

B.E. / B.Tech. (Civil Engineering) Model Curriculum Semester-V  
**PEC-CE501 / CIVIL1 - Construction Project Planning and System**

P. Pages : 3

Time : Three Hours



**GUG/S/25/13721**

Max. Marks : 80

- 
- Notes :
1. All questions carry equal marks.
  2. Due credit will be given to neatness and adequate dimensions.
  3. Assume suitable data wherever necessary.
  4. Diagrams and Chemical equation should be given wherever necessary.
  5. Illustrate your answers wherever necessary with the help of neat sketches.

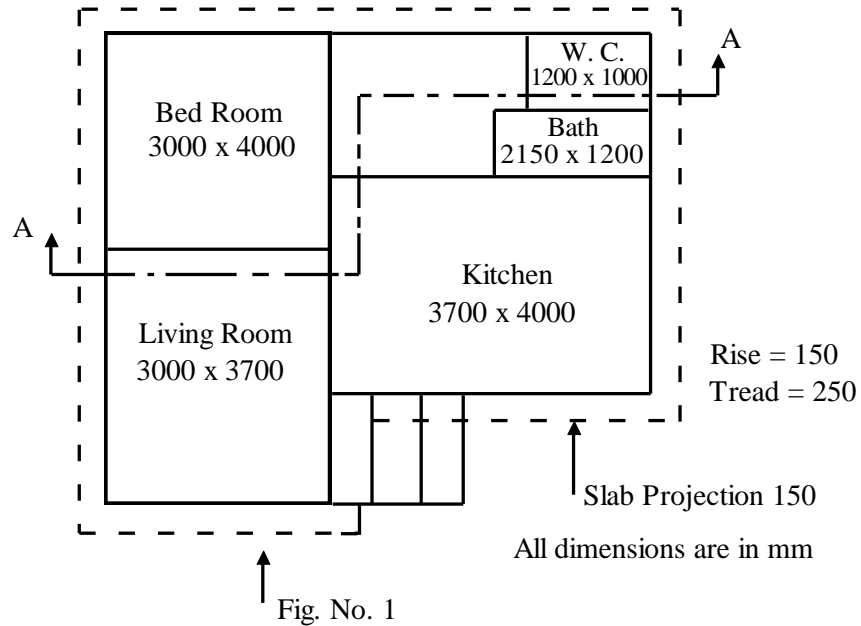
1. a) Draw detailed plan and section of column and column footing with following data: **8**
  - 1) Size of footing: 1500 x 1500
  - 2) Size of column : 300 x 300
- b) Explain the terms circulation and grapping. **4**
- c) Draw free hand dimension sketch of king post truss. **4**

**OR**

2. a) Write all the recommendations of CBRI. **8**
- b) Prepare area of statement with Key area block diagrams with FSI calculation. **4**
- c) Differentiate between aspect and prospect with one example. **4**
3. Fig. no. 1 shows a line plan of residential building. Draw developed plan with suitable scale. Show all dimensions and label the parts. **16**

Data-

- 1) Super structure consists of B. B. Masonry with walls 230 mm thick and internal walls for bath and W.C. 100 mm thick.
- 2) Assume chajja projection 450 mm thick
- 3) Plinth height 600 mm
- 4) Assume suitable data if necessary.



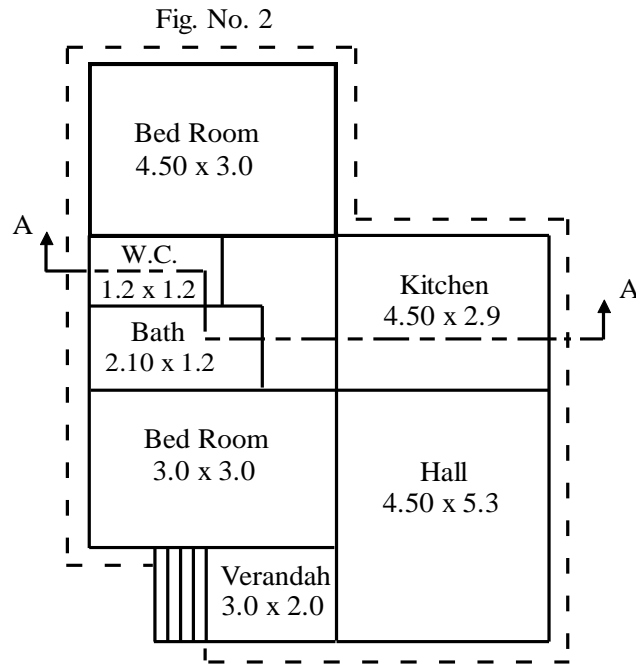
**OR**

4. Figure 2 shows a line plan of a residential building. Draw to scale of 1:50 the following views, show all dimensions and label the parts. 16

- Developed plan
- Front elevation
- Section AB

Use following data:

- Depth of foundation 1.2 m below GL.
- Plinth height 0.750 m
- Ceiling height 2.85 m
- RCC slab 0.12 m thick
- Wall thickness 0.30 m and for toilets 0.20 m thick
- Chajja 0.45 m projection
- Assume suitable data if required.



5. a) How will you calculate activity duration? Explain in detail. 8
- b) Describe the concept of work break down structure in project planning. 8

**OR**

6. a) Explain the method of scheduling projects. 8
- b) What are the stages of project planning? 8
7. a) Discuss in detail about various construction methods for various types of structures. 8
- b) What is procurement? What activities does procurement follow? What are 7R's of procurement. 8

**OR**

8. a) What are different inventory control techniques? 8
- b) Write the process of staffing in detail. 8
9. a) Write in detail about role of inspection in quality control. 8
- b) What is record Keeping and periodic progress reports in terms of project monitoring. 8

**OR**

10. a) What are occupational – health problems faced at construction site. 8
- b) Classify the different methods of statistical quality control. What is quality control by sampling. 8

\*\*\*\*\*

