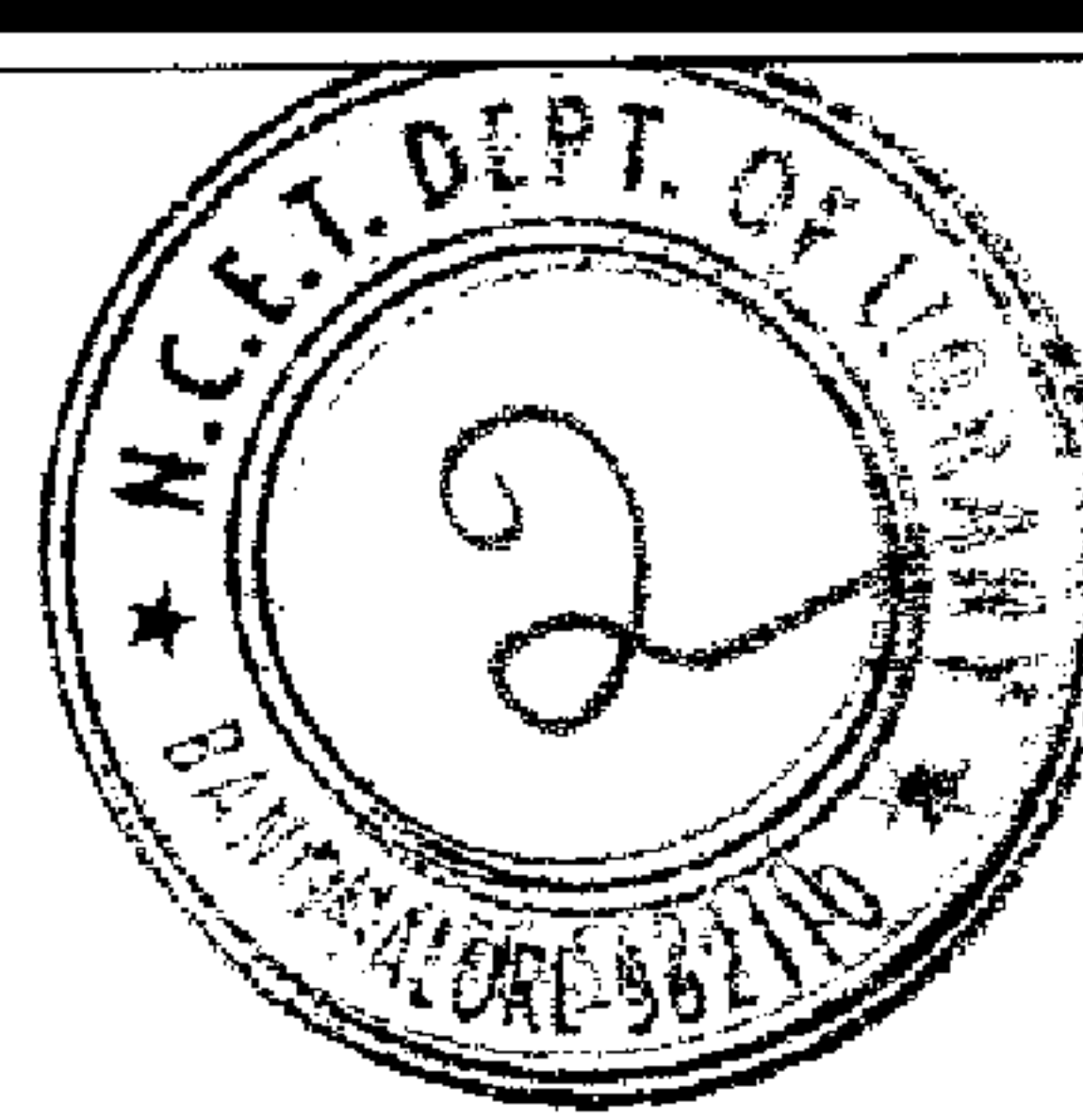


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06CV32

Third Semester B.E. Degree Examination, June / July 08
Materials of Construction

Time: 3 hrs.

Max. Marks:100

Note : *Answer any FIVE full questions choosing at least TWO form each part.*

PART – A

- 1 a. Discuss briefly the geological classification of rocks. (06 Marks)
b. Describe the process of blasting. (04 Marks)
c. What do you mean by dressing of stones? Explain with neat sketches the different finishes obtained by dressing of stones. (10 Marks)
- 2 a. Mention the qualities of good bricks. (05 Marks)
b. With the help of a neat sketch, explain the working of Hoffman's Kiln for the burning of bricks. (10 Marks)
c. Compare clamp – burning with Kiln – burning. (05 Marks)
- 3 a. Draw a neat cross – section of an exogenous tree and show various components of it. (05 Marks)
b. Mention the qualities of good timber. (07 Marks)
c. What are the defects in timber? Discuss any two defects of timber. (08 Marks)
- 4 a. What are the types of lime? (04 Marks)
b. Explain the functions of cement ingredients. (06 Marks)
c. List the varieties of cement and explain any two types of cement. (10 Marks)

PART – B

- 5 a. List out the tests conducted on cement and explain with neat sketches any three laboratory tests of cement. (10 Marks)
b. What do you mean by grading? What is fineness modulus? Discuss the influence of fineness modulus on the properties of concrete mixes. (10 Marks)
- 6 a. What are the factors affecting workability and discuss in brief. (08 Marks)
b. What is meant by segregation of a concrete mix? How to prevent it? (04 Marks)
c. What precautions are necessary in transporting and placing of concrete? (08 Marks)
- 7 a. Discuss the influence of water / cement ration and age on permeability of concrete. (07 Marks)
b. What is the difference between gel pore and capillary pore? Discuss the effect of curing on capillary pore system and how these affect durability? (07 Marks)
c. What is Creep? Explain the factors affecting creep. (06 Marks)
- 8 Write short notes on any four of the following :
a. Bitumen and asphalt.
b. Types of glass
c. Properties and uses of rubber
d. Electrical insulators
e. Properties and uses of plastics
f. Ingredients of an oil borne paint. (20 Marks)
