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CHEMISTRY · EAPCET (EAMCET)

Environmental Chemistry

Previous Year Questions with answers

104 questions · **102** papers · **2010–2026** · newest paper first

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What is in this PDF: every Environmental Chemistry question we hold from past AP and TS EAPCET (called EAMCET until 2020 in Andhra Pradesh and 2023 in Telangana) papers, with its options and answer. Where an answer comes from a source other than the official final key, it says so next to the answer.

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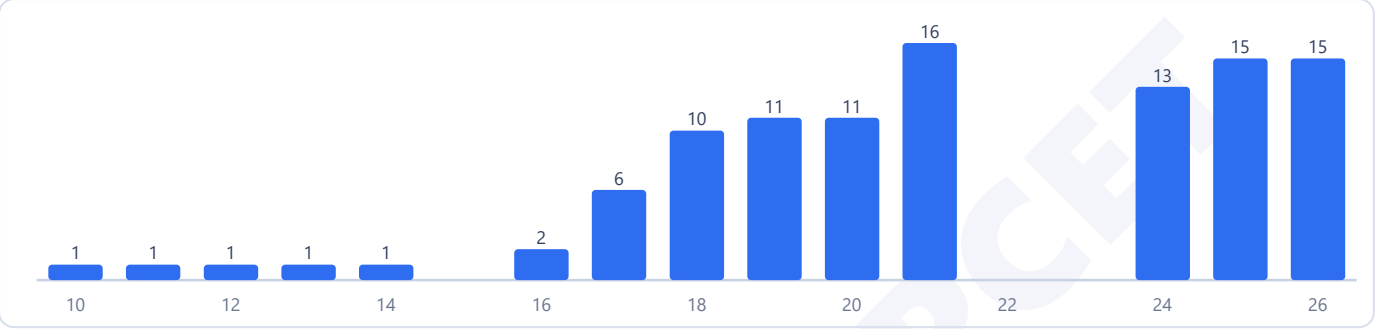
Chapter at a glance

1.4%	104	43 of 77	104 / 0
of Chemistry questions, 2022–2026	questions, 2010–2026	papers asked it, 2022–2026	MCQ / numerical, 2010–2026

Trend. 43 questions in 2024–2026, none in 2022–2023.

Questions per year



Counts are the questions we hold: 104 in 102 papers. 2 questions in this chapter came back in more than one paper.

Most-asked topics in this chapter (2010–2026)

Pollution	**104**

How often it comes up

Environmental Chemistry holds rank 29 among all 31 chemistry chapters in the modern 2022 to 2026 examination span. Across our full compilation of entrance tests from 2010 through 2026, the chapter contributed 104 questions across 149 papers, appearing in 102 of those examinations to capture 1.7 percent of the subject with an average of 0.7 questions per paper. In the modern five-year timeframe from 2022 to 2026, it gathered 43 questions across 77 sittings, appearing in 43 papers to record 0.6 questions per paper and a 1.4 percent subject share.

The chapter was completely absent in 2022 and 2023 before returning strongly from 2024 onward, being absent from thirty-four papers overall across the five-year window. Looking at regional differences between 2022 and 2026, AP tests carried 26 questions across 48 papers (appearing in 26 papers, 0.5 questions per paper, 1.4 percent share), while TS tests generated 17 questions across 29 papers (appearing in 17 papers, 0.6 questions per paper, 1.5 percent share).

During earlier testing between 2010 and 2021, papers featured 61 questions across 72 sittings (appearing in 59 tests), delivering 0.8 questions per paper and a 2.1 percent subject share. Across the latest three exam years from 2024 to 2026, question writers set 43 questions across 46 sittings (appearing in 43 papers), yielding 0.9 questions per test and 2.3 percent share. Looking at trend dynamics, the share early versus the last three years is about the same, while the share recent versus the last three years is up.

Most-asked topics

The environmental chemistry curriculum organizes under one overarching domain:

- **Pollution** accounts for all 104 questions across the full archive, including all 43 questions from the recent period through 2026. Subtopics include tropospheric pollution (gaseous pollutants like sulphur dioxide, nitrogen oxides, carbon monoxide, and hydrocarbons; particulate pollutants like smoke, dust, mists, and fumes), acid rain formation and stone leprosy of marble structures, photochemical smog versus classical reducing smog, stratospheric pollution and chlorofluorocarbon-mediated ozone hole formation, water pollution parameters

(biochemical oxygen demand, chemical oxygen demand, and eutrophication), maximum permissible drinking water contamination thresholds (lead, fluoride, sulphate, nitrate), and principles of green chemistry.

What the questions look like

Examiners test exact factual knowledge from NCERT environmental tables. A prominent question type presents a matching list pairing toxic heavy metals with their maximum allowable drinking water concentrations, such as matching fluoride (up to one part per million protects enamel, while above two parts per million causes mottling of teeth), lead (fifty parts per billion), or nitrate (fifty parts per million, above which causes methemoglobinemia or blue baby syndrome).

Another frequent format asks candidates to contrast classical smog (cool, humid climate; smoke and sulphur dioxide; reducing nature) with photochemical smog (warm, dry, sunny climate; unburnt hydrocarbons, nitric oxide, ozone, and peroxyacetyl nitrate; oxidizing nature). Questions on stratospheric chemistry focus on the catalytic cycle where chlorine free radicals continuously destroy ozone molecules.

How to practise it

Memorise the statutory concentrations for drinking water: fluoride should be around one part per million; lead must not exceed fifty parts per billion; sulphate should stay below five hundred parts per million (higher amounts cause laxative effects); nitrate must not exceed fifty parts per million. Clean drinking water has a biochemical oxygen demand below five parts per million, whereas highly polluted water records values of seventeen parts per million or higher.

Review the reactions responsible for photochemical smog: vehicle exhaust emits nitric oxide and unburnt hydrocarbons; sunlight dissociates nitrogen dioxide into nitric oxide and reactive oxygen atoms; atomic oxygen combines with molecular oxygen to form ozone, which oxidizes hydrocarbons into formaldehyde, acrolein, and peroxyacetyl nitrate. In green chemistry, remember that replacing tetrachloroethene with liquid carbon dioxide in dry cleaning avoids groundwater poisoning.

