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.



05

(B) Establish sine rule for forces.

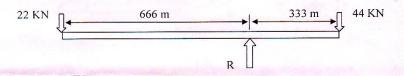
05

(C) Importance of Structures in Architecture.

05

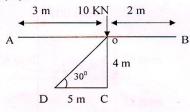
Q.2 (A) Find Reaction R from the following figure.

05





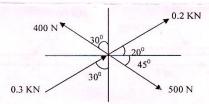
10

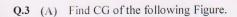


OR

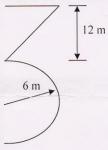
(B) Find the magnitude of resultant and its direction.

10



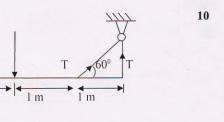


Order 3



(B) Find Reactions and Tensions.

3 m



OR

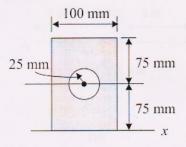
→ | | 1 m

20 KN

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

10

10



(B) Find Reactions.

10