CE-8042

B.E. VIII Semester Examination, June 2015

Pavement Design (Elective-II)

Time: Three Hours Maximum Marks: 70

Note: i) All questions carry equal marks.

ii) Attempt five questions, selecting one question from each unit.

iii) Assume suitable data if found missing.

UNIT-1

1. Explain various factors considered in design of pavements in detail.   14

OR

2. How EQUIVALENT SINGLE WHEEL LOAD is calculated graphically? Explain effect of load repetitions. 14

UNIT-II

3. Explain stresses in flexible pavement. Compare stress distribution according to BOUSSINESQUE's theory and BURMISTER theory. 14

OR

4. How flexible pavement is designed by CBR method? Explain in detail step by step.   14

UNIT-III

5. Explain (i) temperature stresses (ii) WARPING stresses (iii) frictional stresses 14

Or4

6.   Explain calculation of stresses in rigid pavement by WESTERGAARD'S theory;   14

UNIT-IV

7.   Explain PC A method of rigid pavement design, step by step.   14

Or

8.   Discuss AASHTO method of rigid pavement design, step by step.   14

UNIT-V

9. Explain BENKELMAN BEAM method for evaluation and strengthening of flexible pavement, with the help of neat sketch.   14

Or

10. Explain the design of rigid overlays. Discuss evaluation of rigid pavement by SERVICE ABILITY INDEX method.   14