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INTERNATIONAL CENTRE FOR APPLIED SCIENCES
(Manipal University)
II SEMESTER B.S. DEGREE EXAMINATION – NOV. 2017
SUBJECT: BUILDING CONSTRUCTION -1 (CE I22)
(BRANCH: CIVIL /ARCHITECTURE)
Tuesday, 21 November 2017

Time: 3 Hours

Max. Marks: 100

- ✓ **Answer ANY FIVE Questions.**
- ✓ **Assume missing data, if any, suitably and indicate them clearly.**
- ✓ **Draw sketches wherever necessary**

- 1A. List and explain various uses of stones in civil Engineering
- 1B. Explain in brief, the following, giving examples to each type.
- a) Polymineralic and mono-mineralic rocks
 - b) Calcareous and argillaceous rocks
- 1C. List various ways in which rocks are classified and explain any two classification in detail.
(6+6+8)
- 2A. Explain various classification of bricks based on field practice and also indicate their uses.
- 2B. Explain the various field and laboratory tests conducted to ascertain the quality of bricks.
- 2C. Explain the various properties of good tiles.
(8+8+4)
- 3A. What are the important objectives of seasoning? Explain any five methods of artificial seasoning
- 3B. List and explain, the various qualities of good timber.
- 3C. Explain classification of lime according to I.S.
(10+5+5)
- 4A. Explain in detail with the neat sketches, the Standard consistency test, initial setting time test and Final setting time test conducted on cement.
- 4B. Explain in detail, the compressive strength test conducted on cement.
- 4C. Explain Air entraining cement. Also explain its advantages and disadvantages.
(10+5+5)
- 5A. What is meant by “compounding of plastic”? Explain in detail.
- 5B. Discuss various preventive measures for corrosion
- 5C. Explain any five important varieties of paints.
(5+7+8)
- 6A. Write explanatory note on tar.
- 6B. Explain briefly the ingredients of 5 types of varnishes. Describe briefly role of these ingredients in each of them.
- 6C. Explain the procedure adapted for granolithic finish, also explain Terrozzo flooring.
(5+10+5)
- 7A. What is meant by Batching? Explain weight batching and volume batching in detail.
- 7B. What is meant by bulking of aggregates? Explain its significance and also how it is determined?
- 7C. Explain the “Rebound hammer test” conducted on hardened concrete.
(10+6+4)
- 8A. Write short note on (i) High strength concrete (ii) Super plasticizers
- 8B. What is meant by water cement ratio? Explain its significance and also its impact on the strength of concrete.
- 8C. What is meant by curing of specimens as applicable to hardened concrete? What are the various methods employed and also explain each method in detail.
(10+5+5)