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Q1 AP EAPCET 2026 · 18 May · Shift 1 MCQ

Correct statements about oxidising smog are

I. Primary precursors of it are O_3, PAN

II. It occurs in warm, dry and sunny climate

III. Its formation can be controlled by the use of catalytic converters in automobiles

Correct answer is

(A) II, III only
(B) I, II only
(C) I, III only
(D) I, II, III

Answer: (A) II, III only · The council's preliminary key

Q2 AP EAPCET 2026 · 18 May · Shift 2 MCQ

Which ions in drinking water causes a disease 'methemoglobinemia' when they are above permissible level?

(A) SO_4^{2-}
(B) NO_3^-
(C) F^-
(D) CH_3COO^-

Answer: (B) NO_3^- · The council's preliminary key

Q3 AP EAPCET 2026 · 15 May · Shift 1 MCQ

High levels of which pollutant in blood induce premature delivery in pregnant women, who have the habit of smoking?

(A) SO_2
(B) CO_2
(C) CO
(D) NO

Answer: (C) CO · The council's preliminary key

Q4 AP EAPCET 2026 · 15 May · Shift 2 MCQ

Match the following

List-I Water pollutant		List-II Its effect
A Phosphates	I	Suspected to be carcinogenic
B PCBs	II	Harmful to bones

C Pb > 50 ppb	III Enhances algae growth
D $F^{\ominus}$ > 10 ppm	IV Damage kidney

(A) A-III, B-I, C-II, D-IV
(B) A-III, B-I, C-IV, D-II
(C) A-I, B-III, C-IV, D-II
(D) A-IV, B-II, C-I, D-III

Answer: (B) A-III, B-I, C-IV, D-II · The council's preliminary key

Q5 AP EAPCET 2026 · 14 May · Shift 1 MCQ

Which of the following radical initiates the chain reaction responsible for depletion of ozone layer?

(A) $^{\bullet}CF_2Cl$
(B) $Cl^{\bullet}$
(C) $ClO^{\bullet}$
(D) $^{\bullet}OH$

Answer: (B) $Cl^{\bullet}$ · The council's preliminary key

Q6 AP EAPCET 2026 · 14 May · Shift 2 MCQ

Two statements are given below

Statement – I: An object located at 30 Km above the sea level is in stratosphere

Statement – II: The maximum permissible limit of Cd present in drinking water is 0.05 ppm

The correct answer is

(A) Statements I , II both are correct
(B) Statements I and II both are not correct
(C) Statement I is correct but statement – II is not correct
(D) Statement I is not correct but statement – II is correct

Answer: (C) Statement I is correct but statement – II is not correct · The council's preliminary key

Q7 AP EAPCET 2026 · 13 May · Shift 1 MCQ

Identify the sets which contain greenhouse gases only

I. CO_2, SO_3, N_2

II. CO_2, CH_4, O_3

III. O_2, NO_2, SO_2

IV. $O_3, CFCs, N_2O$

The correct answer is

(A) I , II only
(B) II , III only
(C) II , IV only
(D) I , IV only

Answer: (C) II , IV only · The council's preliminary key

Q8 AP EAPCET 2026 · 13 May · Shift 2 MCQ

In which of the following, pollutant is correctly matched with its source?

(A) SO_2 --- incomplete combustion of automobile fuels
(B) NO_2 --- burning of fossil fuel in automobile engine
(C) CO_2 --- incomplete combustion of carbon
(D) CO --- burning of fossil fuels

Answer: (B) NO_2 --- burning of fossil fuel in automobile engine · The council's preliminary key

Q9 AP EAPCET 2026 · 12 May · Shift 1 MCQ

Which oxide of nitrogen can damage the leaves of plants and retard the rate of photosynthesis, when it is present in higher concentration in air?

(A) NO_2
(B) NO
(C) N_2O
(D) N_2O_3

Answer: (A) NO_2 · The council's preliminary key

Q10 TS EAPCET 2026 · 11 May · Shift 1 MCQ

The oxides of which element are responsible for photochemical smog?

(A) Sulphur
(B) Nitrogen
(C) Carbon
(D) Chlorine

Answer: (B) Nitrogen · The council's preliminary key

Q11 TS EAPCET 2026 · 11 May · Shift 2 MCQ

Observe the following

PAN Acrolein CF_2Cl_2 CH_2O Vinyl chloride

A B C D E

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Identify the pollutants which are formed when unburnt hydrocarbons are released into atmospheric air

(A) A, B, C, D, E
(B) A, B, D only
(C) A, B, E only
(D) B, C, D only

Answer: (B) A, B, D only · The council's preliminary key

Q12 TS EAPCET 2026 · 10 May · Shift 1 MCQ

A sample of water is found to contain F^- (1 ppm), SO_4^{2-} (>500 ppm), NO_3^- (40 ppm),

Which ion/s make (s) the water sample unfit for drinking?

(A) F^- & NO_3^-
(B) SO_4^{2-}
(C) NO_3^-
(D) F^-

Answer: (B) SO_4^{2-} · The council's preliminary key

Q13 TS EAPCET 2026 · 10 May · Shift 2 MCQ

Identify the correct statements about Eutrophication

I. It takes place in air

II. It is due to excess oxygen in water

III. It occurs in water

IV. It leads to the destruction of aquatic life

The correct answer is (only)

(A) I, II, III, IV
(B) I, III only
(C) III, IV only
(D) I, II only

Answer: (C) III, IV only · The council's preliminary key

Q14 TS EAPCET 2026 · 9 May · Shift 1 MCQ

Match the following

List-1 (Metal)	List-2 (Maximum prescribed concentration of metal in drinking water) (ppm)
A Zn	I 5×10^{-2}
B Cd	II 5×10^{-3}

C	Mn	III 5.0
D	Cu	IV 3.0

The correct answer is

(A) A – III, B – IV, C – II, D – I
(B) A – II, B – III, C – IV, D – I
(C) A – III, B – II, C – I, D – IV
(D) A – IV, B – III, C – II, D – I

Answer: (C) A – III, B – II, C – I, D – IV · The council's preliminary key

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Q15 TS EAPCET 2026 · 9 May · Shift 2 MCQ

In winter, polar stratospheric clouds formed over Antarctica provide surface on which compound 'X' responsible for depletion of ozone is formed. What is X?

