Roll. No………………………… 1224017

B.Tech / Integrated (MBA/M.Tech) 4th Semester Examination
June 2014

Building Materials & Building Construction
Subject Code: CEL-212

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: Question No. 1 is Compulsory and attempt two questions from each section. All questions carry equal marks.

1(a) Define Stone masonry. Write the name of different types of masonry unit.
(b) Define the following terms used in pitched roof construction
   (i) Pitch of roof
   (ii) Hipped End
   (iii) Ridge
   (iv) Gable
   (v) Rafters
(c) Write the constituents of lime stone and explain?
(d) Define wall cladding. [5 x 4 = 20]

SECTION-A

2(a) (i) What is English Bond? Discuss with neat sketch. [5]
   (ii) What is Flemish Bond? Discuss with neat sketch. [5]
(b) Discuss the difference between English Bond and Flemish Bond with neat Sketch. [10]

3(a)(i) Define super structure and sub structure? [5]
(b) Write a short not on Civil Engineering Structures. [10]

4(a) What do you understand from basement of any structure? What is the use of ground floor, basement floor and upper floor? [10]
(b) Explain the Queen Post truss with the help of neat sketch and also write the importance of it in building construction?[10]

SECTION-B

5(a) Describe with neat sketches:- [10]
   (i) Framed and Braced doors
   (ii) Framed and Panelled doors.
(b) Describe with neat sketches:- [10]
   (i) Revolving Shutters    (ii) Collapsible Steel doors

6(a)(i) What is meant by damp proof construction and what are the materials used for damp proof construction? [5]
   (ii) Discuss the problems of drainage of foundations of residential and public buildings. How will you ensure water proofing and damp proofing of such buildings constructed in localities where water table rises quite high during the monsoon season? [5]
(b) Explain about the acoustics treatment and explain about the material used for the absorbance of acoustics emission.[10]

7(a) Give a detail explanation of manufacturing of cement. [10]
(b)(i) Write the classification of various types of woods used in building construction? [5]
   (ii) Write the defects in timber? [5]