

Aliphatic Hydrocarbons

Sr	Questions	Answers Choice
1	Hydrocarbons are divided into aliphatic, alicyclic and aromatic which structure among the following show an alicyclic hydrocarbon	
2	Question Image	A. 2, 3-dimethylbutane B. 2, 3-methylbutane C. 2-dimethylbutane D. Dimethylbutane
3	The saturated hydrocarbons usually end with suffix _____	A. Ane B. Ene C. Yne D. Oic
4	Question Image	A. Pent -1-ene-3-yne B. 2-pentyne-4-ene C. 1-pentene-3-yne D. Pent-2-yen-4-ene
5	The hydrocarbons having double bonds normally end with suffix	A. Ane B. Ene C. Yne D. Oic
6	The Total coal resources of Pakistan are estimated to be	A. 184 billion B. 184 million tones C. 1.84 billion tounes D. 1.84 million tonnes
7	Alkanes are generally not reactive towards acids, alkalis, oxidation or reuducing agents. They however undergo some reactions, which one is the reaction undergone by alkanes	A. Elemination B. Addition C. Free radical substitution D. Nucleophilic substation
8	What is not a common use of methane	A. As a fuel B. For the preparation of haloaklanes C. For the preparation of methyl alcohol D. For the preparation of sulphuric acid
9	The temp. used for the hydrogenation of alkenes using Ni is	A. 2000°C B. 400°C C. 200-- 300°C D. 1000°C
10	Which is the used as test for the presence of alkenes	A. Reaction of cold dilute alkaline KMnO_4 B. Combustion C. Polymerization D. Catalytic hydrogenation
11	Hydrocarbons are organic compounds which contain elements such as	A. Hydrogen B. Carbon C. Hydrogen and carbon D. Halogens
12	To differentiate isomers we use	A. n- B. iso- C. neo D. All of them
13	Paraffins are also called	A. Alkanes B. Alkynes C. Alkenes D. None of these
14	Replacement of hydrogen by NO_2 group is called	A. Sulphonatioin B. Hydration C. Nitration D. Cracking
15	The process in which orbitals of different energies and shapes mix with each other to give equivalent hybrid orbitals is called	A. Isomerization B. polymerization C. Hybridization D. None

		D. Resonance
16	Nitroalkane are used in	A. Fuel B. Solvents C. Organic synthesis D. All of them
17	When acetylene is passed through a copper tube at 300°C, it polymerizes to	A. Polyacetylene B. polyethylene C. Benzene D. None of these
18	Sp ³ hybird orbitals are oriented at an angle of	A. 107.5° B. 108.5° C. 109.5° D. 103.5°
19	Hydrogenation of alkenes/alkynes inthe presence of Ni as catalyst at 3000°C result in the formation of corresponding alkanes. This reaction is known as	A. Sabatier-senderens reaction B. kolbes reaction C. Cannizaro's reaction D. Haloform reaction
20	The general formula of alkane is	A. C_nH_{2n+2} B. C_nH_n C. C_nH_{2n} D. $C_{2n}H_{2n-1}$
21	Alkenes normally have _____ geometry	A. Tetrachedral B. Linear C. Planer D. None
22	In CH ₄ , all the H-C-H bond angles are	A. 120° B. 107° C. 109° D. 109.5°
23	Zn + HCl are used in	A. Clemenson reduction B. Wof kishner reduction C. Kolb's electrolysis D. Wutruz reaction
24	Alkyl halides when reduced with nascent hydrogen in the presence of Zn + HCl, are converted to	A. Alkynes B. Alkenes C. Alkanes D. Alcohol
25	When an aqueous solution of potassium salt of monocarboxylic acid is subjected to electrolysis, corresponding alkane is formed. This reation is known as	A. Cannizaro reaction B. Sabatier-secdereens reaction C. Alkylation D. Kolbe's reaction
26	Ethylene can be prepared in the laboratory by heating together ethyl alcohol and	A. HCl B. Phenol C. HF D. H_2SO_4
27	The elimination of HX from adjacent carbon atoms is called	A. Halogenations B. Hydrohalogenation C. Dehydrohalogenation D. Hydration
28	Alkenes combine readily with electrophillic reagents such as halogens giving	A. Haloalkanes B. Gem-dihalides C. Vicinal dihalides D. Vinyl halides
29	Ethylene combines with water in the presence of H ₂ SO ₄ + HgSO ₄ and forms	A. Ethyle chloride B. Ethyle alcohol C. Carboxylic acid D. None of these
30	C ₁₈ and onward hydrocarbons are normally	A. Gases B. Liquids C. Solids D. Plasma
31	Ethylene polymerizes at 100 atm pressure and 400°C to give	A. Polybenzene B. Polyalcohol C. Polypropylene D. Polyethylene
32	Ethylene decolorizes cold dilute solution of KMnO ₄ . This test is known as	A. Colouration test B. Baeyer's test C. Silver mirror test D. Ring test
33	When ethane is heated with chlorine in the presence of light, it produces	A. Methane B. Ethane

