2014-15
B. ARCH (WINTER SEMESTER) EXAMINATION
ARCHITECTURE
TOWN PLANNING
AR-502

Maximum Marks: 60
Credits: 04
Duration: Three Hours

Answer all the questions.
Support your answers with relevant sketches where necessary.
Well-drafted and neat sketches shall be given extra credit.

Q. No. Question
1(a) Explain short notes on the following: (any four) [4x5=20]
(i) Satellite town
(ii) Garden city
(iii) Geddesian Triad
(iv) Utopians
(v) Radburn Layout

2 Explain the factors responsible for the development of vedic society. Write in detail about its social, economic and political conditions. [10]

OR

2' Write in detail the town planning characteristics of Indus valley civilization. Discuss the causes of its failure. [10]

3 What was the contribution of Utopians in the development of modern day town planning. Discuss the town planning idea of any one with detailed sketch. [10]

4 Write in detail about the town planning ideas of any contemporary town planner giving example of a city proposed or designed by him. [10]

5 Design a 60m ROW road with a bus stop and explain the design with the help of following details:
(a) Plan [05]
(b) Section [05]
2014-15
B. ARCH (WINTER SEMESTER) EXAMINATION
ARCHITECTURE
BUILDING SERVICES (ELECTRICAL & MECHANICAL)
AR-306

Maximum Marks: 60 Credits: 04 Duration: Three Hours

Answer all the questions. Assume suitable data if missing. Notations used have their usual meaning.

Q.No. Question M.M.
1. What are the different components of Elevators, explain the functioning of Elevators with neat sketches? [12]
   OR
1'. Explain the following terms:
   A) Sound Shadow
   B) Echo
   C) Reverberation Time
   D) Dead Spots [3X4]

2. What are the four main components of any air conditioning system, explain them with neat diagram? [12]
   OR
2'. What are the different classifications of Air Conditioning, explain with figure the working of Central Air Conditioning system?

3. What the different type of electrical switches, explain their uses? [12]

4. Explain any three of the following terms:
   A. Comfort Air Conditioning for Indian Conditions
   B. Stack Effect
   C. Illumination Level
   D. Compact fluorescent lamp [4X3]

5. Draw the electrical layout of a bed room for two male child of age 12 and 15 with room size 4.5m X 6m with attached toilet cum dressing on the short wall (size 4m X 2.5m), also provide the legend and specifications for the same? [12]
Maximum Marks: 40

Credits: 05

Duration: Three Hours

Answer all the questions.
Assume suitable data if missing.

Q.1. Write short notes on the following with neat sketches (any two):
   a) Prefabrication
   b) Curtain glazing
   c) Wall panelling

   [2x6=12]

Q.2. Draw the ridge detail of a steel roof truss.  

   [08]

Q.3.a) What are the various types of joints used in building construction? Explain each one of them in detail.  

   [06]

Q.3.b) What are the various types of distempers available in the market. Explain their properties and uses.  

   [06]

OR

Q.3'.a) Draw the lintel detail of a cavity wall in section.  

   [06]

Q.3'.b) What are the causes of dampness in a cavity wall?  

   [06]

Q.4. Draw the sectional detail of a barrel enclosure for a rolling shutter.  

   [08]
2014-15
B.A.R.C.H. (WINTER SEMESTER) EXAMINATION
ARCHITECTURAL DESIGN IV
AR 352N
Credits: 07
Duration: Six Hours

Maximum Marks: 40

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/situation if missing.

Club House

Design and present a Club House for a social organisation on a site measuring 100 mts x 165 mts on a 45 mts wide Ramgati road in the Eastern side closed to Quarsi crossing in Aligarh.

Design the building/site with following features/facilities considering:
- Park and Parking for 25 cars and 50 two--wheelers, in the 20 mts. front setback.
- Entrance lounge for 10 people.
- Audio Visual Lounge for 25 people.
- Borrowing and lending library accommodating.
- Spaces and activity zones for indoor and outdoor sports and activities like:
  1. Table Tennis 2 Nos
  2. Billiards/ Snookers 2 Nos
  3. Chess 4 Nos
  4. Carom 4 Nos
  5. Badminton 1 indoor and 1 outdoor
  6. Tennis 1 outdoor
  7. Bowling Alley
  8. Banqueting for 200 indoors and 300 outdoors
  9. Kitchens with stores and wash areas
  10. Jogging Track

- Integrated these spaces with following
- Manager's and caretaker's chambers supported by staff of 6 each.
- General Toilet for males and female.

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

* Floor Plans, two elevations and two sections.

*Concept(Viva)
Note: (i) Neufert's data and time saver standards are allowed but provision of these is not the responsibility of the department.
(ii) Good drafting shall carry weightage.
(iii) Assume any suitable data wherever desirable.

Design problem

Aligarh in its region has developed as an important centre for education especially due to establishment of A.M.U. Aligarh. Many parents desire to send their children to Aligarh for education but find it difficult to provide accommodation and dining facilities even if they are able to get admission in some Aligarh school. An entrepreneur desires to establish a hostel for 180 students with mess, library and sports facilities for such type of students and appoints you as project advisor cum architect considering your experience in designing of academic buildings. It has provided a plot of rectangular shape measuring 75m x 125m located on east side of G.T. road running north-south.

For the above project provide the following

1. List of requirement with area chart. 08
2. Site plan with parking and landscaping. 06
3. Suitable plans to explain your design. 12
4. Section/sections 04
5. Elevations and/or views. 04
6. Viva shall also be conducted to provide you opportunity to explain your concept/design. 06