

B.Tech. IN CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

December, 2014

00565

BICEE-018 : PAVEMENT EVALUATION

Time : 3 hours

Maximum Marks : 70

Note : Answer any **seven** questions. All questions carry equal marks.

1. Differentiate between flexible and rigid pavements, with their relative advantages and disadvantages. 10
2. What is pavement distress ? What are its causes and how is it rectified ? 10
3. What are ruts and pot holes ? How are they measured and reduced ? Discuss in detail. 10
4. (a) What is "riding comfort" ? What is its significance in the evaluation of pavement surface condition ? 5
(b) What are the general causes of pavement failures ? 5
5. Discuss in detail, the effects of moisture and temperature on structural stability and pavement deterioration. 10

6. Discuss the advantages and disadvantages of Destructive Test methods for pavement evaluation with their uses. 10
7. Discuss the design of flexible overlays over flexible pavement by Benkelman Beam Deflection method. 10
8. (a) Discuss Benkelman Beam Rebound Deflection Test. 5
- (b) Discuss the skidding of pavement surfaces in detail. 5
9. Differentiate between the Destructive and Non-destructive tests used for pavement evaluation. 10
10. Write short notes on any *two* of the following : $2 \times 5 = 10$
- (a) Pavement Slipperiness
- (b) Unevenness
- (c) Plate Load Test
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