33	Which of the following decolorized Br ₂ -water	<p>A. Ethane</p> <p>C. Ethene</p> <p>D. Propane</p>
34	Which gas is produced by treating CaC ₂ with water	<p>A. Methane</p> <p>B. Ethane</p> <p>C. Acetylene</p> <p>D. HCl</p>
35	Which gas is used for welding purposes	<p>A. Butane</p> <p>B. Nitrogen</p> <p>C. Methane</p> <p>D. Acetylene</p>
36	Acetylene when treated with 10% H ₂ SO ₄ in the presence of HgSO ₄ adds one molecule of water to form	<p>A. Aldehydes</p> <p>B. Esters</p> <p>C. Alcohols</p> <p>D. Acids</p>
37	Acetylene is used in the manufacture of	<p>A. Rubber</p> <p>B. Plastic</p> <p>C. Ethyl alcohol</p> <p>D. All of these</p>
38	The molecule of ethane possesses which hybridization	<p>A. sp³</p> <p>B. sp²</p> <p>C. sp</p> <p>D. sp²d</p>
39	The sp ² hybrid orbitals are oriented in space at one angle	<p>A. 180°</p> <p>B. 109.5°</p> <p>C. 100°</p> <p>D. 120°</p>
40	The geometry of acetylene is	<p>A. Angular</p> <p>B. Bent</p> <p>C. Trigonal</p> <p>D. Linear</p>
41	When n-hexane is heated in the presence of Pt at 500°C, it cyclizes to give	<p>A. Benzene</p> <p>B. Cyclohexene</p> <p>C. Benzene</p> <p>D. Toluene</p>
42	Preparation of vegetable ghee involves	<p>A. Halogenations</p> <p>B. Hydrogenation</p> <p>C. Hydroxylation</p> <p>D. Dehydrogenation</p>
43	Formula of chloroform is	<p>A. CH₃Cl</p> <p>B. CCl₄</p> <p>C. CH₂Cl₂</p> <p>D. CHCl₃</p>
44	The correct order of reactivity of halogens with alkanes is	<p>A. I₂ > Br₂ > Cl₂ > F₂</p> <p>B. I₂ > Cl₂ > F₂ > Br₂</p> <p>C. F₂ > Cl₂ > I₂ > Br₂</p> <p>D. F₂ > Cl₂ > Br₂ > I₂</p>
45	Vinyl acetylene combines with HCl to form	<p>A. Poly acetylene</p> <p>B. Benzene</p> <p>C. Chloroprene</p> <p>D. Divinylacetylene</p>
46	The addition of unsymmetrical reagent to an unsymmetrical alkene is in accordance with	<p>A. Hund's rule</p> <p>B. Markownikov's rule</p> <p>C. Pauli's Exclusion principle</p> <p>D. Aufbau principle</p>
47	Synthetic rubber is made by polymerization of	<p>A. Chloroform</p> <p>B. Acetylene</p> <p>C. Divinylacetylene</p> <p>D. Butene</p>
48	B-B'-dichloroethyl sulphide is commonly known as	<p>A. Mustard gas</p> <p>B. Laughing gas</p> <p>C. Phosgene gas</p> <p>D. Bio gas</p>
49	When methane reacts with Cl ₂ in the presence of diffused light the products obtained are	<p>A. Chloroform only</p> <p>B. Carbon tetrachloride only</p> <p>C. Chloromethane and</p>

