Roll No. .....

23428

M. Tech. 2nd Sem. Civil Engg. (Specialisation in Structural Design) Examination – May, 2016

CONSTRUCTION FAILURES

Paper : MTSD-210

Time : Three Hours] *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions. All questions carry equal marks.

1. How design deficiency leads to major construction failure ? Explain it with the help of some historical references. 20

2. Explain in detail how inadequate supervision and inspection leads to construction failure. 20

3. What are the codal provisions for design of durable concrete ? Explain in detail with code name. 20

4. Write down the factors affecting the durability of concrete. Explain how the sulphate attack can be minimized ? 20

5. What are the measures adopted to control the cracks in concrete structure ? Discuss in detail. 20

6. Explain with neat and clean sketch why cracks appear in masonry structure and concrete structure. 20

7. What are the legal responsibilities during construction and also discuss what the role of professional responsibility after construction ? 20

8. Write down the precautions which help to reduce the frequency and severity of construction failure during and after the construction. 20