Q.27 Write a short note of galvanization. (CO1)

Q.28 Write the specifications of curing of pre-stressed concrete structures, as per IS code. (CO1)

Q.29 What are the advantages of Freyssinet post-tensioing system. (CO1)

Q.30 Write a short note on jacking method of pile driving. (CO2)

Q.31 What type of problem can be arises from free fall procedure of pile installation. (CO2)

Q.32 Describe deep foundations with the help of a diagram. (CO2)

Q.33 What precaution should be taken into consideration during the pile installation by free fall methods? (CO2)

Q.34 Explain bored cast in situ pile. (CO2)

Q.35 What are factors which affect the use of pile foundations? (CO2)

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x10=20)

Q.36 Explain the working of the Freyssinet post-tensioning system with its advantages. (CO1)

Q.37 Explain the process of protection of anchorages from corrosion with the help of diagram. (CO1)

Q.38 Explain the process of testing of piles by dynamic pile load test. (CO2)

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Roll No. .....

5th Sem., Branch : Civil Constr. Mgmt.
Subject : Pre-Stresed Concrete

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

Q.1 Loss of pre-stress is maximum due to (CO1)

a) Friction b) Elastic shortening

c) Shrinkage of concrete d) Creep of concrete

Q.2 To drive heavy pile in hard soil, the best type of hammer is (CO2)

a) Single acting b) Drop hammer

c) Double acting d) None of these

Q.3 The settlement of a pile as compared to a spread footing. (CO2)

a) More b) Unrelated

c) Less d) None of these

Q.4 Total amount of losses in pre-tensioning methods are approximately. (CO1)

a) 10%-18% b) 20%-25%

c) 18%-20% d) 25%-30%

Q.5 Number of piles required to support a column is (CO2)

a) 1 b) 2

c) 3 d) 4

Q.6 Post tensioning method is best suitable for production of (CO1)

a) Electric poles b) Slabs

c) Bridges d) Railways sleepers

Q.7 Pile foundation are cont. off_____. (CO2)

a) In wet soils

b) In sandy soils

c) For multistoreyed building

d) None of these

Q.8 A grillage fundation is essentially a (CO2)

a) Deep foundation b) Shallow foundation

c) Pile foundation d) Spread foundation

Q.9 In Pre-tensioning concute minimum trade to be used are _____? (CO1)

a) M20 b) M30

c) M40 d) M50

Q.10 A strand is made up of (CO1)

a) 5 wires b) 6 wires

c) 7 wires d) 8 wires

Section-B

Note: Very short answers type questions. Attempt any 10 parts. (10x2=20)

Q.11 In Freyssinet system conical ping is knows or _____? (CO1)

Q.12 Pre-cast piles length varies from _____. (CO2)

Q.13 Pre-stressing force _____ with the time. (Increase / Decease) (CO1)

Q.14 Pre-stressing concrete members _____ useful than R.C.C. members (Less / More) (CO1)

Q.15 A Raft foundation is knows as _____? (CO2)

Q.16 Pre-tensioning is best suited for factory production. (True/ False) (CO1)

Q.17 Minimum garde of concrete to be used for post-tensioning shall not be than _____ (M20 / M40) (CO1)

Q.18 The Piles having one or more bulbs are knows as _____. (CO2)

Q.19 Pre-stressing helps in minimizing_____. (CO1)

Q.20 A vertical column of relatively large diameter than a pile is termed as a _____. (CO2)

Section-C

Note: Short answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

Q.21 Write a short note on pre-tensionng of concrete. (CO1)

Q.22 Enlisan difference between the pre-tensioning method and post tensioning method of concrete. (CO1)

Q.23 Write a short note Grouting. (CO1)

Q.24 Write a short note on admixtures used in pre-stressed concrete. (CO1)

Q25 Describe the techniques of pre-stressed. (CO1)

Q.26 Write a short note on light weight aggregates used in pre-stressed concrete. (CO1)