

Sai Nath University

Assignment For Diploma in CIVIL Engineering 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 2 long answer questions of 10 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:

➤ Session-2019

List Of Suggested Questions

The list of suggested questions are 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
DCE 1	EARTHQUAKE RESISTANT BUILDING CONSTRUCTION
DCE 2	RAILWAYS, BRIDGES AND TUNNELS
DCE 3	QUANTITY SURVEYING AND VALUATION
DCE 4	CONSTRUCTION MANAGEMENT AND ACCOUNTS
DEE 5	REPAIR AND MAINTENANCE OF BUILDINGS
DCE 6	EMPLOYABILITY SKILLS – II
DCE-7	PROJECT WORK



SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER

NAME

COURSE Diploma Engineering

STREAM CIVIL.....

SEM 6th

SUBJECT CODE

SUBJECT NAME

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

EARTHQUAKE RESISTANT BUILDING CONSTRUCTION

Assignment

SEC A

- Q.1 Discuss, in detail, the different types of thermal insulating materials.
- Q.2 What do you understand by dressing of stone?
- Q.3 What are screw piles? State the circumstances under which they are used.?
- Q.4 . Write a detailed note on expansion and contraction joints.
- Q.5. Explain, in detail, the fire safety requirements of buildings.

Sec B

- Q.1. What are the advantages of concrete piles over other types of piles?
- Q.2 Discuss the various methods of timbering trenches in firm soil loose soil and very loose soil.?

Assignment

SEC A

1. Q What are the objectives of Indian Road Congress ?
2. Write briefly about Highway Classification based on Lucknow Plan.
3. Discuss the economic evaluation of transport projects.
4. Discuss briefly on "Plate Bearing Test" with a sketch.
5. What are the requirements of good mix-design of concrete for road pavement ?

Sec B

1. (a) What are the considerations in the design of road embankment ? What factors govern the selection of its soil ?
(b) Write briefly on 'Built Up Spray Grout' (BUSG).
2. (a) What are the broad features of IRC method of flexible pavement design ?
(b) What are the aspects covered by The Motor Vehicles Act, 1988 ?
Explain traffic rules.

DIPLOMA 6th SEMESTER

QUANTITY SURVEYING AND VALUATION

Assignment

SEC A

1. What are the stages involved in quantity surveying ?Elaborate each stage in brief.
2. What are the functions of each column of take off sheet.? Give example.
3. Describe the temporary adjustments of theodolite.
4. Discuss the basic principle of traverse survey. Also describe various types of traverse.
5. Derive an expression for the horizontal distance (D) of a vertical staff from a tachometer, if the line of site of the telescope is horizontal.

Sec B

1. Explain the principle and application of GPS.
2. Write short notes on the following :
 - (i) Traverse Balancing.
 - (II) Vertical Curve
 - (iii) Degree of Curve
 - (iv) Trigonometric Leveling

CONSTRUCTION MANAGEMENT AND ACCOUNTS

Part A

1. Briefly explain the importance of training and development of a construction worker.
2. Name any three basic trades which are most important at site.
3. How do you categorise a worker as unskilled/semi-skilled/skilled at site ?
4. Suggest a module for workers training at site.
5. Explain the purpose of tender documents. What are the typical contents of a tender document ?

Part B

1. Briefly explain the roles and responsibilities of the following at site:

- | | |
|--------------------------------|--------------------------------------|
| (a) Construction/Site Engineer | (b) Supervisor/Foreman |
| (c) Executing Sub-Contractor | (d) HR and Administration
-person |

2. Write short notes on the following :

- (i) Cost-time trade-off
- (ii) Methods of charging depreciation
- (iii) Productivity of site
- (iv) Safety induction of labour Trigonometric Leveling

REPAIR AND MAINTENANCE OF BUILDINGS

Part A

1. What are the possible defects in timber ? Describe them with their figures.
2. Give the classification of rocks. Discuss them in brief.
3. Discuss the common building stones, with their uses.
4. Explain Slump Test for workability of concrete, with a neat sketch. Discuss the factors affecting workability.
5. What are the qualities of glass ? Discuss the various varieties of glass and their uses in the building industry.

Part B

1. Give a list of different types of doors and windows. Explain the construction of flush doors, with neat sketches.
2. Write short notes on the following :
 - (i) Precast Concrete
 - (ii) Types of Tiles
 - (iii) Scaffolding
 - (iv) Bonds in Brick-work.

EMPLOYABILITY SKILLS – II

Part A

1. Explain the process of communication with the help of examples.
2. Draw up the list of steps one should take in developing good listening skills.
3. What are the important do's and don'ts for attending business meetings?
4. What are the advantages of written communication?
5. Describe the importance of body language for a successful interview.

Part B

1. Explain upward, downward and lateral channels of communication.
2. What is group discussion ? What are the various qualities of the candidate, that are evaluated during .a group discuss.

CIVIL ENGG. DRAWING.-2

PART-A

1. What is the Izod test of impact ? How is it different from the Charpy impact test ?
2. What is hardness of a material and how can it be measured ?
3. Explain briefly the Portal method.
4. Write the advantages and disadvantages of indeterminate structure analysis through different methods.
5. Explain in detail the stiffness matrix method with the help of a suitable example.

PART-B

1. Three wires of the same material and cross-section support a rigid bar which further supports a weight of 5 kN. The length of the wires is 5 m, 8 m and 6 m in order. The spacing between the wires is 2 m and the weight acts 1.6 m from the first wire. Determine the load carried by each wire.
2. Write down the design steps for the following members of a square steel tank :
 - (a) Vertical side walls
 - (b) Base slab