

APOLLO

Atmosphere

FBISE Chemistry Class 9 (SSC-I)

Domain D: Environmental Chemistry

19 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

29.	Which gas cannot be removed from the exhaust gases of a petrol-powered car by its catalytic converter?	carbon dioxide	carbon monoxide	hydrocarbons	nitrogen dioxide
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30.	Which noble gas is present in the largest percentage by volume in air?	argon	helium	krypton	neon
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Scenario for MCQ (57-60)		In a busy city, heavy traffic releases gases like carbon monoxide (CO), carbon dioxide (CO₂), and nitrogen oxides (NO_x). People living near roads often complain of breathing problems.			
57.	Which gas is most dangerous because it binds with haemoglobin?	CO ₂	CO	NO ₂	SO ₂

Scenario for MCQ (57-60)		In a busy city, heavy traffic releases gases like carbon monoxide (CO), carbon dioxide (CO₂), and nitrogen oxides (NO_x). People living near roads often complain of breathing problems.			
58.	Why is carbon monoxide toxic?	It increases oxygen supply	It forms carboxyhemoglobin reducing oxygen transport	It destroys the red blood cells completely upon contact	It damages the lung tissues

Scenario for MCQ (57-60)		In a busy city, heavy traffic releases gases like carbon monoxide (CO), carbon dioxide (CO₂), and nitrogen oxides (NO_x). People living near roads often complain of breathing problems.			
59.	Which gas contributes most to global warming among these?	CO	CO ₂	NO ₂	SO ₂

Scenario for MCQ (57-60)	In a busy city, heavy traffic releases gases like carbon monoxide (CO), carbon dioxide (CO₂), and nitrogen oxides (NO_x). People living near roads often complain of breathing problems.				
60.	What is the main source of nitrogen oxides in cities?	Burning household garbage in residential areas.	Motor vehicles and the combustion of fossil fuels.	Industrial wastewater treatment plants.	The widespread use of air conditioners and refrigerators

First Annual 2025 | Section B Q2(ix) OR | 3 marks

How a closed system may contribute to the establishment of equilibrium in reversible reactions? Give one example.	1+2	OR	How do the following air pollutants cause harm? درج شدہ ہوائی آلودگیاں کیسے نقصان دہ ہیں؟ a) Carbon monoxide کاربن مونو آکسائیڈ b) Methane میتھین	03
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First Annual 2025 | Section B Q2(iv) | 3 marks

(iv)	How do the following air pollutants cause harm? درج شدہ ہوائی آلودگیاں کیسے نقصان دہ ہیں؟ a) Carbon monoxide کاربن مونو آکسائیڈ b) Sulfur dioxide سلفر ڈائی آکسائیڈ	03	OR	Briefly describe the harm caused by each of the following air pollutants. ا) کاربن مونو آکسائیڈ ب) سلفر ڈائی آکسائیڈ ج) ...
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Second Annual 2025 | Section A Q11 | 1 mark

11. Catalytic converters help in controlling the emission of:	Cl_2	N_2, O_2	CO, NO	He
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Second Annual 2025 | Section B Q2(iv) | 3 marks

(iv)	What is meant by Greenhouse effect? Enlist any two greenhouse gases. گرین ہاؤس ایفیکٹ سے کیا مراد ہے؟ کوئی سی دو گرین ہاؤس گیسز کے نام لکھیں۔	2+1
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First Annual 2026 | Section A Q9 | 1 mark

9. The approximate percentage of nitrogen (N ₂) in clean, dry air is:	10%	21%	78%	90%
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First Annual 2026 | Section A Q10 | 1 mark

10. Sulfur dioxide (SO ₂) is released into the air during:	Use of catalytic converters in cars and vehicle	Combustion of fossil fuels containing sulfur compounds	Melting of ice on glaciers	Rusting of iron in industry
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First Annual 2026 | Section A Q8 | 1 mark

The percentage of oxygen in clean, dry air is about:	21%	50%	78%	92%
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Carbon monoxide and particulates are mainly produced by:	Complete combustion	Incomplete combustion	Plant respiration	Evaporation
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Sulfur contributes to acid rain mainly by forming:	HNO ₃	H ₂ CO ₃	HCl	H ₂ SO ₄
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(x)	What is the purpose of using catalytic converters in vehicles?	To increase fuel consumption	To reduce harmful gases in exhaust	To make cars run faster	To add more sulfur dioxide to the air
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(xi)	Which compound is most likely to damage marble buildings due to the reaction with acid rain?	CaSO ₄	Ca(NO ₃) ₂	CaCO ₃	CaC ₂ O ₄
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Attempt the following parts:

(11 x 3 = 33)

سوال نمبر 2 درج شدہ اجزاء کے مختصر جوابات تحریر کریں۔

How acid rain damages marble structures. Write reactions of sulphuric and nitric acids.	1.5 +	OR	Draw the structural formula of CH ₃ OH and identify functional group in it.	2+1
تیزابی بارش سنگ مرمر کی عمارتوں کو کس طرح نقصان پہنچاتی ہے؟ سلفیورک اور نائٹریک ایسڈ کے ری ایکشن لکھیں۔	1.5		CH ₃ OH کا سٹرکچرل فارمولہ بنائیں نیز اس میں فنکشنل گروپ کی پہچان کریں۔	

Increased levels of methane contribute to global warming and climate change. How?	03
میٹھن کی مقدار میں اضافہ عالمی حرارت (Global Warming) اور موسمیاتی تبدیلی میں کردار ادا	