

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END EXAMINATION  
B.Tech. (Agril. Engg.)

Semester : IV (Old) Term : II Academic Year : 2017-18  
Course No. : FS 242  
Credits : 2 (1+1) Title : Building Materials  
Day & Date : Saturday, 05.05.2018 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) What are the properties of a good building stone?  
b) What is the purpose of blasting and what are the explosive materials required in the process of blasting?
- Q.2 a) What are the characteristics of good bricks?  
b) What is frog? State its importance in clay bricks?
- Q.3 a) What are the purposes of laboratory testing of cement?  
b) What are the precautions to be taken for the storage of cement?
- Q.4 a) What is mortar? Briefly describe the various types of mortar.  
b) Describe the process of making cement mortar.
- Q.5 a) Define and explain workability of concrete.  
b) What is curing? What is its significance?
- Q.6 a) How are tiles manufactured?  
b) What are the characteristics of a good tile?
- Q.7 a) Enumerate the various defects in timber.  
b) What is meant by seasoning of timber? What are its objects?
- Q.8 a) What are the applications of plastics?  
b) How are the plastics classified?
- Q.9 a) Describe the properties and use of rubber.  
b) What are the different forms of rubber?
- Q.10 a) What is polymerization? What are its three methods?  
b) What are the constituents of plastics?

SECTION "B"

- Q.11 Fill in the blanks.
- 1) The natural stones are obtained from \_\_\_\_\_ quarry.
  - 2) The brick should not absorb water more than \_\_\_\_\_ per cent by weight for first class bricks.
  - 3) The ratio of the amount of water to the amount of cement by weight is termed as \_\_\_\_.
  - 4) The innermost center portion or core of the tree is called \_\_\_\_\_.
- Q.12 State True or False.
- 1) The first class bricks are table- moulded and standard shape.
  - 2) The houses with timber construction are found to be hot in summer.
  - 3) The plastics are used to carry chemicals.
  - 4) The ordinary cement is more costly than white cement.