


ECAT Chemistry Chapter 1 Basic Concepts

Sr	Questions	Answers Choice
1	He Ar and Ne are:	<p>A. Mono-atomic molecules</p> <p>B. Hetero atomic molecules</p> <p>C. Poly-atomic molecules</p> <p>D. Diatomic molecules</p>
2	Who one mole of each of the following is completely burned in oxygen, which gives the largest mass of carbon dioxide?	<p>A. Carbon monoxide</p> <p>B. Diamond</p> <p>C. Ethane</p> <p>D. Methane</p>
3	<div style="border: 1px solid black; padding: 2px; width: fit-content;">Question Image</div>	<p>A. 8 g</p> <p>B. 16 g</p> <p>C. 32 g</p> <p>D. 24 g</p>
4	One mole of SO ₂ contains	<p>A. 6.02×10^{23} atoms of oxygen</p> <p>B. 18.1×10^{23}, molecules of SO₂</p> <p>C. 6.02×10^{23} atoms of sulphur</p> <p>D. 4 gram atoms of SO₂</p>
5	One of the following statements is incorrect	<p>A. Actual yeild is always less than the theoretical yield</p> <p>B. The formula of a compound is not definite</p> <p>C. Law of conservation of mass is applied in stoichiometry</p> <p>D. Boyles law is applied in stoichiometry</p>
6	Which one of the following compounds does not have the empirical formula CH ₂ O?	<p>A. Ethanoic acid, CH₃CO₂H</p> <p>B. Ethanol, CH₃CH₂OH</p> <p>C. Glucose, C₆H₁₂O₆</p> <p>D. Methanal, HCHO</p>
7	A compound having empirical formula C ₃ H ₃ O and its molecular mass is 110.02. Its molecular formula is	<p>A. C₃H₃O</p> <p>B. C₆H₆O₂</p> <p>C. C₉H₉O₃</p> <p>D. C₃H₆O₂</p>
		<p>A. Mono-atomic molecules</p>

8	NH ₃ , HCL, H ₂ O, HL are:	<p>initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Diatomic molecules<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Poly-atomic molecules<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Mono-atomic molecules<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Hetero atomic molecules<o:p></o:p></p></p>
9	The largest number of molecules are present in	<p>A. 3.6 g of H<sub>2</sub></p></p> <p>B. 4.8 g of C<sub>2</sub></p>H<sub>5</sub></p>OH</p> <p>C. 2.8 g of CO</p> <p>D. 5.4 g of N<sub>2</sub></p>O<sub>5</sub></p></p>
10	CL ₂ , N ₂ and O ₂ are:	<p>A. <p class="MsoNormal">Diatomic molecules<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Hetero atomic molecules<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Poly-atomic molecules<o:p></o:p></p></p> <p>D. Mono-atomic molecules</p>
11	Benzene is stable to:	<p>A. Oxidation</p> <p>B. Nitration</p> <p>C. KMnO<sub>4</sub></p></p> <p>D. SULPHONATION</p>
12	An ion bearing positive charge is called:	<p>A. Cation</p> <p>B. Positron</p> <p>C. Anion</p> <p>D. None of above</p>
13	A compound contains one atom of oxygen and % of O 34.78, then molecular mass of compound is	<p>A. 46</p> <p>B. 78</p> <p>C. 110</p> <p>D. 180</p>
14	What is the maximum mass of aluminium which can be obtained from 240g of aluminium oxide Al ₂ O ₃ ?	<p>A. 26 g</p> <p>B. 127 g</p> <p>C. 51 g</p> <p>D. 108 g</p>
15	The percentage of H is the highest in	<p>A. CH<sub>4</sub></p></p> <p>B. NH<sub>3</sub></p></p> <p>C. H<sub>2</sub></p>SO<sub>4</sub></p></p>

D.
C₆H₁₂O₆

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- 16 The empirical formula of a liquid compound is known to be C₂H₄O. What other information is needed to work out its molecular formula?
- A. The percentage composition of the compound
B. The relative molecular mass of the compound
C. The density of the compound
D. The volume occupied by one mole of the compound
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- 17 The number of atoms present in molecule determines its:
- A. Molecularity
B. Atomicity
C. Basicity
D. Acidity
-
- 18 A species having positive or negative charge is called:
- A. Electron
B. Ion
C. Proton
D. Atom
-
- 19 
- A. 99.2%
B. 99.5%
C. 90.5%
D. 96.2%
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- 20 A balloon contains 0.02 gram of H₂ gas, it contains H₂ molecules
- A. 6.02×10^{23}
B. 3.01×10^{22}
C. 6.02×10^{21}
D. 3.01×10^{21}
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