



# MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

*(A constituent institution of MAHE, Manipal)*

## II SEMESTER B.TECH. (Department of Civil Engineering)

### END SEMESTER EXAMINATIONS, APRIL/MAY 2018

#### SUBJECT: ENVIRONMENTAL STUDIES [CIE 1002]

#### REVISED CREDIT SYSTEM

**(27/ 04/ 2018)**

Time: 3 Hours

MAX. MARKS: 50

#### **Instructions to Candidates:**

- ❖ Answer ALL the questions.
- ❖ Missing data may be suitably assumed

<b>1A.</b>	"Environmental studies needs multidisciplinary approach". Justify this statement with suitable examples.	<b>03</b>	<b>CO1</b>
<b>1B.</b>	With a neat diagram discuss the different layers and its relative significance of each layers of atmosphere. Also describe the temperature variation.	<b>04</b>	<b>CO1</b>
<b>1C.</b>	Explain how human impact is affecting biogeochemical cycles.	<b>03</b>	<b>CO2</b>
<b>2A.</b>	"All Ecosystems maintain themselves in characteristics, dynamic state". Provide examples in support of this statement.	<b>03</b>	<b>CO3</b>
<b>2B.</b>	Mention the places in India where the minerals like gold, limestone, coal and bauxite are available	<b>03</b>	<b>CO5</b>
<b>2C.</b>	Explain the biotic and abiotic components of a lake ecosystem. What natural resources are to be preserved in order to maintain the lake ecosystem?	<b>04</b>	<b>CO3</b>
<b>3A.</b>	Define Biomagnification. Explain the classification of Taxon as per Red data book	<b>05</b>	<b>CO4</b>
<b>3B.</b>	List out the elements at risk and main mitigation strategies for floods and water hazards	<b>02</b>	<b>CO8</b>
<b>3C.</b>	Draw the flowchart for National Response mechanism with respect to disaster management	<b>03</b>	<b>CO8</b>
<b>4A.</b>	With the help of a neat sketch explain High Volume Air sampler	<b>04</b>	<b>CO6</b>
<b>4B.</b>	Write a short note on temperature inversion.	<b>02</b>	<b>CO6</b>
<b>4C.</b>	Explain Waste water treatment plant layout with the help of a schematic diagram.	<b>04</b>	<b>CO6</b>
<b>5A.</b>	What are the different phases of disaster management? Explain.	<b>04</b>	<b>CO9</b>
<b>5B.</b>	What are the advantages of GIS in disaster management? Explain any 4 powers and functions of pollution control boards	<b>04</b>	<b>CO7</b>
<b>5C.</b>	Write a short note on Energy efficient buildings.	<b>02</b>	<b>CO10</b>