JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- March-April 2017

M. Tech. 4th Semester

COURSE CODE: 11M1WCE133   MAX. MARKS: 25

COURSE NAME: BRIDGE ENGINEERING

COURSE CREDITS: 03   MAX. TIME: 1.5 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Assume any missing data suitably.

1. Explain the IRC Slandered Live Loads.   [5]

2. Write the impact allowance as a fraction or percentage of the applied live loads for the various class of IRC loadings   [5]

3. Analyze a slab culvert having the following primary data as: Width:12 m (With no footpath); exposure condition: moderate; Steel: Fe 415; Concrete: M 25; Clear span: 5 m; Height of vent: 3 m; Depth of foundation:1.35 m; Wearing course: 56 mm asphaltic concrete and therefore find the maximum bending moments for the following classes of IRC loading

(a) Class AA tracked vehicle   [5]

(b) Class AA wheeled vehicle   [5]

(c) Class A two-lane loading   [5]