

Sai Nath University

Assignment For Diploma Civil 6th Sem.

The Assignment will consist of two parts, A and B. Part A will have 5 short answer questions(40-60 words) of 4 marks each. Part B will have 4 long answer questions of 5 marks each.

All questions are compulsory.

These Assignments should be completed and submitted in written form by the student to his/her respective Faculty/ Examiners. Assignment Submission Dates are:

➤ **MAY**

List Of Suggested Questions

The list of suggested questions is for students to practice. Although optional, we recommend that students solve these questions, as they will help them in preparing for exams as well as in clearing the important concepts of the subject.

List of Practical and suggested practical's

The list of practical's should be done by the students in their Lab Sessions. These are the basic practical's, which each student should be able to do himself independently. While the list of suggested practicals are optional, but it is recommended that students should perform those practical so as to have a thorough knowledge of the subject

Education Delivery Schedule (EDS)

As per University Semester scheme, the minimum contact hours of each paper has been Divided into two hours theory and practical class.

The faculty will maintain this attendance paper wise for his/her batch.

Subject Code	Subject Name
DECE-601	Estimating and cost
DECE-602	Construction management
DECE-603	Irrigation system
Environmental system	SURVEING
DECE-605	Project
DECE-606	PRACTICAL

SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER

NAME

COURSE Diploma.....

STREAM Civil Engineering.....

SEM 6Th

SUBJECT CODE

SUBJECT NAME

Assignments will be completed by the Student in his/her own handwriting.

ESTIMATING AND COSTING

DECE-601

PART-A

1. What is meant by ferro cement?
2. How do you estimate quantity of the steel reinforcement in various RCC elements ?
3. What is importance of specifications in a construction project?
4. What will be unit of measurement for the wearing coat of a bridge?
5. Write any two materials for which the least cost is more than their actual cost.

PART-B

1. Explain in detail about all available estimates for civil engineering structure.
2. Explain in detail about the three cases of canal sections with neat sketches.
3. The automatic screw cutting machine has been purchased for R 60,000. Its scrap value at the end of 10 years is estimated as R 12,000. Calculate the following by reducing balance method : (a) Fixed percent depreciation (b) Depreciation in first two years and last two years
4. Explain detailed specification of earthwork in excavation.

Construction management

DECE-602

PART-A

1. short notes:
 - a. Grid-Iron Planning and Radial Planning
 - b. Built-up Area and Carpet Area
2. On-site and Off-site features Define the role of transport planning for planning a site. How will you design and fix the width of connecting roads/streets to the site ?
3. "Green areas are the lungs of a city." Discuss and analyze this statement with respect to the size of a neighborhood city.?
4. Write a short essay on the role of natural site features during site planning. Give examples.
5. Diagrammatically represent the various types of street parking?

PART-B

1. Write an essay on 'hierarchy of open spaces' in a cluster housing development project. Support your answer with an illustrated example.
2. Write a short essay on the principles of site planning by Kevin Lynch.

3. Describe briefly various transportation problems and subsequent remedies for a metropolitan city in India.
4. Enlist the various legal tools for planned development?

IRRIGATION SYSTEM

DECE-603

PART-A

1. How would be the Remote Sensing (RS) and Geographical Information System (GIS) helpful in canal irrigation system?
2. What are the special field situations in which sub surface irrigation is suitable?
3. What are the four basic stages in the hydraulics of check basin irrigation?
4. Give difference between Border strip Irrigation and Check basin Irrigation.
5. Classify the irrigation systems in India. Discuss it.

PART-B

1. Give classification of Drainage.
2. Discuss the common criterion for judging the performance of irrigation System.
3. Write about the farmer's participation and role of irrigation managers in practising the irrigation.
4. Define water' logging'. How it will affect irrigated land? Discuss in detail the causes of it.

ENVIRONMENTAL SYSTEM

DECE-604

PART-A

1. Write the differences between prismatic and surveyor's compasses.
2. Convert the following quadrantal bearings into whole circle bearings and find their back bearings: N 67 E, S 31 E, N 26 W and S 43 W.
3. Enumerate the methods for Plane Table Surveying. Explain any one method in detail with a suitable line diagram.
4. Differentiate between Magnetic Bearing and True Bearing. 2 BICE-002 2
5. Explain the temporary adjustment of transit theodolite.

PART-B

1. Define the following terms associated with theodolite survey :
 - a. Vertical axis
 - b. Horizontal axis
2. Short note
 - a. Trunnion axis
 - b. Face left observations
 - c. Axis of plate level tube
3. Write short notes on any two of the following :
 - i. Direct and Indirect Ranging
 - ii. Reciprocal Levelling

4. Write short notes on any two of the following :
- (a) Fast Needle Method
 - (b) Accessories for Compass Survey
 - (c) Local Attraction
 - (d) Field Book
 - (e) Offsets
 - (f) Correction for Temperature and Pull

PROJECT

DECE-605

1. Design and analysis of multi-storied Commercial building
2. Design of residential apartments
3. Design of R.C.C over Head Tank
4. Designing and Planning of Auditorium
5. Design and analysis of Multistoried Residential Building
6. Analysis & Design of a Residential Villa
7. Economical Building Design(Low Cost House)
8. Gated Community Planning & Design
9. Green Buildings Design & Construction
10. Duplex House with solar panels Analysis and Design
11. RMC Plant Construction & Design
12. R.C.C Bridge slab design
13. Flat slabs design
14. Pile foundation design
15. Design of under-reamed pile in black cotton soils
16. Raft foundation design
17. Analysis & Designing of columns with lateral loads (beam-columns)
18. RCC Portal frame design
19. RCC shear wall design
20. Design for torsion in beams.
21. Design of pile caps
22. Design of domes
23. Design of circular slabs
24. Seismic design of joints in RCC buildings
25. Design of RCC pipes

PRACTICALS

DECE-606

1. Study of various instruments used for linear measurement and minor instruments
2. Study of prismatic and surveyor's compass, measurement of bearings, computation of included angles
3. Plane table -Radiation, Intersection & Traversing
4. Study of dumpy, tilting and auto level
5. Differential leveling practice, reduction of level by HI and Rise and Fall method, Fly leveling.
6. Study of Theodolite – measurement of horizontal angle
7. Measurement of horizontal angle by method of repetition
8. Measurement of vertical angle.
9. Laying of an angle by method of repetition