Reg. No. ☐☐☐☐☐☐☐☐☐☐

MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A Constituent Institution of MAHE, Manipal)

END Semester EXAMINATIONS, NOV/DEC 2020

SUBJECT: INDUSTRIAL POLLUTION CONTROL [CHE-4301]
REVISED CREDIT SYSTEM

Time: 3 Hours   MAX. MARKS: 50

Instructions to Candidates:
- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A.	What is composting? Clearly explain the mechanism of composting.	**3**
1B.	What is the purpose of settling in wastewater treatment? Explain types of sedimentation tanks.	**3**
1C.	Clearly explain Carbon and Nitrogen cycles with the help of neat diagrams.	**4**
2A.	What is solid waste management? How are solid wastes classified?	**3**
2B.	With the help of a neat diagram explain the development of a modern landfill.	**4**
2C.	Define Hazardous waste. What are the treatment techniques used in controlling these wastes?	**3**
3A.	Mention any six functions of the central board of air pollution prevention and control.	**3**
3B.	Explain about BOD curve and oxygen sag curve with the help of neat diagrams.	**4**
3C.	Write any three differences between primary and secondary air pollutants.	**3**
4A.	Clearly explain the surface water treatment process.	**4**
4B.	Explain any two methods for the removal of Mercury from gases.	**3**
4C.	What are the necessary steps in managing biomedical wastes?	**3**
5A.	What are the various treatment options for E-waste? Mention any 2 effects of E-waste on human health.	**3**
5B.	With the help of a neat flow diagram explain the activated sludge process.	**4**
5C.	Explain the determination of COD and any two of its advantages and disadvantages.	**3**