(A) Peroxyacetyl nitrate
(B) Acrolein
(C) Chlorine nitrate
(D) Sulphuryl chloride

Answer: (C) Chlorine nitrate · The council's preliminary key

Q16 AP EAPCET 2025 · 27 May · Shift 1 MCQ

Which of the following statements is not correct ?

(A) Catalytic converters present in automobiles prevent the release of nitrogen oxide to the atmosphere.
(B) Photochemical smog is a mixture of smoke, fog and SO_2
(C) Chlorofluorocarbons damage ozone layer.
(D) Acid rain corrodes water pipes resulting in the leaching of heavy metals into the drinking water.

Answer: (B) Photochemical smog is a mixture of smoke, fog and SO_2 · The council's preliminary key

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Q17 AP EAPCET 2025 · 26 May · Shift 1 MCQ

Which one of the following gases is the major contributor to global warming ?

(A) CO
(B) CO_2
(C) CH_4
(D) N_2O

Answer: (B) CO_2 · The council's preliminary key

Q18 AP EAPCET 2025 · 26 May · Shift 2 MCQ

The incorrect statement from the following is

(A) Classical smog is also called reducing smog
(B) Common components of classical smog are O_3, NO, HCHO
(C) Photochemical smog leads to cracking of rubber and corrosion of metals
(D) Photochemical smog occurs in warm, dry and sunny climate

Answer: (B) Common components of classical smog are O_3, NO, HCHO · The council's preliminary key

Q19 AP EAPCET 2025 · 24 May · Shift 1 MCQ

Which one of the following statements related to photochemical smog is not correct?

(A) It is controlled by the use of catalytic converters in automobiles
(B) It causes corrosion of metals
(C) It is a mixture of SO_2, smoke and fog
(D) It causes extensive damage to plant life

Answer: (C) It is a mixture of SO_2, smoke and fog · The council's preliminary key

Q20 AP EAPCET 2025 · 23 May · Shift 1 MCQ

Match the following

List-I (Pollutant concentration limit in water)	List-II (Effect)
A) $Pb > 50$ ppb	I) Brown mottling of teeth
B) $SO_4^{2-} > 500$ ppm	II) 'Blue baby' syndrome
C) $NO_3^- > 50$ ppm	III) Laxative effect
D) $F^- > 2$ ppm	IV) Liver damage

The correct answer is

(A) A-IV, B-III, C-II, D-I
(B) A-IV, B-III, C-I, D-II
(C) A-III, B-IV, C-I, D-II
(D) A-II, B-III, C-IV, D-I

Answer: (A) A-IV, B-III, C-II, D-I · The council's preliminary key

Q21 AP EAPCET 2025 · 23 May · Shift 2 MCQ

Which of the following when present in excess in drinking water causes the disease methemoglobinemia ?

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(A) SO_4^{2-}
(B) NO_3^-
(C) F^-
(D) Pb

Answer: (B) NO_3^- · The council's preliminary key

Q22 AP EAPCET 2025 · 22 May · Shift 1 MCQ

Match the following

List-I (Metal in drinking water)	List-II (Maximum prescribed concentration in ppm)
A) Mn	I) 0.05
B) Zn	II) 3.0
C) Cd	III) 0.005
D) Cu	IV) 5.0

The correct answer is

(A) A-IV, B-II, C-I, D-III
(B) A-I, B-III, C-IV, D-II
(C) A-III, B-II, C-IV, D-I
(D) A-I, B-IV, C-III, D-II

Answer: (D) A-I, B-IV, C-III, D-II · The council's preliminary key

Q23 AP EAPCET 2025 · 22 May · Shift 2 MCQ

Among the following compounds, which one is not responsible for the depletion of ozone layer ?

(A) CH_4
(B) $CFC\ell_3$
(C) NO
(D) $C\ell_2$

Answer: (A) CH_4 · The council's preliminary key

Q24 AP EAPCET 2025 · 21 May · Shift 2 MCQ

Identify the air pollutant which in high concentration leads to stiffness of flower buds ?

(A) CO_2
(B) SO_2
(C) CO
(D) CH_4

Answer: (B) SO_2 · The council's preliminary key

Q25 TS EAPCET 2025 · 4 May · Shift 1 MCQ

Which of the following is not the common component of photochemical smog?

(A) Ozone
(B) Formaldehyde
(C) Acrolein
(D) Sulphur dioxide

Answer: (D) Sulphur dioxide · The council's preliminary key

Q26 TS EAPCET 2025 · 4 May · Shift 2 MCQ

Observe the following statements

Statement-I: The carbon containing components of photochemical smog are acrolein, methanal and PAN

Statement-II: The number of greenhouse gases in the list given below is 5

CH_4, CO_2, NO, H_2O (l), H_2O (g), O_2, O_3

The correct answer is

(A) Both statements I and II are correct
(B) Both statements I and II are not correct
(C) Statement I is correct, but statement II is not correct
(D) Statement I is not correct, but statement II is correct

Answer: (C) Statement I is correct, but statement II is not correct · The council's preliminary key

Q27 TS EAPCET 2025 · 3 May · Shift 1 MCQ

In drinking water, if the maximum prescribed concentration of copper is x mg dm^{-3}, the maximum prescribed concentration of zinc will be

(A) $\frac{15}{x}$
(B) $\frac{x}{15}$
(C) $\frac{6}{10}x$
(D) $\frac{5}{6}x$

Answer: (A) $\frac{15}{x}$ · The council's preliminary key

Q28 TS EAPCET 2025 · 3 May · Shift 2 MCQ

Which of the following is a lung irritant that can lead to an acute respiratory disease in children?

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(A) SO_2
(B) CO_2
(C) CO
(D) NO_2

Answer: (D) NO_2 · The council's preliminary key

Q29 TS EAPCET 2025 · 2 May · Shift 1 MCQ

Among the following compounds, which one is not primarily responsible for depletion of ozone layer in stratosphere?

