Note: - Answer all questions.
  - Neat drafting/sketching will be credited.
  - Assume suitable data and scale wherever necessary

1. Draw the plan and sectional details of wooden single floor having the span of 3.5x6.0 m

   [12]

   OK

1' Draw the plan and sectional details of RCC one way slab having the span of 3.0mX6.0m.

2. Draw the sectional details of the following on suitable scale :
   [4 x 4]
   a) Stair case reinforcement details
   b) Tiles flooring at ground floor
   c) Water proofing details at terrace level
   d) Column beam connections

3. Briefly discuss any Three of the following :
   [4 x 3]
   i) Water Cement Ratio
   ii) Bulking of sand
   iii) Sources of dampness
   iv) Requirements of form work
   v) Types of chemical admixtures
2014-15
B. ARCH. (IV SEMESTER) EXAMINATION
PRE MODERN/ WESTERN ARCHITECTURE
(AR – 210)

Maximum Marks: 60 Credits: 03 Duration: Three Hours

Answer all questions. Draw neat sketches to support your answers.

1. Explain in brief the Egyptian architecture with respect to historical conditions, climate, geography, construction system and materials, political, socio-cultural, religious beliefs and practices etc. [10]

2. What are orders in Greek architecture? Explain them with neat sketches. [10]

3. Explain in brief any FOUR of the followings:
   a) Agora
   b) Ziggurat
   c) Peristyle
   d) Groin Vault
   e) Flying Buttress
   f) Rose Window [16]

4. Discuss any ONE of the followings:
   a) Parthenon at Athens
   b) Hagia Sophia, Constantinople [8]

5. What are the different architectural characteristics that help in recognising the following styles. Explain any ONE
   a) Gothic
   b) Renaissance
   c) Baroque [8]

6. Explain in brief any ONE of the followings:
   a) Optical Correction introduced by the Greeks in their buildings.
   b) Different materials used by Romans and how did they help in constructing massive structures. [8]
2014-2015
B.Architecture Winter (IV Semester) Examination
B.Arch.
Building Bye Laws and Regulations
(AR-212)

Credits: 03

Max Marks: 60

Duration: Three Hours

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

1. Describe the Zonal Development Plan. What are the considerations to be taken for preparation of Zonal Development plan? [12]

OR

1' Discuss in brief the rights and obligations of apartment owners.

2. Differentiate any Three of the following: [4 x 3]
   a) Set back and Light plane
   b) Floor Area and Carpet Area.
   c) Land use plan and Layout plan.
   d) Skip floor and Mezzanine floor.

3. Discuss the provisions in the building bye laws with respect to following: [4 x 3]
   i) Width and length of means of access for residential buildings.
   ii) Interior open space.
   iii) Light and ventilation with respect to different climatic zones.

4. A Commercial Plot measuring 80m x 90m located on the Ram Ghat road subjected to the maximum ground coverage of 60% and FAR 3.00 with fullest land utilization and uniform floor areas. How many floors can be built on the plot?
Also calculate the total number of cars and area required for parking, if parking is provided
   a) At Basement.
   b) At Stilt floor

5. Write short notes on any Three of the following: [4 x 3]
   a) Floor Space Index (FSI).
   b) Exterior open spaces.
   c) Exemption to open spaces.
   d) Floating F.S.I. or transferable development rights (TDR).
STUDENTS HOBBY CLUB

A 'Student Hobby Club' is a place for various activities where students can develop their creative talent. The focus of these club is primarily to help the students explore their hidden talents in activities that range from personal & cultural hobbies to technical interest. The authorities of IIT, Roorkee want to construct a student's hobbies club on the site measuring 35 m X 45 m having approach road towards south, located within the campus of IIT, Roorkee. The proposed Hobby Club must create an environment which allows freedom and flexibility, where students can exercise their talent without formal guidance.

**Design Requirements:**

1. Director's Room (With attached toilet).
2. Reception + Entrance Lobby
3. Office
4. Hall for Painting
5. Hall for Sculpture making
6. Hall for Photography
7. Hall of Technology (Electronics and Computers)
8. Multipurpose Hall (for debates, Lectures, Presentations etc.)
9. Snacks counter
10. Toilet for male and female
11. Parking for 4 cars 10 two wheelers

**Drawings Requirements:**

- All Plans (1:100 scale)
- Elevations
- Sections

**Area**

- 25 sq. m. (including toilet)
- As required
- 30 sq. m.
- 60 sq. m.
- 60 sq. m.
- 60 sq. m.
- 50 sq. m.
- 100 sq m.
- 15 sq. m.
- As required
- As required

**Marks**

- 25
- 08
- 07