

B.Arch. Seventh Semester (Architecture) (Old)
Advanced Building Construction - I
7 SA 2

P. Pages : 1

Time : Three Hours



AV - 3249 Add

Max. Marks : 60

- Notes :
1. All question carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Diagrams and chemical equations should be given wherever necessary.
 5. Retain the construction lines.
 6. Illustrate your answer necessary with the help of neat sketches.

1. a) What type of foundation would you proposed for multi-stored office building in Black cotton soil. 15
b) What is mean by ultimate bearing capacity of soil? What are field test for soil investigations?
2. What are the main principals to be considered in designing the space frame structure for factory measuring 30M x 150M, Space frame is proposed shorter span. Indicate by sketches the details of various components use in space frame. Also assume width of space frame? 15
3. What are the causes of failure of the structure due to earthquake? Also suggest some remedial measures for the protection of building due to such calamity? 15
4. Design and draw to suitable scale a covered parking lot for 15 cars. With folded plate roof above? Assume suitable data as required? 15
5. Design and draw to suitable scale Pendol for Annual gathering of college the capacity of Pendol is for 800 persons it is temporary structure. Assume suitable data. Draw key plan, sectional elevation & necessary joinery details. 15
6. Draw neat sketches to explain the following **any two**. 15
 - a) Schwedler dome
 - b) Retrofitting techniques to repair earthquake affected buildings?
 - c) Various water proofing techniques used for basement?
 - d) Temporary structures, material & techniques.
