2013-14
B.A.R.C.H. (WINTER SEMESTER) EXAMINATION
ARCHITECTURE
ISLAMIC ARCHITECTURE
AR-301

Maximum Marks: 60
Credits: 03
Duration: Three Hours

Answer all the questions.
Assume suitable data if missing.
Neat sketches shall have suitable weightage.

Q.No. | Question | M.M.
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1(a) | Explain the process of understanding religious architecture of any type especially its values and socio-political history with technological developments. | [06]
1(b) | Explain basic socio-religious values of Islam which affects Islamic architecture. | [06]

2 | Explain any ONE of the following Islamic architecture style in detail. Moorish architecture, Turkish architecture, Iranian and central Asian architecture. Architecture of china and far-east. | [12]

3 | Explain Mughal architecture in detail with suitable examples of sketches of important buildings and their salient features. | [12]

4 | Explain Islamic art and decoration as used in various buildings and any ONE of the following Islamic architecture style in detail. Bengal architecture, Gujarat architecture, Golconda and Bijapur architecture, Deccan Architecture, Punjab architecture. | [12]

5(a) | Explain technologies used in Islamic architectural buildings related to climatic control, acoustical control and earthquake resistance. | [06]
5(b) | Explain salient features of Sikh and Rajput architecture with suitable examples. | [06]
2013-14
B.Arch. (Autumn Semester) Examination
B.Arch-III Year
LandScape DeSign
AR-303 N

Maximum Marks: 40  Credits: 04  Duration: Three Hours

Answer any four questions.
Draw sketches to support your answer.
Question no 5 is compulsory

Q.No.  Question  M.M.

1  Explain the basic principles of Landscape Design?  [10]

OR

1'  Explain the need and importance of Landscape in present day situations?  [10]

2  Explain the term Hard and Soft Landscaping and define the materials used in hard and soft landscape?  [10]

OR

2'(b)  What are the Major and Minor Landscaping elements, explain the different approaches which are used for developing any landscaping scheme?  [10]

3  What are the basic purposes for which the plants are used in landscaping, explain with plan and elevation the characteristics of Ashok and Bottle Palm?  [10]

4  What are the basic elements used in Mughal Gardens, explain the difference between a Mughal Garden and a Persian Garden?  [10]

5  Draw the Landscape Plan and section of a D Shape front lawn of a Palatial House with diameter 25 M. The scale of drawing is 1:50.  [10]
Answer any four questions.
Draw sketches to support your answer.
Question no 5 is compulsory

Q.No.  Question  M.M.
1  Explain the role of Landscape Architect in a project?  [10]

OR

1'  What are the elements used in landscape design, explain their effect on visual and spatial organization of spaces?  [10]

2  What are the various forms of vegetation used in landscaping, explain the purpose of using plant materials in landscaping?  [10]

3  Draw the Plan and elevation of any two of the following:
   a) Ashok Tree
   b) Coconut Tree
   c) Banyan Tree
   d) Bottle Palm Tree  [10]

4  Explain with neat sketches the various elements used in French Gardens?  [10]

5  Draw the Landscape Plan and section of a circular intersection on the junction of roads with radius 12 M. The scale of drawing is 1:50.  [10]
Q.No. | Question | M.M.
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1(a) | Describe the different sources of water supply. Differentiate between the quality of surface and subsurface sources of water supply | [08]
1(b) | Draw the water supply connection diagram for residential buildings and briefly explain the functioning of each unit. | [04]

OR

1'(a) | Differentiate between the different water distribution systems. Comment on their merits and demerits | [04]
1'(b) | Describe in detail the methods adopted for the estimation of total water demand of a town | [06]
1'(c) | On what principle does a domestic water meter depend? | [02]

2(a) | Draw the flow sheet for water treatment for surface and subsurface sources of water supply. Describe the significance of aeration process. | [04]
2(b) | Describe the lime soda process of water softening and write the different chemical equations involved. Briefly describe the significance of addition of excess lime in lime soda process. | [04]
2(c) | The 5 day $20^0$C BOD of a wastewater sample was 250 mg/L. Determine 7 days BOD if the temperature was kept around $27^0$C. Take $K_{20} = 0.23$ d$^{-1}$. | [04]
3(a) | Design a sedimentation tank (circular as well as rectangular) for the treatment of | [04]
12000 m$^3$/d of water. Assume surface overflow rate as 30 m$^3$/m$^2$.d.

3 (b) Differentiate between coagulation and flocculation processes of water treatment. Write down the equation of coagulation using alum as a coagulant.

3 (c) A 400 mm sewer is laid at a slope of 0.006. Find out the depth of flow when the sewer is flowing at 30% of its capacity. Also find the velocity of flow.