(A) NO
(B) CF_2Cl_2
(C) CH_4
(D) Cl_2

Answer: (C) CH_4 · The council's preliminary key

Q30 TS EAPCET 2025 · 2 May · Shift 2 MCQ

Identify the correct statements from the following

I. Photochemical smog has high concentration of oxidising agents

II. NO_2 is present in classical smog

III. Higher concentration of SO_2 in air can cause stiffness of flower buds

IV. pH of rain water is approximately 7.5

(A) I & III
(B) I & II
(C) III & IV
(D) II & III

Answer: (A) I & III · The council's preliminary key

Q31 AP EAPCET 2024 · 23 May · Shift 1 MCQ

Which of the following is lung irritant?

(A) CO
(B) NO_2
(C) CO_2
(D) CH_4

Answer: (B) NO_2 · The council's preliminary key

Q32 AP EAPCET 2024 · 22 May · Shift 1 MCQ

Which of the following is/are estimated by titrating polluted water with potassium dichromate solution in acidic medium?

COD	BOD	DO
I	II	III

(A) I only
(B) II only
(C) II & III only
(D) I, II, III

Answer: (A) I only · The council's preliminary key

Q33 AP EAPCET 2024 · 22 May · Shift 2 MCQ

Match the pollutant in List I with its maximum permissible limit in drinking water given in List II

List I		List II	
A	Lead	I	500 ppm
B	Sulphate	II	50 ppm
C	Nitrate	III	50 ppb

Correct answer is

(A) A-II, B-III, C-I
(B) A-II, B-I, C-III
(C) A-III, B-I, C-II
(D) A-III, B-II, C-I

Answer: (C) A-III, B-I, C-II · The council's preliminary key

Q34 AP EAPCET 2024 · 21 May · Shift 1 MCQ

The BOD values for pure water and highly polluted water are respectively

(A) > 5 ppm, ≤ 17 ppm
(B) > 5 ppm, ≥ 17 ppm
(C) < 5 ppm, ≥ 17 ppm
(D) < 5 ppm, ≤ 17 ppm

Answer: (C) < 5 ppm, ≥ 17 ppm · The council's preliminary key

Q35 AP EAPCET 2024 · 20 May · Shift 1 MCQ

Match the following

List-I (F^- ion concentration in drinking water)	List-II (effects on humans)

A < 1 ppm	I Harmful to bones
B > 2 ppm	II Tooth decay
C > 10 ppm	III Brown mottling of teeth

Correct answer is

(A) A - III, B - II, C - I
(B) A - III, B - I, C - II
(C) A - II, B - I, C - III
(D) A - II, B - III, C - I

Answer: (D) A - II, B - III, C - I · The council's preliminary key

Q36 AP EAPCET 2024 · 20 May · Shift 2 MCQ

A metal catalyst (X) is used in the catalytic converter of automobiles. This prevents the release of gas Y into the atmosphere. What are X and Y respectively?

(A) Pd, NO_2
(B) Rh, CO_2
(C) Pt, N_2
(D) Ni, CH_4

Answer: (A) Pd, NO_2 · The council's preliminary key

Q37 AP EAPCET 2024 · 19 May · Shift 2 MCQ

Two statements are given below

I. In dry cleaning, the solvent $Cl_2C = CCl_2$ was earlier used and now it is replaced by liquefied CO_2

II. In bleaching of paper, H_2O_2 was used earlier and now it is replaced by chlorine gas

Correct answer is

(A) Statements I, II both are correct
(B) Statements I, II both are incorrect
(C) Statement I is correct but statement II is incorrect
(D) Statement I is incorrect but statement II is correct

Answer: (C) Statement I is correct but statement II is incorrect · The council's preliminary key

Q38 AP EAPCET 2024 · 18 May · Shift 1 MCQ

Arrange the following pesticides in the chronological order of their release into the market

Organophosphates A

organochlorides B

sodium chlorate C

(A) B, A, C
(B) B, C, A
(C) C, B, A
(D) A, B, C

Answer: (A) B, A, C · The council's preliminary key

Q39 TS EAPCET 2024 · 11 May · Shift 1 MCQ

Eutrophication can lead to

(A) Decrease in nutrients
(B) Increase in dissolved salts
(C) Decrease in dissolved oxygen
(D) Decrease in water pollution

Answer: (C) Decrease in dissolved oxygen · The council's preliminary key

Q40 TS EAPCET 2024 · 10 May · Shift 1 MCQ

Acrolein (X) is one of the chemicals formed when O_3 and NO_2 react with unburnt hydrocarbons present in the polluted air. The structure of 'X' is

(A) $CH_3 - CH = CH_2$
(B) $CH_2 = CH - CHO$
(C) $CH_2 = CH - CN$
(D) $CH_3CO(OO)NO_2$

Answer: (B) $CH_2 = CH - CHO$ · The council's preliminary key

Q41 TS EAPCET 2024 · 10 May · Shift 2 MCQ

Which of the following industries generate non-biodegradable wastes?

(A) Cotton mills
(B) Paper mills
(C) Thermal power plants
(D) Textile factories

Answer: (C) Thermal power plants · The council's preliminary key

Q42 TS EAPCET 2024 · 9 May · Shift 1 MCQ

The common components of photochemical smog are

(A) O_3, CH_4, CO_2
(B) O_3, CO_2, CO
(C) O_2, SO_3, PAN
(D) O_3, NO, PAN

Answer: (D) O_3, NO, **PAN** · The council's preliminary key

Q43 TS EAPCET 2024 · 9 May · Shift 2 MCQ

Methemoglobinemia is due to

(A) Excess of nitrate concentration in drinking water
(B) Excess of sulphate concentration in drinking water
(C) Excess of fluoride concentration in drinking water
(D) Excess of lead in drinking water

Answer: (A) Excess of nitrate concentration in drinking water · The council's preliminary key

Q44 AP EAPCET 2021 · 24 Aug · Shift 1 MCQ

Which region of the atmosphere is the domain of all living organisms?

(A) Troposphere
(B) Stratosphere
(C) Mesosphere
(D) Thermosphere

Answer: (A) Troposphere · The council's preliminary key

Q45 AP EAPCET 2021 · 24 Aug · Shift 2 MCQ

Which of the following practices will not come under green chemistry?
(i) Using soaps made of vegetable oils instead synthetic detergents, whenever possible.
(ii) Using H_2O_2 for bleaching purposes instead chlorine based bleaching agents.
(iii) Using liquefied CO_2 for dry cleaning clothes and laundry.
(iv) Using plastic cans for neatly storing substances

(A) (i) only
(B) (ii) only
(C) (iii) only
(D) (iv) only

Answer: (D) (iv) **only** · The council's preliminary key

Q46 AP EAPCET 2021 · 23 Aug · Shift 1 MCQ

Which gas among the following has the maximum global warming potential?