		dichloromethane D. Mixture of a, b, c
50	Which one of the following gases is used for artificial ripening of fruits	A. Ethane B. Ethyne C. Methane D. Propane
51	Preparation of vegetable ghee involves	A. Halogenations B. Hydrogenations C. Hydroxylation D. Dehydrogenations
52	Which can be used for dehydration of alcohol	A. P_4O_{10} B. H_2SO_4 C. H_3PO_4 D. All of them
53	The addition of unsymmetrical reagent to an unsymmetrical alkene is in accordance with the rule	A. Hund's rule B. Markownikov's rule C. Pauli's exclusion principle D. Auf ban principle
54	Synthesis of rubber is made by polymerization of	A. Chloroform B. Acetylene C. Divinylacetylene D. Butene
55	Which one of the following gases is used for artificial ripening of fruits	A. Ethene B. Ethane C. Methane D. Propane
56	The next homologue of $C_{10}H_{22}$ will be	A. C_9H_{20} B. $C_{12}H_{26}$ C. $C_{11}H_{24}$ D. $C_{13}H_{28}$
57	The four bonds of carbon in methane are directed towards the corners of	A. Cube B. Pentagon C. Hexagon D. Tetrahedron
58	De halogenatiion of tetrahalides happens in the presence of active metal like	A. Zn B. Mg C. Both a and b D. None of them
59	Question Image	A. 4-methyl pentene B. 2-methyle-1-butene C. 2-methyl propane D. None of the above
60	The order of dehydration of alcohol	A. 10> 20> 30 B. 10> 30> 20 C. 20> 30> 10 D. 30> 20> 10
61	The simplest and the parent members of aromatic hydrocarbon is	A. Benzene B. Toluene C. Biphenyis D. Naphthalene
62	Which of the following is not aromatic hydrogencarbon	A. Benzene B. Naphthalene C. Toluene D. Cyclohexene
63	Introduction of a second methyl group in methylbenzene will give how many isomeric dimethylenzenes	A. 2 B. 1 C. 3 D. 4
64	Question Image	A. 2-bromonitrobenzene B. 2-nitrobromobenzene C. 1-bromonitrobenzene D. 1-nitrobromobenzene
65	Cyclohexane can be converted not benzene in the presence of	A. Pt at 100°C B. Pt at 250°C C. Pd at room temperature D. Pt at room temperature
66	The carbon, carbon bond length in benzene is	A. 1.54Å B. 1.34Å C. 1.20Å D. 1.39Å

