

**MANIPAL UNIVERSITY****FIRST SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2017****SUBJECT: ARC -14-107 – BUILDING MATERIALS  
(2014 SCHEME)**

Monday, November 13, 2017

Time: 14:00 – 17:00 Hrs.

Max. Marks: 50

- ✍ Answer any FIVE questions from the following.  
✍ Answer all parts of a question. Give sketches wherever necessary.

**1. Write short notes on the following:**

- 1A. Qualities of a good stone  
1B. Qualities of a good brick

(5+5 = 10 marks)

- 2A. Discuss the dry process of cement manufacturing and support with sketches.  
2B. Discuss the composition of concrete. List down any two properties of concrete.

(6+4 = 10 marks)

- 3A. What are the constituents of mortar? Briefly explain its function in mortar.  
3B. Briefly explain the sources of sand.

(7+3 = 10 marks)

- 4A. What are the advantages and disadvantages of natural and artificial seasoning?  
4B. Explain any two defects due to seasoning of timber.

(5+5 = 10 marks)

**5. Discuss the following:**

- 5A. Differentiate between Ferrous and Non-ferrous metals  
5B. Two heat treatment process of steel

(4+6 = 10 marks)

**6. Write short notes on any TWO from the following:**

- 6A. Characteristics of an ideal paint  
6B. Polyvinyl chloride  
6C. Properties of rubber

(5+5 = 10 marks)

