

SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (REGULAR), NOVEMBER-2015

B. ARCH, IV YEAR, VII SEMESTER

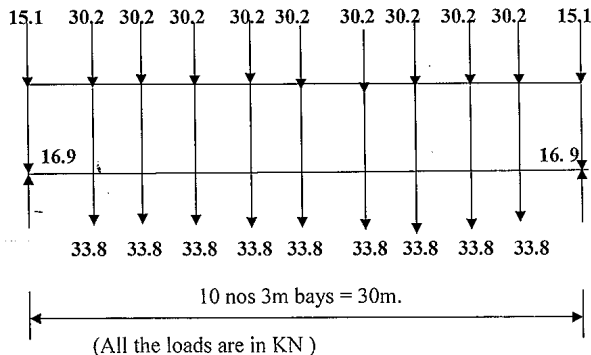
TS 7: THEORY OF STRUCTURES

Time – 3.00 Hours

Maximum Marks - 100

- a) Answer any Four questions out of 1 to 7 questions.
b) Question No. 8 is compulsory and answer any four out of six sub-questions.
c) Scientific calculator is allowed.

- Q1. a) Mention any four systems of structures which can take the gravity loads and draw their sketches. (2x10 =20M)
b) Mention any four lateral load resisting systems and draw their sketches.
- Q2. Draw the sketch of a two room building that is used in United States with wooden members for residential purpose. Also draw the sections at foundation and eve's level. Building should have a canopy. 20M
- Q3. What are the pre-tensioned pre-stressed concrete and post-tensioned pre-stressed concrete and write their advantages and disadvantages. Draw typical sketches depicting pre-stressing systems used in both post-tensioned and pre-tensioned pre-stressed concretes. 20M
- Q4. Draw the structural systems used in high rise structures and briefly explain them how they work. 20M
- Q5. Part of roof structure of an industrial building is subjected to point loading as shown in figure below. 20M



Analyse the structure using statically determinate analysis and draw the bending moment diagram.

P.T.O