A. Na_2CO_3

67	When sodium benzoate is treated with soda lime (NaOH) benzene is formed. What is the other product	B. NaHCO_3 C. Ca(OH)_2 D. CaCO_3
68	Preparation of ethylbenzene by the reaction of bromobenzene, ethylbromide and sodium is called	A. Wurtz reaction B. Fitting reaction C. Wurtz fitting reaction D. None of these
69	Which of the following reaction is characteristic of benzene	A. Electrophilic substitution reaction B. Reduction C. Oxidation D. Ozonolysis
70	Which of the following is not an electrophilic substitution reaction of benzene	A. Nitration B. Sulphonation C. Friedel-Craft alkylation D. Free radical chlorination of benzene
71	Which of the following is an ortho-para directing group	
72	Which of the following is not an ortho-para directing group	
73	A single benzene ring can have _____ ortho position maximally	A. One B. Two C. Three D. Four
74	The benzene molecule contains	A. Three double bonds B. Two double bonds C. One double bonds D. Delocalized π -electron charge
75	Aromatic hydrocarbons are the derivatives of	A. Normal series of paraffins B. Alkene C. Benzene D. Cyclohexane
76	Benzene does not undergo	A. Substitution reaction B. Addition reaction C. Oxidation reaction D. Elimination reaction
77	Amongst the following the compound that can be most readily sulphonated is	A. Toluene B. Benzene C. Nitrobenzene D. Chlorobenzene
78	During nitration of benzene, the active nitrating agent is	A. NO_3 B. NO_2^+ C. NO_2^- D. HNO_3
79	Acetylene gives	A. White ppt. with ammonical AgNO_3 and red ppt. with ammonical $\text{Cu(NO}_3)_2$ B. White ppt. with ammonical AgNO_3 and red ppt. with ammonical Cu_2C C. White ppt. with both D. Red ppt. with both
80	The order of reactivity of halogens in aliphatic substitution reactions is	A. $\text{Br}_2 > \text{Cl}_2 > \text{F}_2$ B. $\text{Cl}_2 > \text{Br}_2 > \text{F}_2$ C. $\text{Cl}_2 > \text{Br}_2 > \text{F}_2$ D. $\text{F}_2 > \text{Br}_2 > \text{Cl}_2$
81	Which of the following substances is used as an antiknock compound?	A. Tetraethyl lead B. Lead tetrachloride C. Lead acetate D. Ethyle acetate
82	The IUPAC name of the compound having formula $(\text{CH}_3)_3\text{C}-\text{CH}=\text{CH}_2$ is	A. 1, 1-Dimethyl-3-butene B. 1, 1, 1-Trimethyl-3-propene C. 3, 3-Dimethyl-1-butene D. 3, 3, 3-Trimethyl-1-propene
83	Octane number is zero for	A. n-Heptane B. Isooctane C. n-Hexane D. Isoheptane
84	For preparing an alkane, a concentrated aqueous solution of sodium or potassium salt of saturated carboxylic acid is subjected to	A. Hydrolysis B. Oxidation C. Hydrogenation D. Electrolysis
85	In Friedel-Craft's alkylation besides AlCl_3 the other reactants are	A. $\text{C}_6\text{H}_6 + \text{NH}_3$ B. $\text{C}_6\text{H}_6 + \text{NH}_4$ C. $\text{C}_6\text{H}_6 + \text{CH}_3\text{Cl}$

		<p>C. $\text{C}_6\text{H}_6 + \text{CH}_3\text{COCl}$ D. $\text{C}_6\text{H}_6 + \text{CH}_3\text{COCl}$</p>
86	The addition of HBr is easiest with	<p>A. $\text{CH}_2 = \text{CHCl}$ B. $\text{ClCH} = \text{CHCl}$ C. $\text{CH}_3 - \text{CH} = \text{CH}_2$ D. $(\text{CH}_3)_2\text{C} = \text{CH}_2$</p>
87	Which of the following method is most appropriate for the manufacture of methane?	<p>A. By reduction of CH_2Cl_2 B. Wurtz reaction C. Liquification of natural gas D. None of these</p>
88	The reaction-method that does not give an alkane is	<p>A. Catalytic hydrogenation of alkanes B. Wurtz reaction C. Hydrolysis of alkyl magnesium bromide D. Dehydrohalogenation of an alkyl halide</p>
89	A fuel has the same knocking property as a mixture of 70 isooctane (2, 2, 4- trimethyl pentane) and 30% n-heptane by volume the octane number of the fuel is	<p>A. 100 B. 70 C. 50 D. 40</p>
90	Hydrocarbon which is liquid at room temperature is	<p>A. Pentane B. Butane C. Propane D. Ethane</p>
91	An organic compound, on treatment with Br_2 in CCl_4 gives bromoderivative of an alkene. The compound will be	<p>A. $\text{CH}_3 - \text{CH} = \text{CH}_2$ B. $\text{CH}_3\text{CH} = \text{CHCH}_3$ C. $\text{HC} = \text{CH}$ D. $\text{H}_2\text{C} = \text{CH}_2$</p>
92	A salt producing hydrocarbon among these compounds is	<p>A. Ethyne B. Ethene C. Methane D. Ethane</p>
93	Marsh gas was the name given to	<p>A. Methane B. Ethane C. Propane D. Butane</p>
94	"Each different compound should have a different name" was published by IUPAC system of nomenclature in	<p>A. 1892 B. 1830 C. 1947 D. 1979</p>
95	If we remove one hydrogen atom from an alkane we obtain a group called	<p>A. Acetylene group B. Formyl group C. Alkyl group D. Ketone group</p>
96	Write the name of following compound	<p>A. 5 - methyl - 2 - hexene B. 2 - methyl hexene C. 4 - ethyl - 2 - methyl hexene D. 3 - ethyl - 3 - methyl hexene</p>
97	Write the name of following alkene $\text{CH}_2 = \text{CH} - \text{CH} = \text{CH}_2$	<p>A. 1,3 butadiene B. Buta -1, 3-diene C. Both a & b D. None</p>
98	C_nH_{2n} is the general formula of	<p>A. Alkanes B. Alkenes C. alkynes D. None of above</p>
99	During the preparation of alkanes the hydrogenation of alkenes or alkynes the catalyst may be	<p>A. $\text{H}^{+}/\text{SO}_4^{2-}$ B. Ni C. $\text{Fe}^{+2}/\text{O}^{+3}$ D. $\text{Al}^{+2}/\text{O}^{+3}$</p>
100	An alkane is produced when an alkyl halide reacts with zinc in the presence of	<p>A. HCl B. CH_3COOH C. Both a & b D. None</p>
101	The method in which alkanes prepared by alkyl halides in the presence of palladium - charcoal is	<p>A. Hydrolysis B. Electrolysis C. Hydrogenation D. Hydrogenolysis</p>
102	Kolb's method of alkanes production, is actually	<p>A. Hydrolysis B. Catalysis C. Electrolysis D. Hydrogenation</p>

