

JS University

Assignment For B.Tech 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 markseach.

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 beenDivided into two hours theory and practical class.

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

Subject Code	Subject Name
BTCE-61	DESIGN OF CONCRETE STRUCTURE 2
BTCE-63	CONSTRUCTION TECHNOLOGY AND MANAGEMENT
BTCE-62	ENVIROMENTAL ENGINEERING 2
BTCE-64	ENVIRONMENTAL MANAGEMENT FOR INDUSTRIES
BTMB-61	INDUSTRIAL ECONOMICS & MANAGEMENT
BTCE-65	RURAL WATER SUPPLY AND MANAGEMENT

BTCE-61
DESIGN OF CONCRETE STRUCTURE 2

PART-

A

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. A steel joist simply supported over a span of 6 m carries a point load of 50 kn at 1.2 m from the left hand support . find the position and magnitude of the maximum deflection. $EI = 14 \times 10^{12} \text{ N-mm}^2$.
3. Derive the formula slope and deflections simply supported beam with a central point load?
4. Condition to overturning of the dam? condition for the stability of a dam?
5. What is moment of resistance? do you know about the position of neutral axis? do you know about Rankine's theory.

PART-B

1. Relation between slope, deflection and radius of curvature?
2. 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.

BTCE-63

CONSTRUCTION TECHNOLOGY AND
MANAGEMENT

PART-A

1. Relation between slope, deflection and radius of curvature?
2. 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.

3. DO you know about column with eccentric loading?
4. Define the retaining walls.
5. Define the active earth pressure and passive earth pressure.

Part-B

1. A water tank contains 1.3 m deep water .find the pressure exerted by the water per meter length of the tank . Take specific weight of water as 9.8 kN/m^3 write the sign convention?
2. Determine the moment of inertia of a semicircular section of 100mm diameter about its centre of gravity and parallel to x x and y y axes?

BTCE-62

ENVIRONMENTAL ENGINEERING 2

PART-A

1. Describe the various methods of forecasting population. Which method will be considered most appropriate for forecasting the population of cities like Delhi, Mumbai, etc? Why?
2. What is meant by hardness? Differentiate between temporary and permanent hardness.
3. What points should be considered in deciding the location of a pumping station ?
4. What are the different materials which are commonly used for water supply pipes ? Discuss their comparative merits and de
5. What are the common impurities found in natural sources of water ? Explain their effects upon its quality?

Part-B

1. What is coagulation? What are its purposes? Explain the working of clariflocculator with a neat sketch.
2. Compare in detail the slow sand filter with Rapid sand filter. Explain the various techniques used to remove taste and odour from water.

BTCE-64

ENVIRONMENTAL MANAGEMENT FOR INDUSTRIES

PART-A

1. Define Environment Management, elaborate on existing legislative framework for environment protection in India.
2. Elaborate on present status of Environment management in India? State and Explain objectives of India's National Environmental Policy 2006. Explain principles of National Environmental Policy 2006.
3. Elaborate on Substantive Reforms suggested in NEP 2006. Explain Regulatory and Process related reforms with reference to NEP 2006. Explain Environment Impact Assessment (EIA) process in detail.
4. Explain various environmental issues relevant to India.
5. Government of India enacted special environmental laws after 1972, explain reasons behind.

PART-B

1. An organization needs to comply with various rules and regulations in order to operate in India. Enlist such rules and regulations with reference to various Indian environmental laws.
2. Elaborate on scope of Environment Management. Explain role and function of Government as planning agency. Explain role and function of Government Organizing, Directing, and implementing agency.

BTMB-61

INDUSTRIAL ECONOMICS & MANAGEMENT

PART-A

1. Is economics a science or an art?
2. Outline the main features of new industrial policy in India.
3. Discuss the causes of market failure.
4. Examine the impact of macro-economic policies on consumer behaviour.

5. Explain price determination under monopoly.

PART-B

1. Critically examine Samuelson's Revealed Preference theory
2. Explain Bergson - Samuelson Social Welfare function.

BTCE-65

RURAL WATER SUPPLY AND MANAGEMENT

PART-A

1. Explain Epidemiological aspects of water quality method.
2. What is Specific contaminant removal system.
3. Explain Community and sanitary latrines.
4. What is septic tank.
5. What is Imhoff tank.

PART-B

1. explain Solid Waste Management.
2. Explain Disposal of Solid Waste

