



Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



I SEMESTER M.TECH (INDUSTRIAL POLLUTION CONTROL) END SEMESTER EXAMINATIONS, NOV/DEC 2015

SUBJECT: ENVIRONMENTAL IMPACT ASSESSMENT AND

MANAGEMENT PLAN [CHE 559]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 100

Instructions to Candidates:

- ✤ Answer ANY FIVE FULL the questions.
- Missing data may be suitably assumed.

1A.	Discuss any 5 approaches to Environmental Management (EM). Also name any 6 EM tools.	08
1B.	Discuss any 5 international environmental movements.	05
1C.	Consider a forest with an annual increase in forest biomass as 1030 g/m^2 per year. This figure is the annual net production rate or net change in biomass. If the biomass at the beginning of the year was measured at 8600 g/m ² , so that the new biomass in the forest at the end of 2 years would be: (Given: About 48% of vegetation in dry matter is carbon)	07
2A.	Explain the steps involved in EIA process.	12
2B.	What are the requisites for a good Environmental Impact Statement?	03
2C.	Discuss the methodologies that can be used for impact identification.	05
3A.	Explain in detail about the different types of Environmental Auditing.	15
3B.	What is Life Cycle Assessment (LCA)? Name the stages in product LCA.	05

4A.	Discuss briefly about the principles and structure of ISO 14000 series along with its supporting systems.	10
4B.	Write a short note on the evolution of ISO 14000 series.	04
4C.	Discuss the different types of environmental modelling.	06
5A.	Explain in detail about the motivations for Environmental Design.	10
5B.	Write a short note on problems with environmental taxation.	05
5C.	Draw a flow diagram which depicts the elements of Total Economic Value.	05
6A.	Explain in detail about the prediction and assessment of Air environment.	15
6B.	Write a short note on supply-demand curves with pictorial representation.	02
6C.	Write a short note on application of remote sensing and GIS in Environmental Management.	03