Sai Nath University

Assignment For Diploma in Civil Engineering 3rd Sem.

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

➢ DEC

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.

SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER   …………………………………

NAME   …………………………… ……

COURSE   Diploma Engineering………

STREAM   Civil…………………………

SEM   3rd…………………………

SUBJECT CODE   …………………………………

SUBJECT NAME   …………………………………

Subject name

1. FLUID MECHANICS

2. STRUCTURAL MECHANICS

3. SURVEYING – I

4. CONSTRUCTION MATERIALS

5. BUILDING CONSTRUCTION

6. CIVIL ENGINEERING DRAWING -1

FLUID MECHANICS

Part A

1. What is fluid mechanics ?

2. Define the density, weight density of fluid?

3. Define the real and ideal fluid?

4. A litre of crude oil weight 9.6 n calculate, specific weight and density?

5. Comparison between hydrostatics and hydrokinmatics?

Part B

6. Drived the pascal,s law?

7. What is specific weight?

8. A simple u tube manometer containing mercury is conneted to a pipe in which a fluid of specific gravity 0.9 and having vaccum pressure is following find the vaccum pressure

9. Define newtonion and nonnewtonion fluid?

10. Explain the newton ,s law?

STRUCTURAL MECHANICS

Part A

1. What is shear force and Bending moment ?
2. How many types of Beams and Load ?
3. How many types of Stresses ?
4. Do you Know about Hookes law ?
5. Sign Convention for shear force and Bending moment ?

Part B

6. define the tension and compression stress also draw figure.

7. Find the moment of Inertia a T-section with flange as 150 mm*50mm and web as 150*50mm about and Y-Y axis through the center of gravity of the section.

8. A steel wire of 5mm diameter is bent into a circular shape of 5m radius. Determine the maximum stress induced in the wire. E=200 GPa

9. Assumption in the Theory of simple bending.

10. Draw the cantilever beam on loaded U.D.L full spam.

SURVEYING – I

Part A

1.explain surveying and its types.

2.what is geodetic surveying and principle of survetying?

3.explain compass surveying and types of compass.

4.explain process of setting out theodolite.

5. A 30m chain used for a survey was found to be 20.10 m at the beginning and 20.50 m at the end of the work. The area of the plan drawn to a scale of 1cm= 6m was measured with the help of a planimeter and was found to be 32.56 sq.cm find the true area of the field.

Part B

1. What is chain surveying and write the procedure to perform chain surveying.
2. A 20m chain was found to be 10cm too long after chaining a distance of 1500m. It was found to be 18 cm too long at the end of the day's work after chaining a total distance of 2900m. Find the true distance if the chain was corrected before the commencement of the work.
3. Explain the difference between RB and WCB.
4. Explain process of dumpy level and procedure to set out the instrument.
5. What is auto level and draw figure.

CONSTRUCTION MATERIALS

Part A

1. What is rocks and types of rocks.

2. Explain sandstone, quartzite, dolomite, diatomite.

3. Expain durability test on aggregates.

4. What is timber and types of timber.

5. What is paint and ingredients of paints.

Part B

1. Explain strength and durability test on stones.

2. Explain initial and final setting time test on cement.

3. Explain vicat apparatus test on concrete.

4. Explain loss angeles test on aggregates.

5. Explain durability and strength test on timber.

BUILDING CONSTRUCTION

Part A

1. what is the ingredients of good brick.

2. explain different types of bricks.

3. what is plywood and manufacturing process of plywood.

4. what is mortar and describe the various ingredients of mortar.

5. What is Concept of foundation and its purpose.

Part B

1. what is Brick Masonry: Definition of terms like header, stretcher, queen closer, king closer.

2. What is the Meaning and use of arches and lintels.

3. Doors, Windows and Ventilators.

4. Types of floor finishes - cast-in-situ, concrete flooring (monolithic, bonded) Terrazzo tile flooring, stone (marble and kota) flooring.

5. Define Staircase, winders, landing, stringer, newel, baluster, riser, tread, width of staircase, hand-rail, nosing.

CIVIL ENGINEERING DRAWING -1

Part A

1. Details of spread footing foundations.

2. Detais of load bearing and non-load bearing wall for given thickness of walls with the help of given data or rule of the thumb, showing offsets, position of DPC.

3. Detailed drawing of basement.

4. Detailed drawing of single wooden floor.

5. Elevation, sectional plan and sectional side elevation of flush door.

Part B

1. Draw Single flight R.C.C. stair case.

2. Draw Dog legged wooden stair case.

3. Drawing of flat roof.

4. Drawing plan, elevation of a small building by measurement and foundation detail and sectional elevation.

5. Draw Cement concrete floors on ground and at first floor Conglomerate (Concrete Flooring).