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Paper Code : OE-ME801D/OE-ME802D Industrial Pollution and Control

UPID : 008269

Time Allotted : 3 Hours

Full Marks :70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer any ten of the following :

[1 x 10 = 10]

- (I) A safe level of noise depends on_____
- (II) Schistosomiasis, a common water contact disease, is spread by_____
- (III) Air pollution effects are usually found on the_____
- (IV) Sewage water can be purified for recycling by the action of_____
- (V) Ringelmann chart is used for the evaluation of _____ pollution
- (VI) Which is a secondary air pollutant?
- (VII) Photochemical smog is connected to_____pollution
- (VIII) A sewage treatment process, in which a portion of the decomposer bacteria present in the waste is recycled into the beginning of the process, is called __ treatment.
- (IX) Pneumoconiosis' is a disease caused by the inhalation of _____ dust
- (X) Blue baby syndrome in infants is mainly caused by presence of _____
- (XI) Name the chemicals which are used in refrigerators and air conditioners and damage ozone layer when released in air.
- (XII) ___ is used to check water pollution caused by industrial effluents

Group-B (Short Answer Type Question)

Answer any three of the following :

[5 x 3 = 15]

2. What is meant by pollution? Name four important causes of pollution. [5]
3. Write a short note on the ozone layer. [5]
4. What is Pollutant? Classified it. [5]
5. Give an account of indoor air pollution. [5]
6. What is meant by the term 'Water Ecology'? [5]

Group-C (Long Answer Type Question)

Answer any three of the following :

[15 x 3 = 45]

7. (a) Mention two effect of air pollution on meteorological condition [4+7+4]
(b) Write the methods of measurement of meteorological parameters in ambient air
(c) What is wind rose and lapse rate
8. (a) Give Five properties of water that make it essential for life [4+6+5]
(b) List the pollutants present in wastewater of 'electroplating' and 'dairy' industries. Suggest a treatment method for the same
(c) What are the pollutants present in the industrial effluent of petroleum industry? How can these pollutants be taken care off?
9. (a) What is the meaning of industrial pollution? [3+3+9]
(b) What are the major causes of pollution?
(c) What are the incentives to the industries for pollution control?
10. (a) What is meant by air quality monitoring? Explain any four methods of calculation of air pollution indices for monitoring of air pollutants. [7+8]
(b) With the neat sketch explain the working principle of Cyclone separator.
11. (a) Explain in detail about noise mitigation with example [8+7]
(b) Elaborate on Kyoto and Montreal protocol

*** END OF PAPER ***