



REGISTRATION NUMBER

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SRINIX COLLEGE OF ENGINEERING

2ND INTERNAL EXAMINATION-2017-18

Subject-**AFE**

Semester-8TH

Branch-**CIVIL**

Full Mark-**30**

Time-**1.30Hrs**

ANSWER ALL QUESTIONS (PART-A)

[2X5]

1. What do you mean by 'logarithmic decrement'?
2. Enumerate force acting on a bulk head.
3. What is a coffer dam?
4. What do you mean by 'critical depth of vertical cut' for a clay soil
5. What do you mean by 'floating foundation'?

ANSWER ANY TWO QUESTIONS (PART-B)

[10X2]

1. (a) Explain Barkan's method for the determination of natural frequency of foundation soil system.
(b) Using Barken's expression for natural frequency and the amplitude of vibrations, calculate the change in the percentage amplitude in terms of r if the soil mass participating in the vibrations is 23% of m . Also calculate this change for $r=0.3$ and $r=2$.
2. Compute the embedment length D of the sheet pile wall shown in figure.
3. (a) Discuss the causes and types of damages and cracks in buildings on expansive soils.
(b) Discuss various environmental and structural solutions to problems in design of foundation in expansive soils.