103	Kolb's method is not useful for the production of	A. Methane B. Ethane C. Propane D. Butane
104	Kolb's method has limited synthetic applications due to	A. Expensive catalysis B. Slow reaction C. Number of side products produced D. Salts used are very expensive
105	The reaction in which ketone is reduced to the alkane is called	A. Kolb B. Clemmensen C. Cannizzaro D. None
106	The method used only for the production of symmetrical alkanes	A. Kolb's method B. Clemmensen C. Cannizzaro D. Wolf kishner
107	Alkanes containing carbon C ₁₈ onwards are	A. Gases B. Liquids C. Waxy solids D. Solids
108	Alkanes are soluble in all except	A. Benzene B. Ether C. Water D. Carbon tetra chloride
109	Physical properties of alkanes increase with increase of all physical constants except	A. Boiling points B. Melting points C. Density D. Solubility
110	the unreactivity of alkanes is based upon	A. Inertness of sigma bond B. Non-polarity of the bonds C. Both A and B D. None of above
111	Complete combustion of alkane yields	A. CO ₂ + H ₂ O B. CO ₂ + heat C. CO + H ₂ O + heat D. CO ₂ + H ₂ O + heat
112	The major reaction occurring in the engines of automobiles is	A. Oxidation B. Reducing C. Combustion D. Decomposition
113	Incomplete oxidation of alkanes yields	A. CO ₂ & carbon black B. CO ₂ + heat C. CO and carbon black D. CO + heat
114	Catalytic oxidation of alkanes is used for the preparation of	A. Aldehydes B. Ketones C. Fatty acid D. Carboxylic acids
115	The order of reactivity of halogen acids towards alkenes	A. HCl > HBr > HI B. HBr > HCl > HI C. HCl > HBr D. HI > HBr > HCl
116	Raney - nickel is the alloy of Ni with	A. Pt B. Al C. Cu D. Pd
117	Polymerization of ethane take place at pressure of 100 atm and a temperature of	A. 200 °C B. 400 °C C. 600 °C D. 800 °C
118	Mustard gas is a	A. Gas B. High boiling speed

