



12173

13141

3 Hours/100 Marks

Seat No.

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- Instructions :** (1) **All** questions are **compulsory**.
(2) Answer **each** next main question on **a new page**.
(3) Illustrate your answers with **neat** sketches **wherever** necessary.
(4) Figures to the **right** indicate **full** marks.
(5) **Assume** suitable data, **if** necessary.
(6) **Use** of Non-programmable Electronic Pocket Calculator is **permissible**.
(7) Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.
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MARKS

1. Attempt **any five** of the following : **20**
- a) What is meant by green house effect ? **4**
 - b) State the effect of air pollution on economy. **4**
 - c) Explain in brief 'noise mapping'. **4**
 - d) State the causes of biodiversity loss. **4**
 - e) State the causes of agricultural pollution. **4**
 - f) What are the sources of water pollution ? **4**
 - g) Define the term air quality and emission standards. **4**
2. Attempt **any four** of the following : **16**
- a) Explain the concept of ecosystem and enlist the different types of ecosystem. **4**
 - b) Enlist the water pollution analysis. Explain any one of them. **4**
 - c) What is meant by acid rain and ozone layer depletion ? **4**
 - d) State the effects of air pollution on human health. **4**
 - e) Define noise and enlist sources of it. **4**
 - f) State the various environment and pollution control acts. **4**

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3. Attempt **any four** of the following : **16**
- a) Write the various steps in water treatment. **4**
 - b) List any four sources of air pollution. **4**
 - c) Enlist the methods of solid waste disposal. Explain any one of them. **4**
 - d) Explain in brief Kyoto Treaty. **4**
 - e) Define following terms : **4**
 - i) Turbidity
 - ii) Chemical O₂ demand
 - iii) Acidity
 - iv) Total suspended solids.
 - f) Explain in brief impulsive and sonic noise. **4**
4. Attempt **any four** of the following : **16**
- a) Enlist the types of industries that causes major air pollution. **4**
 - b) Write the sources and effects of radiation. **4**
 - c) Discuss the air pollution in Delhi. **4**
 - d) What are the effects of water pollution ? **4**
 - e) Explain with neat sketch positive crankcase ventilation system. **4**
 - f) Write the strategies for conservation of biodiversity. **4**
5. Attempt **any two** of the following : **16**
- a) List the different methods of pollution control of S.I. Engine. Explain EGR system with neat sketch. **8**
 - b) Explain design and operating parameters responsible for emission in C.I. Engine. **8**
 - c) What are the causes and remedial procedures to reduce pollution due to : **8**
 - i) Fertilizer industries
 - ii) Cement industries.
6. Attempt **any two** of the following : **16**
- a) Classify air pollution. Describe the photochemical air pollution. **8**
 - b) i) State the effect of noise on human health. **4**
ii) What is ISO9000 and 14000 standards ? **4**
 - c) i) What is water quality standard ? **4**
ii) Explain the methods of disposal of radiation waste. **4**
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