

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION MO2022)

CLASS: MTECH/MSC/IMSC/MUP/PRE-PHD
BRANCH: CAAD/MECH/BT/CSE/IT/RS/SAC/ICH/IFT/IMH/ARCH

SEMESTER : III/I/VII
SESSION : 2022-23

SUBJECT: CE577 INDUSTRIAL POLLUTION CONTROL
TIME: 03 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

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- Q.1(a) Define industrial pollution and pollutants? **CO1 K1** [2]
Q.1(b) Discuss any one type of air pollution disaster in industry? **CO1 K2** [3]
Q.1(c) Describe the air pollution caused by the Cement industry and their control techniques? **CO1 K3** [5]
- Q.2(a) Outline five constituents of aquatic environment? **CO2 K1** [2]
Q.2(b) Discuss the effect of oxygen demanding industrial waste on natural water and aquatic life? **CO2 K2** [3]
Q.2(c) Describe the industrial wastewater treatment in textile industry with a flow diagram? **CO2 K3** [5]
- Q.3(a) Define and classify the solid waste? **CO3 K1** [2]
Q.3(b) Interpret the environmental impact of industrial solid waste dumps on ecosystem and humans? **CO3 K2** [3]
Q.3(c) Describe the sanitary landfill method with a neat sketch? **CO3 K3** [5]
- Q.4(a) What do you mean by the concept of industrial ecosystem? **CO4 K1** [2]
Q.4(b) Illustrate the cleaner production in industry and waste minimization with an example? **CO4 K2** [3]
Q.4(c) Describe land degradation due to industrialization? Discuss eco restoration and land reclamation techniques? **CO4 K3** [5]
- Q.5(a) Define occupational diseases? **CO5 K1** [2]
Q.5(b) Write a short note on OSHA and ISO18000? **CO5 K1** [3]
Q.5(c) Describe three occupational diseases with their possible symptoms and target organs? **CO5 K2** [5]

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