

APOLLO

Hydrocarbons

FBISE Chemistry Class 9 (SSC-I)

Domain E: Organic Chemistry

21 questions | questions

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

26.	Alkanes are a homologous series of organic compounds. Which statement about alkanes is correct?	Their boiling points increase as the length of the carbon chain increases	Their general formula is C_nH_{2n}	They are unsaturated hydrocarbons	They take part in addition reactions
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First Annual 2025 | Section B Q2(v) OR | 3 marks

OR	Give chemical reactions of alkanes for: اگیز کے درج شدہ ری ایکشن تحریر کریں۔ a) Complete combustion مکمل کسجین b) Incomplete combustion نامکمل کسجین	1.5 + 1.5
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First Annual 2025 | Section C Q4 OR | 6 marks

OR	How can alkanes be prepared by the following? Give a balanced chemical equation for each: اگیز کیسے درج شدہ بنائے جاسکتے ہیں؟ کیمیائی ری ایکشن لکھیں۔ a) Alkynes الکاکنز b) Alkyl halide الکاگل ہالائیڈ	3x2
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First Annual 2025 | Section B Q2(v) OR | 3 marks

03	OR	Write the reactions of CH_4 with Cl_2 in: CH_4 کے Cl_2 کے ساتھ درج کردہ ری ایکشن لکھیں۔ a) In diffused sunlight/UV light ڈیفوزڈ یا UV لائٹ میں b) In direct sunlight سورج کی براہ راست روشنی میں	1.5 + 1.5
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First Annual 2025 | Section C Q4 OR | 6 marks

OR	Explain the preparation of alkanes by given methods: اگیز کی درج شدہ طریقوں سے تیاری بیان کریں: a) Hydrogenation of alkenes اگیز کی ہائیڈروجنیشن سے b) Cracking of larger hydrocarbons	3x2
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Second Annual 2025 | Section A Q4 | 1 mark

4.	Which of the following is a saturated hydrocarbon? ...	$CH_2 = CH_2$	$CH_2 = CHCl$	$CH \equiv CH$	$CH_3 - CH_3$
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Second Annual 2025 | Section B Q2(v) OR | 3 marks

OR	What is meant by substitution reaction. Write chemical equation for halogenation of methane. ...	1+2
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What are alkanes? Why are they generally unreactive? Write any two methods of preparation of alkanes along with chemical equations.	1+1 +4
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An alkane is most likely to undergo:	Addition reaction	Neutralization reaction	Dehydration reaction	Substitution reaction
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1.5 + 1.5	OR	What are substitution reactions? Which type of compounds shows these reactions?	2+1
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OR	How ethane can be prepared by: a. Hydrogenation of alkynes b. Reduction of alkyl Halides	3+3
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Reduction of propyl chloride mainly produces:	Propene	Propane	Methane	Propyne
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(x)	Why are alkanes called saturated hydrocarbons? Write their general formula to determine their molecular formula.	2+1	OR	What is meant by nutrition? Why is healthy eating important for the human body?	1+2
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OR	What are substitution reactions? Why alkanes show substitution reactions? Illustrate the monosubstituted product formed from Methane when it reacts with Cl_2 .	2+2 +2
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11. Which compound is an alkane?	C_2H_4	C_4H_{10}	C_2H_2	C_3H_6
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12. Substitution reactions commonly occur in:	Alkanes	Alkynes	Alkenes	Aldehydes
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(x)	Write chemical equations for the combustion of methane: a. In limited supply of oxygen b. In excess supply of oxygen	1.5 + 1.5
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(iv)	Suggest the correct reagents in the reduction of alkyl halides.	Al_2O_3 at 350°C	Conc. H_2SO_4 at 170°C	Zn + Dust	Zn + HCl
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OR	How can sunlight be important in substitution reaction of methane with chlorine? Explain with reactions.	1+2
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OR	How alkanes can be prepared from the following and also mention the type of reactions in each case. A. $\text{CH}_3 - \text{C} = \text{CH}_2$ B. $\text{CH}_3 - \text{C} \equiv \text{C} - \text{CH}_3$ C. $\text{CH}_3\text{CH}_2\text{CH}_2\text{Cl}$	2x3
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Why alkanes are generally considered unreactive? Explain in context of their structure. Alkaneز (Alkanes) کو عموماً غیر فعال کیوں سمجھا جاتا ہے؟ ان کی ساخت کے حوالے سے وضاحت	03
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