

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

June, 2017

00734

BICEE-018 : PAVEMENT EVALUATION

Time : 3 hours

Maximum Marks : 70

Note : *Attempt any **seven** questions. All questions carry equal marks. Assume suitable data wherever necessary. Use of scientific calculator is allowed.*

1. Explain the locked wheel mode method of measuring skid distance. 10
2. Briefly describe any **two** of the following : 2×5=10
 - (a) Ravelling
 - (b) Alligator cracking
 - (c) Mud pumping
3. Briefly give the design procedure for rigid overlay over flexible pavement. 10

4. What are the factors affecting the structural conditions of a pavement ? Mention suitable examples. 10
5. What is roughness ? Explain the principle used in CHLOE profilometer for measuring pavement profile roughness. 10
6. Explain the importance of a pavement management system. What are its objectives ? 10
7. Explain the procedure for taking measurements using the Benkelman beam. Mention the corrections done for Benkelman beam deflection values. 10
8. Describe in detail, the use of Geo-synthetics in pavement overlays. 10
9. Discuss in detail, the structural and functional requirements of rigid pavements ? 10
10. List out and explain the various factors affecting skid resistance. 10