

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END EXAMINATION

B.Tech. (Agril. Engg.)

|            |                        |       |                      |               |           |
|------------|------------------------|-------|----------------------|---------------|-----------|
| Semester   | : IV (New)             | Term  | : II                 | Academic Year | : 2014-15 |
| Course No. | : FS 242               | Title | : Building Materials |               |           |
| Credits    | : 2 (1+1)              |       |                      |               |           |
| Day & Date | : Saturday, 16.05.2015 | Time  | : 14.00 to 16.00     | Total Marks   | : 40      |

- Note :
1. Solve ANY EIGHT questions from SECTION "A".
  2. All questions from SECTION "B" are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 a) How are rocks physically and chemically classified?  
b) What are the various uses of stones?
- Q.2 a) What are the characteristics of a good tile?  
b) What are the harmful ingredients in brick earth?
- Q.3 a) What are the important properties of cement?  
b) Draw the flow diagram for mixing of raw materials by dry process and wet process for the manufacture of ordinary cement.
- Q.4 a) What is meant by bulking of sand? Explain it.  
b) State the functions of sand in mortar.
- Q.5 a) Define cement concrete and mention its properties.  
b) What is meant by proportioning of concrete?
- Q.6 a) Explain what is meant by felling of trees.  
b) State and explain the market forms of timber.
- Q.7 a) What are the different properties of plastics?
- Q.8 Mention different properties of rubber and uses of rubber.
- Q.9 What are the precautions which are to be taken for the storage of cement?
- Q.10 Describe the methods of quarrying with hand tools and channeling machines.

SECTION "B"

- Q.11 Fill in the blanks.
- 1) A \_\_\_\_\_ indicates a substance having definite chemical composition and molecular structure.
  - 2) The \_\_\_\_\_ may be defined as thin slabs of brick which are burnt in kiln.
  - 3) The ordinary cement contains two basic ingredients namely, argillaceous and \_\_\_\_\_.
  - 4) The mortars having bulk density less than \_\_\_\_\_ are known as the light weight mortars.
- Q.12 Define the following terms.
- 1) Workability
  - 2) Conductive cells
  - 3) Pugging
  - 4) Magma

