

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA IN ENVIRONMENTAL ENGINEERING**  
**SEMESTER: V**

Subject Name: **Environmental Project Management**

Sr. No.	Course Content
1.	<p><b>Introduction:</b></p> <p>1.1 Importance of E P M            1.2 Role of Environmental Engineer in management            1.3 Quality of good manager            1.4 Skills required for ideal manager</p>
2.	<p><b>Planning of Project:</b></p> <p>2.1 Principles, Requirements, Methods and Parameters effecting Project planning            2.2 Project scheduling &amp; controlling            2.3 Bar chart and CPM ( Importance and preparation)            2.4 Examples on Barchart and CPM</p>
3.	<p><b>Site Layout:</b></p> <p>3.1 Necessity of site layout            3.2 Parameters to be considered while preparing site layout            3.3 Preparation of site layout for environment project.</p>
4.	<p><b>Labour Management:</b></p> <p>4.1 Labour Characteristics            4.2 Incentive &amp; Motivation            4.3 Labour laws – Legislation Act, Wages and Payment Act, Compensation Act.</p>
5.	<p><b>Quality Management:</b></p> <p>5.1 Quality of materials            5.2 Inspection &amp; testing methods – Objectives, Types and Relevant laboratory tests.            5.3 Quality in observation</p>
6.	<p><b>Safety Management - Introduction to Safety:</b></p> <p>6.1 Preliminary knowledge regarding environmental related safety codes (BIS) for            6.1.1 Fire Hazards &amp; its prevention            6.1.2 Chemical hazards and its prevention            6.1.3 Mechanical, Electrical &amp; radiation hazards.            6.1.4 Control of Hazards            6.1.5 Occupational safety.            6.1.6 Safety Equipment &amp; Campaign.            6.1.7 Storage of Chemicals.</p>

7.	<b>Management Information System:</b> 7.1 Function, Purpose & needs and Characteristics 7.2 Physical element 7.3 Classification 7.4 Implementation & Application to EPM.
8.	<b>Disaster Management:</b> 8.1 Introduction 8.2 Kinds of Disaster 8.3 Effects of various kinds of disaster 8.4 Socio-economic & culture effects 8.5 Pre disaster management 8.6 Management during and after disaster
9.	<b>Environmental Standards:</b> 9.1 Introduction regarding ISO 9.2 Utility of ISO to the Society 9.3 Introduction to IS- 14000 series 9.4 Environmental Management system (ISO-14000) 9.4.1 Benefits, Key element

### Laboratory Experiences:

1. Draw Project Scheduling and Bar chart
2. Tutorial based on CPM
3. Preparation of site layout after site visit
4. Study of various labour laws
5. Tutorials on quality management
6. Seminar with report writing on safety management
7. Seminar with report writing on various kinds of disaster
8. Report Preparation for various environmental standards (Indian & International).

### Reference Books:

1. A management Guide to PERT, Jerome D. Weist.
2. Construction planning & Management, P. S. Gahlot & B. M. Dhir.
3. Construction Planning Equipment & methods, R.L. Parifoy.
4. Construction structure Management & wrong, S. C. Rangwala.
5. Project Planning by CPM & PERT, B.C. Purnima & Khandwal.
6. Statistical Quality Control methods.
7. Relevant IS and ISO codes.
8. Construction Management and PWD Accounts, B.Lal.
9. Industrial Safety and Environment, Anupama Prashar & Pratibha Bansal.