OR

3'(a) Discuss in detail the different building drainage systems. Also state the suitability of each system.

3' (b) What are the various methods of sewage disposal? Briefly describe any two.

4 (a) What is the purpose of a manhole? Describe in detail the construction of manhole. Draw a neat sketch of the same.

4 (b) With the help of diagram describe the functioning of bell type of a flushing cistern.

4 (c) Briefly describe the functioning of activated sludge process and trickling filter

5 (a) Give the specifications of W.C.s and Wash basins used in India

5 (b) Design a septic tank for 40 users assuming wastewater contribution per person as 70 lpcd and assume period of cleaning as two years.

5 (c) What are traps? Briefly describe the different types of traps

FIGURE ENCLOSED
Figure 4-22
Nomograph for Manning formula in English and SI metric units for circular pipes flowing full based on $n = 0.013$. 

Contd....4
Figure 4-23
Relative quantity, velocity, and cross-sectional area of flow in a circular pipe for any depth of flow.
1) Explain the following. (Any 4) (08)
   a) Complimentary colour scheme
   b) Accessories
   c) Psychology of colours
   d) Importance of Signage designs
   e) Application of Transition in interior Design

2) Discuss different types of finishes for load bearing walls and panelling? (08)

Or

2') What are the different types of lights available in the market? Also discuss
    the criteria for selection of lighting for various activities and locations. (04)

3) What are the general guidelines that should be taken care of before selection
    of a particular material for interior designing? (04)

4) What guidelines should be followed for designing the interiors of an Office
    building? (04)

5) Design interiors for a Coffee shop of size 2.5m X 3.0m, in Delhi. You are
    required to give the following details and specification:
    a) Layout plan
    b) R C Plan
    c) Critical/important sections
    d) Views (16)
TOURIST RESORT

Design and present a Tourist Resort for a private tourism major CLUB MAHINDRA on a site measuring 450 mts x 450 mts on a 30 mts wide road in the east of NH 29 leading to Sarnath from Varanasi.

Design the building/site with following features/facilities.

- Park and Parking for 30 cars and 20 two-wheelers, 4 Buses in the 40 mts. front setback.
- Entrance lounge to seat 40 people.
- Stay-in units 40 Nos. (double bedded with Attached Toilet) Dormitories 4 Nos. of capacity 12 each with attached toilet & terrace.
- 20 cottages/family suits in the lush green landscape.
- Entertainment Lounge with TV-capacity 40 people.
- Indoor games like Table Tennis (2 Boards), Carom Boards (2 Nos.), Billiards/Snooker boards (1 No.), Swimming pool with diving boards (1 No.).
- Reading space in Library for 10 people.
- Managers and caretaker chambers together with their support staff of 4 each.
- Indoor dining for 70 people.
- Kitchen, store, etc. for 70 indoor dining.
- General Toilet for males and female.

*Present your scheme to suggest site layout, park/parking & outdoor (functioning) [08] spaces.

* Floor Plans, two elevations and two sections. [08+08+08]

*Concept(Viva) [08]
Use of standards is permitted, however their supply in the examination hall is not guaranteed.
Present the scheme through the to-scale drawn and drafted sketches.
Neat presentation of graphics and write-ups carry additional weight-age within maximum marks.
Concept of design shall be evaluated through viva-voice.
Assume suitable data if missing.

MOTEL

Design and present a MOTEL for the Uttar Pradesh State Tourism Development Corporation (UPSTDC) at Mathura on a site measuring 250 mts x 450 mts (deep) on a 60 mts wide NH 2 in the west of the site adjacent to McDonald Restaurant opposite I.O.C. Refinery at Mathura.

Design the building/site with following features/facilities.

- Park and Parking for 20 cars and 20 two-wheelers, 2 Buses in the 20 mts. front setback.
- Entrance lounge to seat 20 people.
- Entertainment Lounge with TV- capacity 40 people.
- Indoor games like Table Tennis (2 Boards), Carom Boards (2 Nos.), Billiards/Snooker boards (1 No.), Swimming pool with diving boards (1 No.).
- Reading space in Library for 10 people.
- Managers and caretaker chambers together with their support staff of 4 each.
- Indoor dining for 50 people.
- Kitchen, store, etc. for 50 indoor dining.
- Stay-in units 20 Nos. (double bedded with Attached Toilet) Dormitories 2Nos. of capacity 12 each with attached toilet & terrace.
- General Toilet for males and female.

*Present your scheme to suggest site layout, park/parking & outdoor (functioning) spaces.
[08]

* Floor Plans, two elevations and two sections.
[08+08+08]

*Concept(Viva)
[08]