

**B.Tech. CIVIL ENGINEERING (BTCLEVI)**

□□□□4

**Term-End Examination**

**June, 2014**

**BICEE-018 : PAVEMENT EVALUATION**

*Time : 3 hours*

*Maximum Marks : 70*

---

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

---

1. What are the various structural and functional requirements of flexible and rigid pavements ? 10
2. Discuss any four types of failures of pavement, their causes and the required remedial methods. 10
3. What do you understand by pavement slipperiness and unevenness ? What are the causes of these conditions ? How are they measured and corrected ? 10
4. What are the various methods of pavement surface condition evaluation and their applications ? Discuss in detail. 10
5. Discuss the role of moisture and pavement layers on structural stability and pavement deterioration. 10

6. Explain the applications of any two Non-Destructive tests used for pavement evaluation, with their merits and demerits. 10
7. Explain in detail the pavement overlays. 10
8. (a) Explain Evaluation of Pavement by Specimen Testing. 5
- (b) Compare Flexible overlays with Rigid overlays. 5
9. (a) Explain the effects of climatic variations on pavement design and performance. 5
- (b) How do we correct the overlay designs for pavement temperature and subgrade moisture variations? 5
10. Write short notes on any **two** of the following :  $2 \times 5 = 10$
- (a) Use of Geosynthetics in Pavement overlays
- (b) Plate load test
- (c) Pavement distress
-