JS University

Assignment For B.Tech Civil 8th 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:

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
BTOE-81	NON CONVENTION ENERGY RESOURCES
BTCE-81	TRANSPORTAION ENGINEERING 2
BTCE-82	WATER RESOURCE SYSTEM
BTCE-83	RIVER ENGINEERING

NON CONVENTION ENERGY RESOURCES

BTOE-81

PART-A

- 1. Explain the SINGLE DEGREE OF FREEDOM SYSTEMS ?write the Equations of motion
- 2. Write the Free vibrations, and damping? explain the Response to harmonic excitation
- 3. Do you know about Response to general dynamic loading? Describe Duhamel's integral?.
- 4. Write the Definition, of pseudo velocity and pseudo-acceleration response spectra.
- 5. What is meant by Analysis of SDOF systems? Write the using response spectrum.

PART-B

- 1. Write the Deference between response spectrum and design spectrum.?
- 2. Do you know about multi degree of freedom systems?

TRANSPORTAION ENGINEERING 2 BTCE-81

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 neighbourhood/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.

WATER RESOURCE SYSTEM

BTCE-82

PART-A

- 1. Explain the principle of operation of an instrument used for fuel flow measurement in an aircraft
- 2. What does a pitot tube measure ? Explain the principle and construction of a pitot tube
- 3. With a neat labelled diagram, describe the working of an air speed indicator and state the two errors in indication of the air speed.
- 4. Draw the block diagram of air data system mentioning at least four outputs.
- 5. Draw the block diagram of goniometer and explain it.

Part-B

- 1. Explain the following in brief :
 - (i) Altimeter
 - (ii) Magnetic Compass
- 2. What is a Gyroscope ? State two important properties of a gyroscope.

RIVER ENGINEERING

PART-A

- 1. Describe the butt joint of plate by welding process.
- 2. Describe the lap joint of plate by riveting process.
- 3. Describe the butt joint of plate by riveting process.
- 4. Describe the C B R test.
- 5. Plane table -Radiation, Intersection & amp; amp; Traversing

PART-B

- 1. Plane table -Radiation, Intersection & amp; amp; Traversing
- 2. Study of dumpy, tilting and auto level