

MANOHARGAD - III (2010 COURSE) : WINTER - 2015
SUBJECT : HISTORY AND BUILDING SCIENCES - III

Day : Friday
Date : 20-11-2015

Time : 10.00 A.M. TO 1.00 P.M.
Max. Marks : 100

N. B. ;

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.
- 4) Neat diagrams must be drawn **WHEREVER** necessary.

SECTION - I

- Q. 1** Explain the following terms **ANY FOUR** of the following: (12)
- a) Stambha
 - b) Garba-griha
 - c) Vimana
 - d) Chatravali
 - e) Dandaka
- Q. 2** Answer **ANY TWO** of the following: (20)
- a) Discuss in detail the Meenakshi temple complex at Madurai w.r.t. its concentric planning.
 - b) Describe the planning and features of Khajuraho group of temples.
 - c) Discss the evolution of early temple form of Architecture.
- Q. 3** Write short notes on **ANY THREE** of the following: (18)
- a) Rathas of Mahalabalipuram
 - b) Column orders of Vijaynagar period
 - c) Jain temple decoration
 - d) Ajanta rock cut architecture
- Q. 4** Draw neat and labeled sketches on **ANY ONE** of the following: (10)
- a) Durga Devi temple, Aihole (Plan and Section)
 - b) Kailashnath temple, Ellora (Plan)

SECTION - II

- Q. 5** Answer **ANY TWO** of the following: (20)
- a) What is a joint? Explain any three joints used in a pipeline.
 - b) Explain any three pipe materials used for supplying water.
 - c) What is the purpose of a valve in water supply system and explain any 2 types of valves.
- Q. 6** Write short notes on **ANY FOUR** of the following: (20)
- a) Air lift pumps
 - b) Service connection
 - c) Dead end system
 - d) Solar water heating
 - e) Overhead water storage tanks

MANOHARGAD – III (2010COURSE): SUMMER – 2016
SUBJECT: HISTORY AND BUILDING SCIENCES – III

Day: Friday
Date: 06-05-2016

Time: 2:00 P.M. TO 5:00 P.M.
Max. Marks: 100

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SEPARATE** answer books.
- 4) Neat diagrams must be drawn **WHEREVER** necessary.

SECTION – I

Q.1 Explain the following terms **ANY FOUR**: (12)

- a) Stambha
- b) Chatravali
- c) Bhogmandapa
- d) Harmika
- e) Gopuram

Q.2 Answer **ANY TWO** of the following: (20)

- a) Describe the development of the temple architecture under the patronage of the Cholas. Support your answers with adequate examples.
- b) Discuss in detail the Meenakshi temple complex at Madurai with respect to its concentric planning
- c) Describe the planning features of Khajuraho group of temples.

Q.3 Write short notes on **ANY THREE** of the following: (18)

- a) Typical architectural characteristics of Pallava style of Architecture
- b) The vedic villages
- c) Column orders of Vijaynagar period
- d) Rathas of Mahabalipuram

Q.4 Draw neat and labeled sketches **ANY ONE**: (10)

- a) Plan and section of Durga temple, Aihole
- b) Plan and section of the Karle Chaitya

SECTION – II

Q.5 Answer **ANY TWO** of the following: (20)

- a) Describe various methods for distribution of water.
- b) What are the systems of supply of water?
- c) What are the causes of wastage of water? What preventive measures can be adopted to bring down the wastage of water?

Q.6 Write short notes on **ANY FOUR** of the following: (20)

- a) Grid –iron method of layout of distribution pipes.
- b) Fire hydrant
- c) Relief Valve
- d) Cement Concrete pipes
- e) Bell and spigot joint

MANOHARGAD - IV (2010 COURSE) : SUMMER - 2015
SUBJECT : HISTORY AND BUILDING SCIENCES - IV

Day : Friday
Date : 08-05-2015

Time : 10:00 A.M. To 1:00 P.M.
Max. Marks : 100

N. B. ;

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.
- 4) Neat diagrams must be drawn **WHEREVER** necessary.

SECTION - I

- Q. 1** Explain the following terms **ANY FOUR** of the following: (12)
- a) Pietra Dura
 - b) Indo Sarcenic Dome
 - c) Mihrab
 - d) Tomb Pavilions
 - e) Bungalows
- Q. 2** Answer **ANY TWO** of the following: (20)
- a) Describe the salient feature of Jami Mosque at Gulbarga.
 - b) Enlist the salient features of Humayun's tomb with respect architecture and planning.
 - c) Describe in detail the inception of the hill station typology during the colonial period.
- Q. 3** Write short notes on **ANY THREE** of the following: (18)
- a) Water tank in Mosques
 - b) Methods of Dome supports in Indo Islamic Architecture
 - c) Types of Minarets in Indo Islamic Architecture
 - d) Jodhabai's Palace, Fathehpur Sikri
- Q. 4** Draw neat and labeled sketches on **ANY ONE** of the following: (10)
- a) Jaipur city plan.
 - b) Palace of Datia.

SECTION - II

- Q. 5** Answer **ANY TWO** of the following: (20)
- a) What is the importance of sewage disposal? Explain the methods of disposal of sewage.
 - b) What are systems of sewerage? Explain the various systems of sewerage.
 - c) Explain in brief the necessity and construction features of septic tank.
- Q. 6** Write short notes on **ANY FOUR** of the following: (20)
- a) Biomass
 - b) Grease and silt trap
 - c) Tests for testing drains
 - d) Aqua privy
 - e) Rural sanitation
 - f) Single stack system

MANOHARGAD – IV(2010COURSE): SUMMER – 2016
SUBJECT: HISTORY AND BUILDING SCIENCES – IV

Day: Saturday
Date: 07-05-2016

Time: 10:00AM TO 1:00 P.M.
Max. Marks: 100

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SEPARATE** answer books.
- 4) Neat diagrams must be drawn **WHEREVER** necessary.

SECTION – I

Q.1 Explain the following terms **ANY FOUR** (12)

- a) Maqsura
- b) Minarets
- c) Squinches
- d) Rauza
- e) Charbaug
- f) Calligraphy

Q.2 Answer **ANY TWO** of the following: (20)

- a) Describe in detail the siting and planning of Fatehpur Sikri.
- b) Describe evolution of Mosques and enlist the salient features of typical mosque.
- c) Explain the development of Minarets in Indo-Islamic period.

Q.3 Write short notes on **ANY THREE** of the following: (18)

- a) Pavillion Tombs
- b) Stepwells
- c) Surface decoration techniques in Indo-Islamic Architecture
- d) Cantonments

Q.4 Draw neat and labeled sketches of **ANY ONE**: (10)

- a) Khirkee mosque, Delhi
- b) Plan and section of Gol Gumbaz, Bijapur

SECTION – II

Q.5 Answer **ANY TWO** of the following: (20)

- a) Explain the different types of traps.
- b) Explain how refuse is carried by water carriage system. What are its advantages?
- c) Discuss any two sanitary fittings required in building drainage.

Q.6 Write short notes on **ANY FOUR** of the following: (20)

- a) Separate system of sewerage
- b) Vent pipe
- c) Manhole
- d) Two –pipe system of plumbing
- e) Grid –iron method of layout of distribution pipes