

Sai Nath University

Assignment For Diploma in Civil Engineering 5st 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:

➤ Nov-17

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 practical's 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-501	Transportation Engineering System
DECE-502	Building Construction System2
DECE-503	Hydraulics
DECE-504	Theory of Structures
DECE-505	Design of Steel Structures
DECE-506	Practical



SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER
NAME
COURSE	Diploma Engineering.....
STREAM	Civil.....
SEM	5 ST
SUBJECT CODE
SUBJECT NAME

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

DECE-501

Transportation Engineering System

Part A

1. Explain briefly on Unified Soil classification system.
2. What are the variations in temperature that generally effect the pavement?
3. How the excavation is done in highway construction?
4. Discuss briefly about the objectives of highway planning.
5. Write down the classification of roads by Nagpur road plan.

Part B

1. What is meant by Reconnaissance?
2. Briefly list the method of construction of gravel road.

DECE-502

Building Construction System2

Part A

1. Define valuation. What is the necessity of valuation?.
2. What is difference between depreciation and Obsolescence ?
3. A building costing Rs. 15lakhs has been constructed on a free hold land measuring 100sqm. recently in big city prevailing rate of land is the neighbor hood of Rs. 4500 per sqm. Determine the net rent of the property if the expenditure on an out going including sinking fund is Rs. 42000 per annum. Work out also the gross rent of the property per month.
4. Explain avoidable and unavoidable errors with example ?
5. Define standard cost and mention the advantages of standard cost ?

Part B

1. State the causes for depreciation?
2. define scrap value and salvage value?

DECE-503 (Hydraulics)

Part A

1. One liter of crude oil weight 9.6 N. Calculate its specific weight ,density and specific gravity ?
2. Define pressure. Obtain an expression for the pressure intensity at a point in a fluid ?
3. What do you understand by Hydrostatics Law ?
4. A simple manometer is used to measure the pressure of oil (sp. Gr.=0.8) flowing in a pipe line .its right limb is open to the atmosphere and left limb is connected to the pipe .the centre of pipe is 9 cm below the level of mercury (sp.gr.=13.6) in the right limb .if the difference of mercury level in the two limbs is 15 cm , Determine the absolute pressure of the oil in the pipe in N/cm² ?
5. What do you understand by Total Pressure and Centre of Pressure ?

Part B

1. What is orifice meters.
2. Explain the general principles of (a) Pelton Wheels(b) Kaplan Turbines(c) Francis Turbine.

DECE-504

Theory of Structures

Part A

1. Condition for the stability of a dam ?
2. Relation between slope, deflection and radius of curvature?
3. Derive the formula slope and deflections simply supported beam with a central point load?
4. A hollow circular column having an internal diameter of 300mm and 250 mm respectively a vertical load of 100 kN at outer edge of the column . Calculate the maximum and minimum intensities of stress in the section.
5. Do you know about column with eccentric loading?

Part B

1. A cantilever beam 4 meter long carries a gradually varying load, zero at the free end to 3 kN/m at the fixed end. Draw B.M. and S.F. diagram.
2. What is theorem of parallel axis.

DECE-505

Design of Steel Structures

Part A

1. Relations between d and t , unwinds formula?
2. How many types of welded joint?
3. Define the leg of weld , size of fillet weld and throat thickness?
4. Comparison in between rivet joint and weld joint?
5. Do you know about pitch, gauge line , and gauge distance?

Part B

1. What is eccentric riveted joint . how does it differ from an ordinary riveted joint?
describe the procedure for bringing out the efficiency of such a joint?
2. Explain the difference between the strength of a riveted joint and efficiency of riveted joint ?

DECE-506

Practical

Part A

1. Determination of surface moisture of aggregates.
2. Steel welding(Lap joint, Butt joint)
3. Plane table surveying.
4. Traversing in an Area by plane table
5. Leveling of a closed traverse.

Part B

1. Leveling - To find the difference of level between
2. two distant points by taking staff reading.
3. Compass surveying- By surveyor compass.