

GUJARAT TECHNOLOGICAL UNIVERSITY
B. ARCH - SEMESTER- I • EXAMINATION – WINTER 2017

Subject Code:1015103

Date:30-12-2017

Subject Name:Basic Structure

Time:10.30 AM TO 12.30 PM

Total Marks: 50

INSTRUCTIONS :

1. ALL QUESTIONS TO BE ANSWERED IN ENGLISH.
2. THE ENTIRE QUESTION PAPER IN THE FOLLOWING QUESTIONS IS COMPULSORY.
3. MAKE SUITABLE SKETCHES WHEREVER NECESSARY.
4. FIGURES TO THE RIGHT INDICATE THE MARKS.

Q-1. EXPLAIN THE DIFFERENCE BETWEEN LOAD BEARING STRUCTURE AND FRAMED STRUCTURE WITH NECESSARY SKETCHES-----(10)

Q-2. WHAT IS A LOAD. EXPLAIN THE DIFFERENT TYPES OF LOADS ACTING ON A BUILDING.-----(05)

Q-3. ENLIST THE DIFFERENT TYPES OF MATERIALS USED IN BUILDING CONSTRUCTION.EXPLAIN ANY 3 IN DETAIL WITH THEIR USES AND PROPERTIES-----(05)

Q-4. EXPLAIN IN DETAIL THE NATURAL LOADS AND MANMADE LOADS WITH CATEGORIES OF THE SAME WHICH ACT ON A BUILDING.-----(10)

Q-5. DRAW A VERTICAL SECTION WALL SECTION OF A BUILDING INDICATION THE CORE ELEMENTS OF THE STRUCTURE.-----(10)

Q-6. DEFINE THE FOLLOWING TERMS: (ANY FIVE)-----(10)

1. BEAM
2. COLUMN
3. PLINTH
4. SILL
5. LINTEL
6. SLAB
7. FOOTING
8. LIVE LOAD
9. DEAD LOAD

