Q.25 Why pre-stress forces applied to the member decreases with time?

Q.26 What are the various equipments used for pres-setting ?

Q.27 What are types of piles based on function or its use.

Q.28 What are the methods to determine the load carrying capacity of a pile. Explain any one method in brief.

Q.29 What are the methods of pre-stressing ? Explain any one in brief.

Q.30 Explain Freyssinet system of pre-stressing.

Q.31 Explain loss due to slippage of tendons and anchorage system

Q.32 What are pile. Give its importance and advantages

Q.33 Write five I.S specification for material used in pre-stressed concrete.

Q.34 What are the factors influencing the shrinkage of concrete.

Q.35 Explain pile driving by hammer .

SECTION-D

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

Q.36 Explain principle of pre-stressing. Also give advantages and disadvantages of pre-stressed concrete.

Q.37 Explain linear post tensioning system. Give its advantages and disadvantages

Q.38 What are piles? Explain different methods of pilling Also write problems in pile construction.

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Roll No. .....

Civil, Constr. Management

Subject:- Pre-stressed Concrete

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Minimum grade of concrete to be used for pre-tensioning shall not be less than

a) M20 c) M40

b) M30 d) M50

Q.2 What is pre-stress concrete?

a) Strengthening a material by the application of stress during packaging

b) Strengthening a material by the application of stress during manufacture

c) Smoothening a material by the application of stress during manufacture

d) None of the above

Q.3 The pre-stressed concrete member develops deformation under the influence of _____

a) Self weight

b) Stress strain diagram

c) Flexural moments

d) Pre-stress and transverse loads

Q.4 In pre tensioning system, type of pre-stressing tendon used is_____

a) Bars c) Strands
b) Wires d) Cables

Q.5 The loss in prestress is necessary to make an estimate of_____
a) Design c) Appearance
b) Loading d) Shear

Q.6 Which of the following piles is used to compact loose granular soil?
a) Friction piles c) Compaction piles
b) End bearing piles d) Tension piles

Q.7 Piles are commonly driven in to ground by means of special device called _____
a) Pile driver and Hammer
b) Driller
c) None of the mentioned
d) All of the mentioned

Q.8 The types of hammer used for driving piles are_____
a) Drop hammer c) Vibratory hammer
b) Diesel hammer d) All of the mentioned

Q.9 Total amount of losses in pre-tensioning method are approximately
a) 10-18% c) 20-25%
b) 18-20% d) 25-30%

Q.10 Piles are suitable for
a) small loads
b) load bearing walls
c) transferring load to firm strata
d) transferring loads in clays

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Pre stressing helps in avoiding the formation of _____In tensile zone

Q.12 The major loss of pre-stress is caused due to_____

Q.13 Single wires used as steel reinforcement are called as_____

Q.14 Minimum grade of concrete required for pre-tensioning is_____

Q.15 More diameter of tendon _____is the ultimate strength.

Q.16 _____foundation provided on water logged soil.

Q.17 End bearing piles and friction piles are used for same purpose(True/False)

Q.18 The piles having one or more bulbs are called_____

Q.19 Mild steel is used as reinforcement in pre-stressing (True/False)

Q.20 Define Pre-stressing.

SECTION-C

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

Q.21 List the types of piles based on material used. Explain any two

Q.22 Why pre-stressed concrete is considered to be better than R.C.C?

Q.23 What are the disadvantages of pre-stressed concrete?

Q.24 How is the selection of pile carried out