

B.E. Civil Engineering (Model Curriculum) Semester-V
PECCE501 - Construction Project Planning and System

P. Pages : 2

Time : Three Hours



GUG/W/23/13721

Max. Marks : 80

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- Notes :
1. Que. No. 1 is compulsory.
 2. All questions carry equal marks.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and Chemical equation should be given wherever necessary.
 6. Illustrate your answers wherever necessary with the help of neat sketches.

1. Design and draw a plan for a single storied framed structure with RCC flat roof for a engineer with provision of office room & 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 sketches of the following: **10**

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

b) Differentiate between load bearing structure and framed structure. **6**

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) What is Work Breakdown structure? Illustrate your answer with an example. 8
b) Write in detail concept of productivities in any project. 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) Explain the monitoring and controlling in Project execution. 8
b) Define Quality Control and State the importance of Quality Control. What is the role of inspection in Quality Control? 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 Industrial
