

# Department of Civil Engineering

III B.Tech ISEM-B section, TE-II, 2015-16

## LESSON PLAN K.RAJASEKHARAM

| Period | Date       | Topic   | Unit No | Teaching Methodology | Cumulative Periods |
|--------|------------|---|---------|----------------------|--------------------|
| 5      | 04-01-2016 | Introduction of transportation engineering-II, Introduction of all units with modes | 1       | CR                   | 1                  |
| 7      | 04-01-2016 | Pavement design methods   | 1       | CR                   | 2                  |
| 5,6    | 05-01-2016 | CBR method, IRC method, AASTHO method   | 1       | CR                   | 4                  |
| 5      | 06-01-2016 | Rigid pavement design-IRC   | 1       | CR                   | 5                  |
| 5,6    | 11-01-2016 | Importance of joints  | 1       | CR                   | 7                  |
| 5      | 12-01-2016 | Types of joints, use and their functioning of joints                                | 1       | CR                   | 8                  |
| 7      | 12-01-2016 | Use of tie bars and dowel bars  | 1       | CR                   | 9                  |
| 7      | 13-01-2016 | Construction of earthen roads   | 2       | CR                   | 10                 |
| 6      | 15-01-2016 | Gravel roads  | 2       | CR                   | 11                 |
| 5      | 18-01-2016 | Water bound macadam (WBM)   | 2       | CR                   | 12                 |
| 7      | 19-01-2016 | Bituminous roads  | 2       | CR                   | 13                 |
| 6,7    | 20-01-2016 | Cement concrete roads   | 2       | CR                   | 15                 |
| 5      | 25-01-2016 | Construction of joints in RCC   | 2       | CR                   | 16                 |
| 7      | 26-01-2016 | Highway maintenance and its types   | 2       | CR                   | 17                 |
| 5,6    | 27-01-2016 | Failure of flexible pavements   | 2       | CR                   | 19                 |
| 5      | 01-2-2016  | Failure of rigid pavement   | 2       | CR                   | 20                 |
| 7      | 01-02-2016 | Strengthening of existing pavements   | 2       | CR                   | 21                 |
| 6      | 02-02-2016 | Highway drainage and its types  | 2       | CR                   | 22                 |
| 5      | 03-02-2016 | Surface drainage  | 2       | CR                   | 23                 |
| 7      | 08-02-2016 | Sub surface drainage  | 2       | CR                   | 24                 |
| 5,6    | 09-02-2016 | Highway user benefits and types<br>Different types of highway costs                 | 3       | CR                   | 26                 |
| 5      | 10-02-2016 | Economic analysis and problems  | 3       | CR                   | 27                 |

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| 7      | 15-02-2016 | Highway finance   | 3       | CR                   | 28                 |
| 6      | 16-02-2016 | Permanent way components  | 4       | PPT                  | 29                 |
| 5      | 17-02-2016 | Functions of rails, sleepers, ballast   | 4       | PPT                  | 30                 |
| 7      | 22-02-2016 | Types of rails, sleepers, ballast   | 4       | PPT                  | 31                 |
| 5,6    | 24-02-2016 | Rail fastenings   | 4       | PPT                  | 33                 |
| 5      | 29-02-2016 | Creep of rails and theories related to creep                                  | 4       | PPT                  | 34                 |
| 7      | 01-03-2016 | Adzing of sleepers  | 4       | PPT                  | 35                 |
| 5,6    | 02-03-2016 | Sleeper density<br>Rail joints, types and uses                                | 4       | PPT                  | 37                 |
| 5      | 07-03-2016 | Turnouts and types  | 4       | PPT                  | 38                 |
| 7      | 08-03-2016 | Turnout parts and components  | 4       | PPT                  | 39                 |
| 5,6    | 09-03-2016 | Types of track functions<br>Points and crossings                              | 4       | PPT                  | 41                 |
| 5      | 16-03-2016 | Track drainage, Railway stations and yards                                    | 4       | PPT                  | 42                 |
| 7      | 04-04-2016 | Railway signalling  | 4       | PPT                  | 43                 |
| 5,6    | 05-04-2016 | Factors affecting selection of site<br>airport, Computation of runway length  | 5       | PPT                  | 45                 |
| 5      | 06-04-2016 | Correction for runway length  | 5       | PPT                  | 46                 |
| 5,6    | 11-04-2016 | Orientation of runway by wind<br>rose diagram                                 | 5       | PPT                  | 48                 |
| 5,6    | 12-04-2016 | Runway lightening system<br>Taxiway, apron, Airport layout and its components | 5       | PPT                  | 50                 |
| 5,6    | 13-04-2016 | Control tower and terminal building   | 5       | PPT                  | 52                 |

NOTE: C.R- Class Room Teaching (Black board, PPT)

*K. Rajam*  
Signature