

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**FIRST SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2018**  
**SUBJECT: ARC -14-107 – BUILDING MATERIALS**  
**(2014 SCHEME)**

Wednesday, November 07, 2018

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.

1A. What do you understand by Quarrying of Stone? What are the criteria for selection of a quarry site?

1B. What is seasoning of timber? Describe its objectives.

(5+5 = 10 marks)

2A. Explain the uses of Steel in a Building.

2B. Explain three types of Clay roof tiles with sketches.

(4+6 = 10 marks)

3A. Specify and discuss briefly any five methods of preservation of timber.

3B. What are Alloys? Explain any two alloys with example.

(5+5 = 10 marks)

4A. What are the constituents of glass? Explain the use of glass in building Industry.

4B. How can clay composition affect brick quality?

(6+4 = 10 marks)

5A. What is the importance of grading the concrete?

5B. Mention the uses of any TWO of the following:

- i) PVC      ii) FRP      iii) Rubber

(5+5 = 10 marks)

6A. What is a Varnish? Explain any two types of varnish in detail.

6B. Attempt any TWO of the following:

- i) Requirements for the usable sand as building material.  
 ii) What are the three types of sand?  
 iii) Brief out the different applications of sand.

(5+5 = 10 marks)