118	Mustard gas is a	C. High melting liquid D. Steam
119	During the preparation of alkynes the active metals that react with tetra halo-alkanes are	A. Zn B. Mg C. Both a and b D. None
120	The method involved for electrolysis of Na or K salts of carboxylic acids	A. Sabatier's sendrens reaction B. Kolbe's method C. Clemmensen D. Wolf kishner reduction
121	Alkynes are colourless & odouless except	A. Acetylene B. Propyne C. Butyne D. Pentyne
122	An alkynes having Carbon count of 20 is	A. gas B. liquid C. Solid D. None
123	The hydrocarbon used for polymerization is	A. Alkanes B. Alkenes C. Alkynes D. All of above
124	The hydrocarbon which is used as an illuminating agent	A. Methane B. Methene C. Methyne D. B & C
125	The alkynides are used for the ----- of alkynes	A. Pxperation B. Purification C. Seperation D. All of above
126	The presence of a double bond in a compound is the sign of	A. Saturation B. Unsaturation C. Substitution D. None of above
127	Most common reactions of benzene and its derivatives are	A. electrophilic addition reactions B. electrophilic substitution reactions C. Nucleophilic addition reactions D. Nucleophilic substitution reactions
128	Which reaction sequence would be best to prepare 3-chloro-aniline from benzene?	A. Chlorination, nitration, reducing B. Nitration, chlorination, reduction C. Nitration, reduction, chlorination D. Nitration, reduction, acylation, chlorination, hydrolysis
129	Benzene is obtained by fractional distillation of	A. Heavy oil B. Anthracene oil C. Middle oil D. Light oil
130	Which of the following species participate in sulphonation of benzene ring?	A. H ₂ SO ₄ B. HSO ₄ C. SO ₃ D. SO ₂
131	Which of the following possesses the highest melting point?	A. Chlorobenzene B. 0-Dichlorobenzene C. m-Dichlorobenzene D. p-Dichlorobenzene
132	The treatment of benzene with isobutene in the presence of sulphuric acid give	A. isobutyl benzene B. tert-Butyl benzene C. n- Butyl benzene D. no reaction
133	Octane number can be changed by	A. Isomerisation B. Alkylation C. Cyclisation D. All of these
134	Benzene can be obtained by heating either benzoic acid with X or phenol with Y. X and Y are respectively	A. Zinc dust and soda lime B. Soda time and zinc dust C. Zinc dust and sodium hydroxide D. Soda lime and copper
135	The compound prepared by a substitution reaction of benzene is	A. Acetophenone B. Glyoxal C. Cyclohexame D. Hexabromo cyclohexane

136	The term aromatic was derives from	A. Greek word B. Latin C. Russian D. English
137	Which compound was recognized the parent member of aromatic compounds	A. Aniline B. Phenol C. Benzene D. Toluene
138	Which one of following is not monocyclic aromatic hydrocarbon	A. Benzaldehyde B. Benzoic acid C. Benzene sulfonic acid D. Biphenyl
139	In which one of the following compound rings are not fused together at ortho positions	A. Phenanthrene B. Naphthalene C. Diphenylmethane D. Anthracene
140	Toluene is also called	A. Hydroxyl benzene B. Methyl benzene C. ethyl benzene D. None
141	Substituted phenyl groups are called	A. acyl groups B. phenyl groups C. Aryl groups D. Alkyle groups
142	Benzene was discovered by Michael Faraday's in	A. 1824 B. 1825 C. 1826 D. 1827
143	The empirical formula of benzene is determined by	A. IR spectra B. U.V C. Elemental analysis D. NMR spectra
144	How many molecules of chlorine adds in benzene in the presence of sunlight	A. One B. Two C. Three D. Four
145	The C-C bond angles in benzene ring are	A. 119° B. 120° C. 121° D. None
146	All C - H bond lengths of benzene ring is	A. 1.07Å B. 1.09Å C. 1.08Å D. None
147	A six membered ring containing one double bond called	A. Cyclohexene B. Cyclohexane C. Cyclohexadiene D. None
148	Hybridization of each carbon atom in benzene ring is	A. sp hybridized B. sp^2 hybridized C. sp^3 D. dsp^2
149	The stability of acromatic compounds decreases with ----- in the no. of its resonance structure	A. Decrease B. Increase C. Remain constant D. Partially decreases
150	Benzene is not prepared from	A. Acetylene B. Phenol C. Benzoic acid D. Bromo benzene