(A) CO_2
(B) SF_6
(C) CH_4
(D) N_2O

Answer: (B) SF_6 · The council's preliminary key

Q47 AP EAPCET 2021 · 23 Aug · Shift 2 MCQ

The secondary precursors of photo chemical smog are _____

(A) SO_2 & NO_2
(B) NO_2 & hydrocarbons
(C) NO_2 & PAN
(D) O_3 & PAN

Answer: (D) O_3 & PAN · The council's preliminary key

Q48 AP EAPCET 2021 · 20 Aug · Shift 1 MCQ

Which among the following is not a greenhouse gas?

(A) Nitrous oxide
(B) Water vapour
(C) Sulphur dioxide
(D) Methane

Answer: (C) Sulphur dioxide · The council's preliminary key

Q49 AP EAPCET 2021 · 20 Aug · Shift 2 MCQ

The main constituent of enamel on the surface of teeth is:

(A) $[3\ Ca_3(PO_4)_2 \cdot CaF_2]$
(B) $Ca_3(PO_4)_2 \cdot H_2O$
(C) $[3\ Ca_3(PO_4)_2 \cdot Ca(OH)_2]$
(D) CaF_2

Answer: (C) $[3\ Ca_3(PO_4)_2 \cdot Ca(OH)_2]$ · The council's preliminary key

Q50 AP EAPCET 2021 · 20 Aug · Shift 2 MCQ

Identify the coldest region among the following layers of atmosphere?

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(A) Troposphere
(B) Mesosphere
(C) Stratosphere
(D) Thermosphere

Answer: (B) Mesosphere · The council's preliminary key

Q51 AP EAPCET 2021 · 19 Aug · Shift 1 MCQ

Green chemistry refers to reactions which _____

(A) reduce the use and production of hazardous chemicals
(B) study of the extremely slow reactions
(C) are related to soil erosion
(D) Study of green leaves

Answer: (A) reduce the use and production of hazardous chemicals · The council's preliminary key

Q52 AP EAPCET 2021 · 19 Aug · Shift 2 MCQ

Which among the following has the highest concentration of PAN?

(A) Acid Rain
(B) Oxidizing Smog
(C) Reducing Smog
(D) Ozone

Answer: (B) Oxidizing Smog · The council's preliminary key

Q53 TS EAMCET 2021 · 6 Aug · Shift 1 MCQ

The fluoride ions make the enamel of teeth much harder by converting, which of the following substance / compound

(A) $[3Mg_3(PO_4)_2 \cdot Ca(OH)_2]$
(B) $[3Ca_3(PO_4)_2 \cdot Ca(OH)_2]$
(C) $[3Ca_3(PO_4)_2 \cdot CaF_2]$
(D) $[3Ca_3(PO_4)_2 \cdot MgCl_2]$

Answer: (B) $[3Ca_3(PO_4)_2 \cdot Ca(OH)_2]$ · The council's preliminary key

Q54 TS EAMCET 2021 · 6 Aug · Shift 2 MCQ

The reagent used in the determination of the chemical oxygen demand (COD) of water sample is

(A) Potassium permanganate
(B) Sulphuric acid
(C) Acidified Potassium dichromate
(D) Potassium dichromate

Answer: (C) Acidified Potassium dichromate · The council's preliminary key

Q55 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

Which of the given statements are correct, when carboxyheamoglobin reaches to 3-4% in blood?
I) Leads to headache
II) Results in cardiovascular problem
III) Increases the body temperature
IV) Leads to diarrhoea

(A) (I) and (II)
(B) (I) and (III)
(C) (III) and (IV)
(D) (II) and (III)

Answer: (A) (I) and (II) · The council's preliminary key

Q56 TS EAMCET 2021 · 5 Aug · Shift 2 MCQ

The indicator used during the estimation of COD of a water sample is

(A) EBT
(B) $K_2Cr_2O_7$
(C) Ferroin
(D) Phenopthalene

Answer: (C) Ferroin · Checked by our team

Q57 TS EAMCET 2021 · 5 Aug · Shift 2 MCQ

Mustard gas among the following is

(A) CCl_3NO_2
(B) $ClCH_2CH_2SCH_2CH_2Cl$
(C) CH_3SH
(D) H_2S

Answer: (B) $ClCH_2CH_2SCH_2CH_2Cl$ · The council's preliminary key

Q58 TS EAMCET 2021 · 4 Aug · Shift 1 MCQ

Which of the following chemicals can be used as dry cleaning agents?
a) $Cl_2C{=}CCl_2$

b) CO_2 (liq)
c) H_2O_2
d) CH_3CHO

(A) a, b, c and d
(B) a, b and c only
(C) b, c and d only
(D) a and b only

Options (2) or (4) were accepted. More than one answer was accepted. · The council's preliminary key

Q59 TS EAMCET 2021 · 4 Aug · Shift 2 MCQ

Ozone is formed in the upper atmosphere by a photochemical reaction with O_2 in the presence of

(A) Ultraviolet solar radiation
(B) Infrared radiation
(C) Visible light
(D) Microwave radiation

Answer: (A) Ultraviolet solar radiation · The council's preliminary key

Q60 AP EAMCET 2020 · 7 Oct · Shift 1 MCQ

BOD means

(A) The amount of oxygen utilized by organisms in water
(B) The amount of oxygen utilized by microorganisms for decomposition
(C) The total amount of oxygen present in water
(D) The amount of oxygen decomposed by organisms in water

Answer: (B) The amount of oxygen utilized by microorganisms for decomposition · The council's preliminary key

Q61 AP EAMCET 2020 · 22 Sep · Shift 2 MCQ

DDT is _____

(A) An antibiotic
(B) Biodegradable pollutant
(C) Non-Biodegradable pollutant
(D) Nitrogen containing insecticide

Answer: (C) Non-Biodegradable pollutant · The council's preliminary key

Q62 AP EAMCET 2020 · 21 Sep · Shift 1 MCQ

In an agricultural field, which among the following is the highest producer of methane

