MANIPAL UNIVERSITY

THIRD SEMESTER B. A. (ID) DEGREE EXAMINATION – NOVEMBER 2015

SUBJECT: BID 203 – BUILDING CONSTRUCTION AND MATERIALS III
(2013 AND 2014 SCHEME)

Monday, November 16, 2015

Time: 14:00 – 18:00 Hrs.   Max. Marks: 50

- ✍ **Q1 is compulsory.**
- ✍ **Attempt any TWO out of Q 2, 3 and 4.**
- ✍ **Support your answer with neat sketches.**

1.   For a classroom of room of size 4m × 5m design the false ceiling. Draft the:-

1A. Plan with furniture layout

1B. Reflected Ceiling Plan with lighting fixtures

1C. Section(s)-

1D. At least three crucial joinery details

(4+6+4+6 = 20 marks)

2A. Design a dogleg staircase for a floor to floor height of 3m showing all the necessary details with sketches.

2B. Write the step by step process of laying flooring tiles.

(10+5 = 15 marks)

3A. **Write short notes on any FIVE of the following:**
   i)   Aluminium
   ii)   Steel Sections
   iii) PVC
   iv)   Chrome Steel
   v)   Bakelite
   vi)   Tiles

(2 marks × 5 = 10 marks)

3B. What are different types of corrugated sheets available in the market? Discuss their properties and application.

(5 marks)

4A. What are polymers? Mention different types of polymers, their properties and uses.

4B. Draw the footing details of a column of cross section 450mm×300mm.

(10+5 = 15 marks)