

1. Draw a sketch of Mass Retaining Wall showing reinforcement detail and explain terminology used in mass retaining wall.
2. Explain R.C.C. Counterfort retaining wall with help of sketches.
3. Explain Cantilever retaining wall showing reinforcement details also showing thumb rule proportions.
4. Explain the terminology of retaining wall.
5. Describe R.C.C. retaining wall & its types with sketches.
6. Draw labelled sketch of Gravity retaining wall.
7. How does ground water affect the retaining wall?
8. Write Short Notes on.
 - a. Band Beam system and it & it's advantages.
 - b. Pre-stressed slab system
 - c. Ribbed system and it's advantages.
9. Compare the following –
10. Pre-tensioning and Post-tensioning.
11. Waffle Slab and Flat Slab.
12. In situ construction and prefabricated construction.
13. What is timber? Which are common woods and wooden derivatives available in market used in interior work?
14. Which are the different materials used for finishing of interior work? Explain any two applications with process.
15. Describe the following terms and draw any two joineries of the following with common names.
 - i. Framing joint
 - ii. Lengthening joint
 - iii. Bearing joint
 - iv. Widening joint
16. Which are various hardware accessories used in furniture? Explain any two applications with process.
 - a. For storage?
 - b. For bed?
 - c. Table?

d. Seating

17. Which other materials other than wood and wood derivatives used for furniture making? How are they different from wood? Why?
18. What are paints? What are the properties of good paint?
19. What are various types of paints? What are its applications?
20. What are Varnishes? What are the properties of good quality Varnish? What are the applications?
21. What are the differences between Paint and Varnishes? What would you prefer in your furniture designs? Why?
22. Design a single bed of size 900 mm x 2000 mm in timber. Draw plan & sections of the bed to scale 1:20. Draw framing & bearing joinery details.
23. Panelling is to be provided for two adjacent wall of a board room of size 4 m x 4m and height 3m with window opening size 1.8 m x 1.2 m height and sill level of 900mm. Draw plan, elevation & section of panelling to the scale 1:10. Draw panelling details at window sill level & panelling meeting at the corner of the room.
24. An office of size 6.0 m x 4.0 m is to be provided with a false ceiling system. Draw reflected ceiling plan at 1:20 scale showing framing system & light position along with section of framed & panelled type using gypsum tiles & Aluminium framing members. Draw details of panel fixing & light fixing to a suitable scale.
25. Draw plan, elevation & section of sandwich partition proposed for a sound recording studio with detail of acoustic treatment. Size of partition of 3m in length & 3 m in height with a glass window of size 1.2 m x 1.2 m located at centre. Draw a plan, elevation & section at 1:10 scale. Draw any two enlarged details.
26. Draw reflected plan & section of suspended ceiling for a leaving room of size 4.5m x 3.5 m Draw plan & section to 1:20 scale. Show light fixing & fan fixing details to enlarged scale.