(A) Wheat crop
(B) Paddy crop
(C) Cotton crop
(D) Groundnut Crop

Answer: (B) Paddy crop · The council's preliminary key

Q63 AP EAMCET 2020 · 17 Sep · Shift 1 MCQ

The insecticide DDT is considered as _____

(A) Greenhouse gas
(B) Biodegradable pollutant
(C) Non-biodegradable pollutant
(D) A fertilizer

Answer: (C) Non-biodegradable pollutant · The council's preliminary key

Q64 TS EAMCET 2020 · 14 Sep · Shift 2 MCQ

Acid rain is mainly caused by the emissions of which of the following gases?
(i) Sulphur dioxide
(ii) Carbon dioxide
(iii) Nitrogen dioxide
(iv) Methane

(A) (i) and (ii) only
(B) (i), (ii) and (iii) only
(C) (i) and (iii) only
(D) (i), (ii), (iii) and (iv)

Answer: (C) (i) and (iii) only · Official TGCHE final key

Q65 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

Which of the following molecules is present in photochemical smog?

(A) SO_2
(B) NO_2
(C) CO_2
(D) CO

Answer: (B) NO_2 · Official TGCHE final key

Q66 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

The average atmospheric residence time is lowest for which of the given the greenhouse gas?

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(A) Carbon dioxide
(B) Methane
(C) Nitrous oxide
(D) Freon

Answer: (B) Methane · Official TGCHE final key

Q67 TS EAMCET 2020 · 10 Sep · Shift 1 MCQ

Biochemical Oxygen Demand (BOD) is a measure of organic materials present in water. BOD value less than 5 ppm indicates a water sample to be

(A) Rich in dissolved oxygen
(B) Poor in dissolved oxygen
(C) Highly polluted
(D) Not suitable for aquatic life

Answer: (A) Rich in dissolved oxygen · Official TGCHE final key

Q68 TS EAMCET 2020 · 10 Sep · Shift 2 MCQ

Which of the following is air pollutant?

(A) Pesticides
(B) Phosphates
(C) Biphenyls
(D) Oxides of sulphur

Answer: (D) Oxides of sulphur · Official TGCHE final key

Q69 TS EAMCET 2020 · 9 Sep · Shift 1 MCQ

The consequence of global warming may be the following

(A) Decrease in average temperature of the earth
(B) Melting of Himalayan glaciers
(C) Eutrophication
(D) Increased biochemical oxygen demand

Answer: (B) Melting of Himalayan glaciers · Official TGCHE final key

Q70 TS EAMCET 2020 · 9 Sep · Shift 2 MCQ

Which among the following is not the components of photochemical smog?

(A) NO_2
(B) Formaldehyde
(C) SO_2
(D) O_3

Answer: (C) SO_2 · Official TGCHE final key

Q71 TS EAMCET 2019 · 6 May · Shift 1 MCQ

Match the following.
List - I
A) Bleaching of paper
B) Eye Irritant
C) Freons
D) Herbicide
List - II
I) CF_2Cl_2
II) H_2O_2
III) Na_3AsO_3
IV) PAN
V) CO_2
The correct answer is

(A) A-III, B-V, C-IV, D-II
(B) A-IV, B-II, C-I, D-III
(C) A-II, B-IV, C-III, D-I
(D) A-II, B-IV, C-I, D-III

Answer: (D) A-II, B-IV, C-I, D-III · Official TGCHE final key

Q72 TS EAMCET 2019 · 4 May · Shift 1 MCQ

The irritant red haze in traffic and congested places is due to

(A) CO_2
(B) O_3
(C) SO_x (oxides of sulphur)
(D) NO_x (oxides of nitrogen)

Answer: (D) NO_x **(oxides of nitrogen)** · Official TGCHE final key

Q73 TS EAMCET 2019 · 4 May · Shift 2 MCQ

Consider the following reactions involving some atmospheric pollutants.

$$NO + O_3 \longrightarrow NO_2 + O_2 \xrightarrow{h\nu} NO + O_3$$

$$4NO_2 + O_2 + 2H_2O \longrightarrow 4HNO_3$$

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$3CH_4 + 2O_3 \longrightarrow 3H_2C{=}O + 3H_2O$

Based on the above, the formation of formaldehyde from methane in the atmosphere will be controlled by

(A) Only O_3
(B) O_3 and NO_2
(C) O_3, NO and NO_2
(D) NO and NO_2

Answer: (C) O_3, NO and NO_2 · Official TGCHE final key

Q74 TS EAMCET 2019 · 3 May · Shift 1 MCQ

What is the formula of the product formed when F^- reacts with enamel on teeth?

(A) $CaSO_4 \cdot CaF_2$
(B) $3Ca_3(PO_4)_2 \cdot PF_5$
(C) $Ca_2SO_4 \cdot CaF_2$
(D) $3[Ca_3(PO_4)_2 \cdot CaF_2]$

Answer: (D) $3[Ca_3(PO_4)_2 \cdot CaF_2]$ · Official TGCHE final key

Q75 TS EAMCET 2019 · 3 May · Shift 2 MCQ

Match the following.
List - I List - II
A) SO_2
B) PAN
C) Smoke
D) CF_2Cl_2
I) Photochemical smog
II) Acid rain
III) Stratospheric pollutant
IV) Particulate
The correct answer is

(A) A-IV, B-III, C-I, D-II
(B) A-III, B-I, C-IV, D-II
(C) A-IV, B-I, C-III, D-II
(D) A-II, B-I, C-IV, D-III

Answer: (D) A-II, B-I, C-IV, D-III · Official TGCHE final key

Q76 AP EAMCET 2019 · 23 Apr · Shift 1 MCQ

Identify the correct statements from the following:
i. In the presence of UV light, $CF_2Cl_2(g)$ gives chlorine free radicals which will react with $O_3(g)$ to

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form $O_2(g)$
ii. Drinking water with 10 ppm fluoride is better than drinking water with 1 ppm fluoride
iii. The maximum permissible concentration of lead in drinking water is 50 ppb

(A) i, ii, iii
(B) i, ii only
(C) ii, iii only
(D) i, iii only

Answer: (D) i, iii only · Official APSCHE final key

Q77 AP EAMCET 2019 · 22 Apr · Shift 1 MCQ

Acid rain is caused by the presence of X and Y in air. X, Y are respectively

(A) SO_2, NO_2
(B) CFC, O_3
(C) CO, CFC
(D) SO_2, O_3

Answer: (A) SO_2, NO_2 · Official APSCHE final key

Q78 AP EAMCET 2019 · 22 Apr · Shift 2 MCQ

The concentration of fluoride ions in drinking water upto 1 ppm make the enamel on teeth much harder by converting $\underline{X}$ into fluorapatite. What is $\underline{X}$?