A. HCl

151	Benzene is obtained from benzene sulphonic acid by treating with	B. NaOH C. H_2SO_4 D. NaHCO_3
152	Which reaction is too vigorous to control	A. Chlorination B. Bromination C. Iodination D. Fluorination
153	Sulphuric acid generates nitronium ion by reacting with	A. Nitric acid B. Nitrogen gas C. Nitrous acid D. Potassium nitrate
154	When benzene is burnt in free supply of air, it is completely oxidized to	A. CO B. $\text{CO}_2 + \text{H}_2\text{O}$ C. $\text{H}_2 + \text{CO}_3$ D. None
155	Benzene reacts with ozone and gives	A. Glycerin B. Glyoxal C. Maleic anhydride D. Benzoic acid
156	Alkyl benzenes are readily oxidized by acidified	A. KMnO_4 B. K_2CO_3 C. MnO_4 D. H_2SO_4
157	How many isomeric disubstituted products are obtained by the introducing of second group in the ring	A. Two B. Three C. Four D. None
158	The electron releasing effect of methyl group is significant and it makes ring a good	A. Electrophilic B. Nucleophilic C. Nucleophobic D. Hydrophobic
159	Meta directing group decreased the ----- of benzene ring	A. Physical activity B. Chemical reactivity C. Density D. None
160	Which class of compound is more reactive	A. Alkane B. Alkene C. Alkyne D. None
161	Benzene does not undergo polymerization and it is also resistant to	A. Reduction B. Oxidation C. Alkylation D. Ozonolysis
162	Which of the following acid can be used as a catalyst in Friedal Craft's reactions	A. AlCl_3 B. HNO_3 C. BeCl_2 D. NaCl
163	Benzene has a ----- structure	A. Pentagonal B. Hexagonal C. Heptagonal D. Tetragonal
164	Which one of the following is (m-xylene)	A. 1,2 dimethyl benzene B. 1,3 dimethyl benzene C. 1,5 dimethyl benzene D. 1,4 dimethyl benzene
165	The electrophile in aromatic sulphonation is	A. H_2SO_4 B. HSO_4 C. SO_3 D. $\text{SO}_3 + \text{H}^+$
166	The nitration of benzene takes place when it is heated with a mixture of conc. HNO_3 and conc. H_2SO_4 at 50°C in ratio of	A. 1 : 2 B. 1 : 1 C. 1 : 3 D. 2 : 1
167	The three alternate single and double bonds in the benzene ring are called	A. Conjugate bonds B. Resonating bonds C. Both A and B D. None of above
168	The difference between amount of heat actually released and that of calculated is called	A. Bonding energy B. Activation energy C. Resonance energy

		D. Transition energy
169	All are ortho & Para directing except	A. X B. OH C. NR_3 D. NH_2
170	Substitution of halogen in the benzene ring requires catalyst	A. AlCl_3 B. FeCl_3 C. SiO_2 D. Organo - nickel
171	Which one does not decolorized KMnO_4	A. Alkenes B. Alkynes C. Benzene D. All above
172	When alkyl is treated with chlorine in the presence of sunlight	A. 1,3 dichloroproduct is formed B. 1,4 dichloro product is formed C. 1,3,5 trichloro product is formed D. Only alkyl group is substituted
173	Benzene is prepared from n-hexane in the presence of catalyst	A. Cr_2O_3 B. Al_2O_3 C. SiO_2 D. All above
174	Preparation of vegetable ghee involves:	A. Halogenation B. Hydrogenation C. Hydroxylation D. Dehydrogenation
175	Formula of chloroform is:	A. CH_3Cl B. CCl_4 C. CH_2Cl_2 D. CHCl_3
176	The presence of a double bond in a compound in the sign of:	A. Saturation B. Unsaturation C. Substitution D. None
177	Vinyl acetylene combines with HCl to form:	A. Polyacetylene B. Benzene C. Chloroprene D. Divinyl acetylene
178	The addition of unsymmetrical reagent to unsymmetrical alkene is in accordance with the rule:	A. Hund's rule B. Markownikov's rule C. Pauli's Exclusion Principle D. Aufbau Principle
179	Synthesis rubber is made by polymerization :	A. Chloroform B. Acetylene C. Divinyl acetylene D. Butene
180	β - β - dichloroethyle sulphide is commonly known as:	A. Mustard gas B. Laughing gas C. Phosgene gas D. Bio gas
181	When methane reacts with Cl_2 in the presence of diffused light the products obtained are?	A. Chloroform only B. Carbon tetrachloride only C. Chloromethane and dichloromethane D. Mixture of a,b,c
182	Which one of the following gases is used for artificial ripening of fruits ?	A. Ethane B. Ethyne C. Methane D. Propane
183	Reaction of ethanes with KMnO_4 gives:	A. Ozonide B. Glyoxal C. Glycol D. Oxalic acid
184	Which decolorizes the colour of Br_2	A. CH_4 B. $\text{CH}_3\text{-CH}_3$ C. $\text{CH}_2=\text{CH}_2$ D. $\text{CH}_3\text{-CH}_2\text{-CH}_3$
185	Which is symmetric alkene?	A. $\text{CH}=\text{CH}_2$ B. $\text{CH}_2=\text{CH}_2$ C. $\text{CH}_3\text{-CH}=\text{CH}_2$ D. $\text{CH}_3\text{-CH}_2\text{-CH}=\text{CH}_2$

