

MANOHARGAD-IV (2009 COURSE) : WINTER - 2015
SUBJECT : ADVANCED BUILDING TECHNOLOGY

Day : Monday
Date : 30.11.2015

Time : 2.00 P.M. TO 5.00 P.M.
Max. Marks : 100.

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Assume suitable data if necessary.

SECTION-I

- Q.1** Explain with sketches (Any Two) (10)
- a) Barrel vault.
 - b) Prestressed reinforced concrete.
 - c) Viewing distances in stadium.
- Q.2** Write short notes (Any Four) (20)
- a) Any two systems in steel for high rise building
 - b) Gantry and crane Girder
 - c) Explain flat and plate slab
 - d) Preferred viewing locations in stadium
 - e) 2-types of gutters in swimming pool.
- Q.3** Design a long span roof for an Indoor Stadium of size 40 m x 80 m (20)
- a) Give detail plan and section.
 - b) Give any four enlarged detail.

SECTION-II

- Q.4** Answer the following (Any One) (10)
- a) Rain water disposal detail in North light Roof.
 - b) Wind load consideration in High Rise Building.
- Q.5** Write short notes (Any Four) (20)
- a) Expansion joint in long span structures
 - b) Machine foundation
 - c) Olympic Standards for Swimming Pool
 - d) Bundled tube system
 - e) Seating arrangements in Stadium.
- Q.6** Design an Industrial Shed of size 18 m x 30 m. (20)
- a) Draw plan and section.
 - b) Give any four enlarged details.

MANOHARGAD-IV (2009 COURSE) : SUMMER - 2016
SUBJECT : ADVANCED BUILDING TECHNOLOGY

Day : Tuesday
Date : 03-05-2016

Time : 10:00 AM TO 1:00 PM.
Max. Marks : 100.

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Assume suitable data if necessary.

SECTION-I

- Q.1** Explain with sketches (Any Two) (10)
- a) Wind upliftment in stadium roof design.
 - b) Roofing systems in Industrial building.
 - c) Double curvature shell.
- Q.2** Write short notes (Any Four) (20)
- a) Framed Tube system
 - b) Monitor roof system
 - c) Various fixtures and fitting in swimming pool
 - d) Sightlines in stadium
 - e) Steel girders and Trusses
- Q.3** Design an industrial building of size 12 m x 24 m. (20)
- a) Draw plan and section
 - b) Draw any four enlarged details.

SECTION-II

- Q.4** Answer the following (Any One) (10)
- a) Explain Tension Roof Structures for long spans.
 - b) Service layout and filtration system in the swimming pool.
- Q.5** Write short notes (Any Four) (20)
- a) Parabolic Hyperboloids
 - b) Wall cladding systems in Industrial building
 - c) Preferred viewing locations in Stadium
 - d) Shear walls in High Rise Systems
 - e) Waterproofing in swimming pool.
- Q.6** Draw a long span structure for an exhibition pavilion of size 15 m x 40 m. (20)
- a) Draw plan and section.
 - b) Give any four enlarged details.