



**PRESIDENCY UNIVERSITY, BENGALURU**  
**SCHOOL OF MANAGEMENT**

Max Marks: 100

Max Time: 180 Mins

Weightage: 50 %

**Set A**

**COMPREHENSIVE EXAMINATION**

I Semester 2016-17

Course: **CE A 205 Construction Materials**

09 December 2016

**Instructions:**

- i. Write legibly.
- ii. Closed book exam comprises Part A, B and C and open book exam involves only Part D.
- iii. Separate answer booklet must be used for open book examination.
- iv. Only prescribed text book is permitted for open book examination.

**Part A**

Answer the following questions

(5 Q x 4 M= 20 Marks)

1. Define malleability and refractoriness.
2. Explain Flemish bond and rubble masonry with neat sketches.
3. Enumerate the comparison between wet and dry process of the cement.
4. What do you understand by slaking of lime?
5. Write a short note on the following:  
a) Checks                      b) Rindgall                      c) Upsets                      d) Foxiness

**Part B**

Answer the following questions

(3 Q x 10 M= 30 Marks)

6. Define various defects in concrete. What precautions should be exercised to prevent them?
7. Illustrate briefly the manufacture of lime with a neat sketch.
8. Describe any five tests on stones and also state the significance for each of them.

**Part C**

Answer the following questions

(2 Q x 15 M= 30 Marks)

9. Describe various stages involved in the production of good quality concrete.



10. Define puzzolana and its classification. Write a brief note on specifications, properties, effects and applications of natural puzzolanas.

**Part D (Open book)**

Answer the following questions

(2 Q x 10 M= 20 Marks)

11. Enumerate the importance of management of construction materials.
12. List down the factors which affect the selection of a construction materials and procurement.





**PRESIDENCY UNIVERSITY, BENGALURU**  
**SCHOOL OF ENGINEERING**

Max Marks: 50

Max Time: 50 Mins

Weightage: 25 %

**Set A**

**MID TERM EXAMINATION**

I Semester 2016-17

Course: CE A 205 Construction Materials

18 October 2016

**Part A**

Write short notes on the following questions

(5 Q x 3 M = 15 Marks)

- 1) Define Permeability.
- 2) Define Specific Gravity.
- 3) Characteristics of good timber (Any four).
- 4) Define Knots in timber.
- 5) What is frog and explain its purpose?

**Part B**

Answer the following questions

(4 Q x 5 M = 20 Marks)

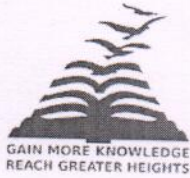
- 1) Draw stress strain diagram for:
  - i) Steel
  - ii) Aluminium
  - iii) Cast iron
  - iv) Copper
- 2) a) Find the minimum diameter of a steel wire, which is used to raise a load of 8000 N, if the rod is not to exceed  $190 \text{ MN/m}^2$ ? (3 M)  
b) If Strain of the wire is 0.0012, then find young's modulus of elasticity. (2 M)
- 3) Explain any five Defects in clay bricks.
- 4) Explain different methods of seasoning.

**Part C**

Answer the following questions

(1 Q x 15 M = 15 Marks)

- 1) Describe different steps involved in quarrying of stones.



**PRESIDENCY UNIVERSITY, BENGALURU**  
**SCHOOL OF ENGINEERING**

Max Marks: 30

Max Time: 50 Mins

Weightage: 15%

**Set B**

**TEST - 2**

I Semester 2016-2017

Course: **CE A 209 Construction Materials**

16 November 2016

**Instructions:**

1. Write legibly.
2. Give Examples wherever required.

**Part A**

Answer the following questions

(5 Q x 2 M= 10 Marks)

- 1) Explain queen and king closure in a brick.
- 2) Write the good qualities of an ideal aggregate.
- 3) What is calcination of the cement?
- 4) Explain the classification of aggregates on the basis of size.
- 5) Write the requirements of a good bond in brick work.

**Part B**

Answer the following questions

(2 Q x 5 M= 10 Marks)

- 1) Explain different types of bonds in brick masonry.
- 2) Write a note on the following types of cement.
  - a) Portland Pozzolona Cement
  - b) High Alumina Cement
  - c) Portland slag cement
  - d) Super sulphated Portland cement
  - e) Rapid hardening cement

**Part C**

Answer the following questions

(1 Q x 10 M= 10 Marks)

- 1) Describe the manufacturing of cement in the wet process with a flow diagram.