

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. - SEMESTER-I EXAMINATION – WINTER 2015

Subject Code: 1015004

Date: 19/12/2015

Subject Name: Structure - 1

Time: 10:30am to 12:30pm

Total Marks: 50

Instructions:

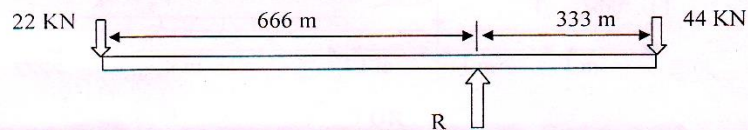
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (A) Prove law of parallelogram. 05

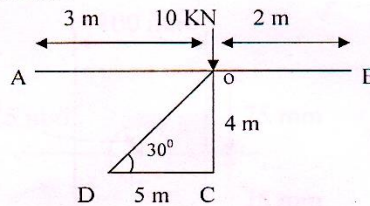
(B) Establish sine rule for forces. 05

(C) Importance of Structures in Architecture. 05

Q.2 (A) Find Reaction R from the following figure. 05

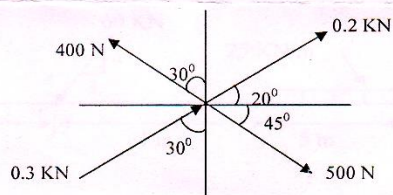


(B) Find the moment at A, B, C, D. 10



OR

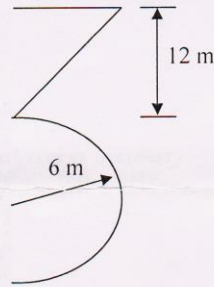
(B) Find the magnitude of resultant and its direction. 10



PTO

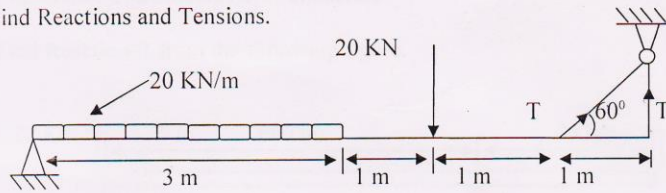
Q.3 (A) Find CG of the following Figure.

10



(B) Find Reactions and Tensions.

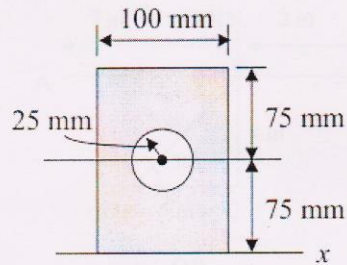
10



OR

Q.3 (A) Find MI of the following Figure.

10



(B) Find Reactions.

10

