Q.26 What are the assumptions made in degisn of pre-stressed concrete. (CO-1)

Q.27 Write any five compression between pre-tensioning & post tensioning. (CO-1)

Q.28 Enlist different types of losses that occur in pre-stressed concrete. (CO-1)

Q.29 Describe special techniques of pre-tensioning. (CO-1)

Q.30 Define different methods of pre-stressing. (CO-1)

Q.31 Enlist various application of prestressed to various building elements. (CO-1)

Q.32 Explain types of pre-stressing. (CO-1)

Q.33 Enlist various methods of pile driving. (CO-1)

Q.34 Enlist the various problems occurs in pile construction. (CO-1)

Q.35 Discuss pre-tensioning method with their suitability. (CO-1)

Section-D

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

Q.36 Explain merits and demerits of prestressed concrete over reinforced concrete. (CO-1)

Q.37 Explain the classification of piles according to method of installation. (CO-2)

Q.38 Explain magnel blaton system of pre-stressing with their advantages. (CO-1)

No. of Printed Pages : 4
Roll No.....

6th Sem / Civil Engineering
Subject : Pre-Stressed Concrete

Time : 3 Hrs. **M.M. : 100**

SECTION-A

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

Q.1 Pre-stressing can eliminate. (CO-1)

a) Compressive stress c) Bearing stress
b) Tensile stress d) Shear stress

Q.2 Total amount of losses in pre-tensioning method are approximately. (CO-1)

a) 25-30% c) 18-20%
b) 20-25% d) 10-18%

Q.3 A strands is made of (CO-1)

a) 6 wires c) 10 wires
b) 8 wires d) 5 wires

Q.4 Post-tensioning method is best suitable for production of (CO-1)

a) Railway sleeper c) Bridges
b) Electric pole d) all of these

Q.5 Pre-tensioning is used for (CO-1)

a) Poles c) Dams
b) Bridges d) All of these

Q.6 Losses of pre-stress is maximum due to (CO-1)

a) Creep of concrete c) Friction

b) Shrinkage of concrete d) Relaxation of steel

Q.7 Which of the following piles is used to compact loose granular soil? (CO-2)

a) Friction piles c) Compaction piles

b) End bearing piles d) Tension piles

Q.8 Which of the following piles is a cast in situ type of concrete piles? (CO-2)

a) Under reamed piled c) Raymond standard pile

b) Pressure pile d) Anchor pile

Q.9 Pile foundations are suitable for (CO-2)

a) Small loads

b) Load bearing wall

c) Transferring load to firm strata

d) Transferring load in clay

Q.10 Minimum grade of concrete for pre-tensioned work is. (CO-1)

a) M40 c) M20

b) M30 d0 M50

Section B

Note: Objective types Questions. All Questions are compulsory. (10x1=10)

Q.11 _____ method is suitable for factory production. (CO-1)

Q.12 _____ size members are commonly pre-tensioned. (CO-1)

Q.13 The minimum grade of concrete for pre-tensioning is _____? (CO-1)

Q.14 Minimum grade of concrete required for post-tensioning is _____ (CO-1)

Q.15 The initial applications of stresses in a structural member are called. (CO-1)

Q.16 Single wire used as steel reinforcement are called as _____. (CO-1)

Q.17 Pre-stressed concrete member are deflects_____ than R.C.C, member. (CO-1)

Q.18 The pile having one or more bulbs are called ____ (CO-2)

Q.19 Cast-in-situ piles may be classified in to _____? (CO-2)

Q.20 Pile foundation is an example of _____ foundation. (CO-2)

Section-C

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

Q.21 Define pile. Enlist any three necessities. (CO-1)

Q.22 Enlist various methods of pile driving. (CO-1)

Q.23 Explain the terms of analysis of prestress. (CO-1)

Q.24 Enlist any five advantages of pre-stressed concrete over R.C.C. (CO-1)

Q.25 Describe material requirement for prestressing concrete. (CO-1)