Q. No.1** and **Q.No.6** are compulsory.
 - ii) Attempt any **Two** questions from remaining in each section.
 - iii) Figures to the right indicate full marks.
 - iv) Assume suitable data if necessity.

Section A

- | | | |
|-----|--|----------|
| Q.1 | Define the following term(Any five) | 10 |
| | <ol style="list-style-type: none"> a) Buckling of rail b) Skew bridge c) Runway d) Deck slab e) Scour Depth f) Cause ways g) Suspension bridge h) Culvert | |
| Q.2 | <ol style="list-style-type: none"> a) Define economic span for a bridge? Derive the relation for the economic span for a bridge. b) What is the requirement of an ideal bridge? | 08
07 |
| Q.3 | <ol style="list-style-type: none"> a) Describe the method adopted for constructing well foundation in shallow water. b) What is coffer dam? Where it is used? Explain with neat sketch the construction of any coffer dam used in shallow water. | 08
07 |
| Q.4 | <ol style="list-style-type: none"> a) What are the characteristics of an ideal airport layout? b) Discuss in detail the Geometric design of Airfields | 08
07 |
| Q.5 | Write short note on (any three) <ol style="list-style-type: none"> a) IRC Loading on bridge. b) Back water c) Strengthening of bridge d) Wind rose diagram e) Location of pier and abutments | 15 |

Section B

- Q.6 Define the following Term(Any five) 10
- Platform
 - Interlocking
 - Buckling of rail
 - Yard
 - Water column
 - Turn Table
 - Gradient
 - State fixture and fastening
- Q.7 a) Write a short note on signalling during track maintenance 08
b) What are functions of points and crossing in railway track? 07
- Q.8 a) What are the requirements of rails? Explain the advantages and disadvantages of flat footed rails. 08
b) Explain in detail Equilibrium super elevation. 07
- Q.9 a) What are the functions of railway sleepers? Explain in detail any one type of sleeper. 08
b) What is station yard? What are the different types of yards? Describe any one in detail. 07
- Q.10 Write a short note on (Any Three) 15
- Tilting of rail? Why it is being adopted.
 - Modern trends in railway.
 - Renewal of ballast.
 - Hocks and harbours.
 - Coning of wheel.