



10/A/C

53

**ARCHITECTURAL ASSISTANT
(THEORY)**

Time : 3 Hours

Marks : 100

Note: Attempt FIVE Questions in all. Q No. 1 is compulsory. All questions carry equal marks.

1. Write short-notes:- (Any four, give sketches, if necessary):
 - (i) Different types of loads subjected to a building .
 - (ii) Difference between strap-foundation and Mat-foundation.
 - (iii) Water-proofing for expansion-joints in a building.
 - (iv) Bonds used for a Boundary-Wall.
 - (v) Difference between a Flush-door and Lowered-door.
2.
 - (i) Distinguish between approximate estimate and detailed estimate?
 - (ii) Estimate the total cost of laying foundation for a (400x400)mm R.C.C. column. Sketch the design of foundation before estimating. Assume your own rates of materials, labour charges and any missing data before commencing.
3.
 - (a) Describe about different types of materials used for a partition?
 - (b) Design and sketch a brick-nogging timber partition for an opening of size (5 m x 3 m) with all specifications and details.
4. What do you understand by the term 'Arch' and 'Lintel'? Sketch and show different technical parts of an 'Arch'? Describe in brief various types of arches used in modern construction?
5.
 - (i) Describe with sketches the different types of Sewage-disposal systems adopted in the building which are located in isolated places and where municipal sewage system does not exist?
 - (ii) What is "Water-Seal" ? Enumerate different causes of breaking water-seal of a trap?
6. Differentiate between:- (Any four, give sketches, if necessary):
 - (i) Prime cost and Capital cost.
 - (ii) Lean Roof and Couple Roof
 - (iii) Indian W.C and European W.C
 - (iv) Housing Joint and Mortice-Tennon Joint
 - (v) Spiral staircase and circular stair-case.
7.
 - (a) How are files different from folders? What are "Standard-views" and "Projections" available in Auto-cad?
 - (b) Explain 3 D-edit commands:- (Any two)
(i) EXTEND (ii) TRIM (iii) COPY