		<div>style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small; ">≡C - CH<sub>3</sub> D. B and C</div>
186	Free radical mechanism of halogenation of alkanes follow step:	<div>A. Initiation B. Propagation C. Termination D. All of these</div>
187	Alkanes have functional group :	<div>A. ----X B. --OH C. ----COH D. No functional group</div>
188	Which is more active ?	<div>A. Alkanes B. Alkenes C. Alkynes D. Benzene</div>
189	acetylene can be converted into-while passing through a Cu-tube at 300°C:	<div>A. Glyoxal B. Vinyl acetylene C. Vinyl alcohol D. Benzene</div>
190	Odour of alkene is:	<div>A. Fruity B. Odourless C. Zarlric like D. Irritating</div>
191	Alkene general formula :	<div>A. C<sub>n</sub>H<sub>2n+2</sub> B. C<sub>n</sub>H<sub>2n</sub> C. C<sub>n</sub>H<sub>2n-2</sub> D. C<sub>n</sub>H<sub>2n+1</sub></div>
192	Alkyne is :	<div>A. CH<sub>3</sub>-CH<sub>3</sub> B. CH<sub>4</sub> C. CH<sub>2</sub>-CH<sub>2</sub> D. C<sub>2</sub>H<sub>2</sub></div>
193	Alkanes are gases :	<div>A. C<sub>1</sub>-C<sub>4</sub> B. C<sub>5</sub>-C<sub>10</sub> C. C<sub>11</sub>-C<sub>15</sub> D. C<sub>10</sub>-C<sub>20</sub></div>
194	Boiling point of n-butane is:	<div>A. -102°C B. -75°C C. -55°C D. 55°C</div>
195	Alkanes are least reactive towards:	<div>A. Acids and bases B. Reducing agents C. Oxidizing agents D. All of these</div>
196	Eletronegativity difference in C-C bond in alkanes is:	<div>A. Zero B. Double C. Half D. 4.0</div>
197	Which is liquid among the following alkenes?	<div>A. Ethane B. Propene C. Butene D. Pentene</div>
198	Hybridization in alkanes is:	<div>A. sp B. sp<sup>2</sup> C. sp<sup>3</sup> D. dsp<sup>2</sup></div>
199	During reaction of O ₂ and alkenes, a product:	<div>A. Glycol B. Epoxide C. Halohydrin D. Ethylene glycol</div>
200	Mustard gas is a :	<div>A. Gas B. Liquid C. Solid D. High boiling point</div>
		<div>A. CH<sub>3</sub>-C<sub>n</sub></div>

201 Which one gives acidic reactions?

- $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$ >≡C-----CH₃</sub>
B. CH₃</sub>-----CH₂</sub>-----HC=CH---
CH₂</sub>
C. CH₃</sub>-----
CH=CH₂</sub>
D. CH₃</sub>-----C>≡CH

202 Hydrocarbons contain :

- A. Carbon only carbon
B. Hydrogen only
C. Carbon & hydrogen
D. Carbon , hydrogen & halogen