(A) $[3Ca_3(PO_4)_2 \cdot CaF_2]$
(B) $[3Ca_3(PO_4)_2 \cdot Ca(OH)_2]$
(C) $[3Ca(OH)_2 \cdot Ca_3(PO_4)_2]$
(D) $[Ca_3(PO_4)_2 \cdot 3CaF_2]$

Answer: (B) $[3Ca_3(PO_4)_2 \cdot Ca(OH)_2]$ · Official APSCHE final key

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Q79 AP EAMCET 2019 · 21 Apr · Shift 1 MCQ

Match the following.
List - I
A) Insecticide
B) $K_2Cr_2O_7$ / 50% H_2SO_4
C) Bleaching of cloths and paper
D) Eye Irritant
List - II
I) COD
II) PAN
III) Na_3AsO_3
IV) BOD

V) H_2O_2

The correct answer is

(A) A-III, B-IV, C-V, D-II

(B) A-III, B-I, C-V, D-II

(C) A-III, B-I, C-II, D-V

(D) A-V, B-I, C-III, D-II

Answer: (B) A-III, B-I, C-V, D-II · Official APSCHE final key

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Q80 AP EAMCET 2019 · 20 Apr · Shift 1 MCQ

The non-biodegradable waste formed in fertilizer industries is

(A) fly ash

(B) carbon monoxide

(C) gypsum

(D) lead

Answer: (C) gypsum · Official APSCHE final key

Q81 AP EAMCET 2019 · 20 Apr · Shift 2 MCQ

Which one of the following statements is **not** correct?

(A) NO_2 is a lung irritant

(B) The municipal sewage has BOD value of 100 - 4000 ppm

(C) Main source of CO is automobile exhaust fumes

(D) COD is the measure of bacteria in water

Answer: (D) COD is the measure of bacteria in water · Official APSCHE final key

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Q82 TS EAMCET 2018 · 7 May · Shift 1 MCQ

Which of the following statements about smog is/are correct?

a) Smog formed on sunny days contain oxidizing molecules

b) Photochemical smog contains many reactive molecules

c) The main polluting components of smog are oxides of carbon

d) The presence of carbon monoxide in air leads to the formation of ozone in smog

(A) a, c

(B) a, b

(C) b, d

(D) Only b

Answer: (B) a, b · The council's preliminary key

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Q83 TS EAMCET 2018 · 5 May · Shift 1 MCQ

Identify the reactions that occur in photochemical smog

a) $CH_2{=}O + H_2 \longrightarrow CH_3OH$

b) $NO_{2(g)} \xrightarrow{h\nu} NO_{(g)} + O_{(g)};\ O_{(g)} + O_{2(g)} \longrightarrow O_{3(g)}$

c) $3CH_4 + 2O_3 \longrightarrow 3CH_2{=}O + 3H_2O$

d) $NO_{(g)} + O_{3(g)} \longrightarrow NO_{2(g)} + O_{2(g)}$

(A) b, c, d

(B) a, b, c

(C) a, b, d

(D) a, c, d

Answer: (A) b, c, d · The council's preliminary key

Q84 TS EAMCET 2018 · 5 May · Shift 2 MCQ

Pure water would have a BOD value of

(A) about 1 ppm

(B) 5-10 ppm

(C) 10-15 ppm

(D) 15-20 ppm

Answer: (A) about 1 ppm · The council's preliminary key

Q85 TS EAMCET 2018 · 4 May · Shift 1 MCQ

When vegetation is burnt in the absence of oxygen, which of the following will be formed?

(A) CH_4

(B) $H_2C = CH_2$

(C) $H - C \equiv C - H$

(D) $H_3C - CH_3$

Answer: (A) CH_4 · The council's preliminary key

Q86 TS EAMCET 2018 · 4 May · Shift 2 MCQ

Which of the following chemicals is NOT involved in photochemical smog formation

(A) SO_2

(B) O_3

(C) NO_2

(D) NO

Answer: (A) SO_2 · The council's preliminary key

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Q87 AP EAMCET 2018 · 24 Apr · Shift 1 MCQ

Match the following.
List - I
A) Methemaglobinemia
B) Kidney damage
C) Bones and teeth damage
D) Growth of fish is stopped
List - II
I) 1 ppm of dissolved oxygen in water
II) 1000 ppb of lead in drinking water
III) BOD of drinking water is 2 ppm
IV) 2000 ppm of nitrates in drinking water
V) 50 ppm of fluoride in drinking water
The correct answer is

(A) A-IV, B-II, C-V, D-I
(B) A-IV, B-III, C-V, D-I
(C) A-IV, B-II, C-I, D-V
(D) A-III, B-II, C-I, D-V

Answer: (A) A-IV, B-II, C-V, D-I · The council's preliminary key

Q88 AP EAMCET 2018 · 24 Apr · Shift 2 MCQ

Methemoglobinemia is caused by the presence of X in drinking water. X is

(A) 1000 ppm of sulphate
(B) 20 ppm of fluoride
(C) 200 ppm of nitrate
(D) 50 ppb of lead

Answer: (C) 200 ppm of nitrate · The council's preliminary key

Q89 AP EAMCET 2018 · 23 Apr · Shift 1 MCQ

Methane of the polluted air reacts with ozone and forms the compounds
(see the figure above)

Question Number : 135 Question Id : 4557344135 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Methane of the polluted air reacts with ozone and forms the compounds

కాలుష్య గాలిలో ఉండే మీథేన్, ఓజోన్‌తో చర్యనొంది ఏర్పరచే సమ్మేళనాలు

Options :

1. $H-\underset{\underset{O}{\|}}{C}-H\,,\,CO_2$

2. $H-\underset{\underset{O}{\|}}{C}-H\,,\,CH_2=CH-CHO$

3. $CH_2=CH-CHO\,,\,C_2H_5CHO$

4. $CO_2\,,\,H_2O$

(A) *see figure*

(B) *see figure*

(C) $CH_2 = CH - CHO,\ C_2H_5CHO$

(D) $CO_2,\ H_2O$

Answer: (B) · The council's preliminary key

Q90 AP EAMCET 2018 · 23 Apr · Shift 2 MCQ

The chemical substance of photochemical smog responsible for eye irritation is

(A) $CH_2 = CH - CHO$

(B) $CH_3 - C(=O) - O - O - NO_2$

(C) $CH_2 = CH_2$

(D) CH_4

Answer: (B) $CH_3 - C(=O) - O - O - NO_2$ · The council's preliminary key

Q91 AP EAMCET 2018 · 22 Apr · Shift 2 MCQ

Which of the following is **not** a greenhouse gas?

