

B.Tech. Sem -VII (CIVIL) 2007 Course : Summer - 2018

SUBJECT : FOUNDATION ENGINEERING

Day : Monday
Date : 21-5-2018

Time : 2.30 P.M. To 5.30 P.M.
Max. Marks : 80

S-2018-2756

N.B.:

- 1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining attempt **ANY TWO** questions from each section.
- 2) Answers to both the section should be written in **SEPARATE** answer books.
- 3) Use of non-programmable **CALCULATOR** is allowed.
- 4) Figures to the right indicate **FULL** marks.
- 5) Assume suitable data if necessary.

SECTION – I

- Q.1** a) What is soil exploration? [05]
b) What are different types of bearing capacity failures? [05]
c) What is consolidation ? [04]
- Q.2** a) Explain standard penetration test. [07]
b) What is soil sample? How it is collected? [06]
- Q.3** a) Derive the formula for Terzaghis bearing capacity analysis. [08]
b) Explain bearing capacity of eccentric footing. [05]
- Q.4** a) What is logarithm of time fitting method? [07]
b) What is consolidation? Explain spring analogy concept. [06]

SECTION – II

- Q.5** a) Give the classification of pile foundation. [05]
b) Draw a neat sketch of under-ream pile and label it. [05]
c) What are the applications of geosynthetics? [04]
- Q.6** a) Explain pile load test. [08]
b) What is negative skin friction? [05]
- Q.7** a) Give the applications of sheet pile. [07]
b) What is cantilever sheet pile? [06]
- Q.8** a) Explain functions of geotextiles. [07]
b) Give the applications of geotextiles in road works. [06]

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