

Government College of Engineering, Aurangabad

(An Autonomous Institute of Government of Maharashtra)

B.E (CIVIL) OLD Examination

End Semester Examination Dec.2016

CE404: FOUNDATION ENGINEERING 12 NOV 2016

Time: Three Hours

“Verify the course code and check whether you have got the correct question paper”

N.B:-

- 1. All questions are compulsory*
- 2. Figures to the right indicate full marks*
- 3. Assume suitable data if necessary and state it clearly*
- 4. Use of non-programmable calculator is allowed*

Q1. Attempt any Two

- i) State the methods of site investigation and sub-soil exploration. Explain with the help of neat and labeled diagram the seismic method.
- ii) Explain the effect of eccentric loading on bearing capacity of soil.
- iii) Explain standard penetration in detail. (12)

Q2. Attempt any Two

- i) Discuss consolidation settlement of soil.
- ii) What is floating foundation? What are the advantages and limitations.
- iii) What is combined footing? Write down the design steps for the design of rectangular combined footing. (12)

Q3. Attempt any Two

- i) With the help of neat sketches, explain different types of raft foundation.
- ii) Explain in detail pile load test.
- iii) Explain different types of piles on the basis of function and material. (12)

Q4. Attempt any Two

- i) Explain with neat sketch various types of cofferdam.
- ii) What are the difficulties in sinking of caisson.
- iii) Explain working and construction feature of pneumatic caisson. (12)

Q5. Write short note on: (Any Two)

- i) Characteristics of B.C. soil
- ii) Caisson disease
- iii) Negative skin friction (12)