

SUBJECT CODE NO:- P-113
FACULTY OF ENGINEERING AND TECHNOLOGY
B.E.(Civil) Examination May/June 2017
Foundation Engineering
(Revised)

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B i) Solve any three question from the each section.
 ii) Assume suitable data whenever necessary and state it clearly
 iii) Draw neat Sketches whenever required
- Section A
- Q.1 a) Explain “Wash boring” method of sub soil exploration in detail 07
 b) Explain with neat sketches: 07
 i) General shear failure
 ii) Local shear failure
 iii) Punching shear failure
- Q.2 a) Discuss the Terzaghi’s expression of bearing capacity of soil for square and circular footings 07
 b) Discuss the effect of water table on bearing capacity of soil 06
- Q.3 a) What is floating foundation? Discuss 06
 b) Write a note on differential settlement of soil 07
- Q.4 a) Discuss the procedure for proportioning of footing of equal settlement 06
 b) Derive the equation for immediate settlement for semi- infinite layer 07
- Q.5 Write short notes on: 13
 i) Auger Boring
 ii) Seismic method of sub soil exploration
 iii) combined footing
- Section B
- Q.6 a) Discuss the designs procedure of pile foundation 07
 b) How –pile capacity is decided? Discuss the arrangement of pile also 07
- Q.7 a) Discuss tilting and seating of well 07
 b) differentiate between open caisson and pneumatic caisson 06
- Q.8 a) Explain why drainage of foundation is necessary, describe various methods of soil damage 07
 b) what difficulties are encountered in sinking of caisson 06
- Q.9 a) Explain pile load test in detail 07
 b) Explain different types of cofferdams with neat sketches 06
- Q.10 Write short notes on: 13
 i) Effect of pile drawing on ground
 ii) Sand island method
 iii) Design of circular cofferdam

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