

Total No of Questions : 5

Total No. of Printed Pages : 3

EIS-198

UITians

B.E. (Vth Sem.) (CGPA) Civil Engg. Exam.-2015

TRANSPORTATION ENGINEERING - II

Paper - CE-505

Time Allowed : Three Hours

Maximum Marks : 60

Note : Attempt all the five questions. Solve only two parts from each question out of four parts a, b, c & d at one place in continuation only.

- Q.I (a) Describe characteristics of an ideal bridge site for a bridge.
- (b) How depth of foundation for a bridge in river is decided.
- (c) Derive mathematically the expression for economical span of bridge.
- (d) What is impact factor? How it is accounted for in a bridge design.

(2)

- Q.II (a) What is pile? How as they classified?
Give advantages and disadvantages of each type.
- (b) Differentiate between dams and cofferdams?
- (c) How precast girders are erected at site?
- (d) Describe pile load test in short.
- Q.III (a) What are various shapes and size of tunnel?
Give neat sketches.
- (b) Give detail of essential surveys for alignment of a turnel.
- (c) What are shafts? Give its advantages.
- (d) Discuss various methods of tunneling in hard rock?
- Q.IV (a) Explain importance of selection of Highway Alignment.
- (b) What is Reconnaissance survey? How it is carried out for a highway?
- (c) Derive expression for superelevation on highway.
- (d) Write use of vertical curves in highway.

(3)

- Q.V (a) Differentiate between rigid pavement and flexible pavements.
- (b) Discuss use of dowel bars and tie bars in highway construction.
- (c) What is WBM road? Discuss its method of laying.
- (d) What is a joint in rigid pavement? How and why they are provided?