(A) CO_2

(B) O_3

(C) CH_4

(D) N_2

Answer: (D) N_2 · The council's preliminary key

Q92 AP EAMCET 2017 · 26 Apr · Shift 1 MCQ

Which of the following forms holes in the Ozone layer?

(A) SO_2
(B) CO_2
(C) CO
(D) CF_2Cl_2

Answer: (D) CF_2Cl_2 · The council's preliminary key

Q93 AP EAMCET 2017 · 26 Apr · Shift 2 MCQ

The COD of water sample is determined using

(A) 50% H_2SO_4, $K_2Cr_2O_7$
(B) 50% NaOH, $K_2Cr_2O_7$
(C) 50% CH_3COOH, $KMnO_4$
(D) 50% H_2SO_4, $FeSO_4$

Answer: (A) 50% H_2SO_4, $K_2Cr_2O_7$ · The council's preliminary key

Q94 AP EAMCET 2017 · 25 Apr · Shift 1 MCQ

The growth of fish gets inhibited, if the concentration of dissolved oxygen is below X ppm. The value of X is

(A) 6
(B) 8
(C) 9
(D) 10

Answer: (A) 6 · The council's preliminary key

Q95 AP EAMCET 2017 · 25 Apr · Shift 2 MCQ

From the following, identify the reactions which are responsible for depletion of ozone layer.

a) $Cl\dot{O}(g) + NO_2(g) \rightarrow ClONO_2(g)$
b) $CF_2Cl_2(g) \xrightarrow{uv} \dot{C}l(g) + \dot{C}F_2Cl(g)$
c) $\dot{C}l(g) + CH_4(g) \rightarrow HCl(g) + \dot{C}H_3(g)$
d) $\dot{C}l(g) + O_3(g) \rightarrow Cl\dot{O}(g) + O_2(g)$
e) $Cl\dot{O}(g) + O(g) \rightarrow \dot{C}l(g) + O_2(g)$

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(A) a, c, d
(B) a, b, c
(C) b, d, e
(D) b, c, d

Answer: (C) b, d, e · The council's preliminary key

Q96 AP EAMCET 2017 · 24 Apr · Shift 1 MCQ

Identify the correct statements from the following
a) BOD value of clean water is less than 5 ppm
b) Oxidation of ethene in the presence of Pd^{2+} catalyst in aqueous medium gives acetic acid
c) Photochemical smog causes damage to plant life
d) Reducing smog is a mixture of smoke, fog and SO_2

(A) a, b, c
(B) b, c, d
(C) a, c, d
(D) a, b, d

Answer: (C) a, c, d · The council's preliminary key

Q97 AP EAMCET 2017 · 24 Apr · Shift 2 MCQ

Which of the following statements are correct?
a) F^- ion concentration above 2 ppm causes brown mottling of teeth
b) The maximum limit of nitrate in drinking water is 400 ppm
c) Depletion of ozone layer leads to cataract and skin cancer
d) The irritant red haze in the traffic is due to oxides of sulphur

(A) b, c
(B) a, d
(C) b, d
(D) a, c

Answer: (D) a, c · The council's preliminary key

Q98 TS EAMCET 2016 · 15 May · Offline MCQ

In environmental chemistry the medium which is affected by a pollutant is called as the _____.

(A) Sink
(B) Slag
(C) Solvent
(D) Receptor

Answer: (D) Receptor · Official TGCHE final key

Q99 AP EAMCET 2016 · 29 Apr · Offline MCQ

Which of the following causes "Blue baby syndrome"

(A) High concentration of lead in drinking water
(B) High concentration of sulphates in drinking water
(C) High concentration of nitrates in drinking water
(D) High concentration of copper in drinking water

Answer: (C) High concentration of nitrates in drinking water · The council's preliminary key

Q100 AP EAMCET 2014 · 22 May · Offline MCQ

What are X and Y in the following reaction ?

$CF_2Cl_2 \xrightarrow{uv} X + Y$

(A) $\dot{C}F_2Cl$, $\dot{C}l$
(B) C_2F_4, Cl_2
(C) $\dot{C}FCl_2$, $\dot{F}$
(D) : CCl_2, F_2

Answer: (A) $\dot{C}F_2Cl$, $\dot{C}l$ · The council's preliminary key

Q101 AP EAMCET 2013 · 10 May · Offline MCQ

Cataract and skin cancer are caused by _____.

(A) Depletion of Nitric oxide
(B) Depletion of Ozone layer
(C) Increase in Methane
(D) Depletion of Nitrous oxide

Answer: (B) Depletion of Ozone layer · The council's preliminary key

Q102 AP EAMCET 2012 · 12 May · Offline MCQ

The pair of gases responsible for acid rain are

(A) H_2, O_3
(B) H_4C, O_3
(C) NO_2, SO_2
(D) CO, CH_4

Answer: (C) NO_2, SO_2 · Official APSCHE final key

Q103 AP EAMCET 2011 · 8 May · Offline MCQ

Which one of the following is not a green-house gas ?

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(A) CO_2
(B) N_2O
(C) O_3
(D) N_2

Answer: (D) N_2 · The council's preliminary key

Q104 AP EAMCET 2010 · 30 May · Offline MCQ

The acceptable level of carbon monoxide gas (CO) in the atmosphere in ppm level is :

(A) 9
(B) 250
(C) 49
(D) 850

Answer: (A) 9 · Official APSCHE final key

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