

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/13721**

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. Illustrate your answers wherever necessary with the help of neat sketches.
  5. Question No. 1 is compulsory.

- 1.** Design and draw a plan for a single storied framed structure with RCC flat roof for a engineer with provision of office room and other facilities. Engineer wants one bedroom as master bedroom & second bedroom for his married son. **16**

- i) Plot size 12m×16m
- ii) Front margin - 4.0 m  
Rare margin - 1.5 m  
Side margin - 3.0 m
- iii) 7.5 m wide road along 12 m side of plot.
- iv) Staircase must be provided.

Draw the following:

- i) Working plan for a scale of 1:50
- ii) Site plan to a scale of 1:200

- 2.** a) Draw free hand sketch of the following: **8**

- i) Paneled Door
- ii) RCC dog legged staircase

- b) Differentiate between load bearing structure and framed structure. **8**

**OR**

- 3.** Plan a single storeyed building for the girls hostel and draw a single line plan on a full size graph paper giving details of room size, doors and windows. **16**

- 4.** a) What is project? Write down the various phases of Project Management. **8**

- b) What is manpower planning? What are the various requirements of manpower planning. **8**

**OR**

- 5.** a) Explain the stages of pre-tendering and post tendering in construction planning. **8**

- b) State the roles and responsibilities of client and contractor in construction project. **8**

6. a) How to make a good pre construction plan for the construction process? 8
- b) Write a note on work break down structure. Why it is used in project management? 8

**OR**

7. a) Explain the advantages and disadvantages of Automation and Robotics in construction industry. 8
- b) Explain the concept of material planning, procurement and inventory control. 8
8. a) State the importance of planning and organizing in management. 8
- b) Give the various process involved in organizing. 8

**OR**

9. a) Why safety is important in projects. Illustrate your answer with effects of poor safety practices. 8
- b) Write short note on **any two**. 8
- i) PPE
- ii) Safety Monitoring
- iii) Various types of accidents in construction industry.
- iv) Remedial measures of Health – Hazards created in construction industry.

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