(ECC01-0001H)

- The positive ions having group of atoms are _____ common.
 - A) More
 - B) Less
 - C) Equal
 - D) None

(ECC01-0002E)

- The empirical formula of simplest sugar is
 - a. CH
 - b. CH₂O
 - c. C₆H₆
 - d. CHO

(ECC01-0003M)

- 0.5 mole of CH₄ and 0.5 mole of SO₂ gases have same
 - A) Volume
 - B) Both Volume & Molecules
 - C) Total number of atoms
 - D) Number of Molecules

(ECC01-0004M)

- What is the mass of water formed when 4 grams H₂ and 64 grams of O₂ combined together
 - A) 66 grams
 - B) b. 18 grams
 - C) 36 grams
 - D) d. 66 grams

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0349-7869821 Page 1 of 9





(ECC01-0005H)

- The total number of covalent bonds in 4.5 grams of water is
 - A) 6.02 x 10²³
 B) b. 6.02 x 10²²
 C) 3.01 x 10²²
 D) d. 3.01 x 10²³

(ECC01-0006E)

- What is the volume in cm³ of 3.01 x 10²³ molecules of O₂ gas at S.T.P.?
 - A) 1000 cm³
 - B) b. 11000 cm³
 - C) 1120 cm³
 - D) d. 11200 cm³

(ECC01-0007E)

- A compound having empirical formula C₃H₃O and its molecular mass is 110.02 its molecular formula is
 - A) C₃H₃O
 - B) $C_6H_6O_2$
 - C) $C_9H_9O_2$
 - D) $C_{3}H_{6}O_{2}$

(ECC01-0008M)

- In the determination of atomic ratio of the elements the mole ratios are divided by
 - A) Least value of gram atoms of elements
 - B) Atomic masses of elements
 - C) Given mass of the Compound
 - D) Molecular mass of the compound





(ECC01-0009E)

- Which one of the following steps is not involved in determination of empirical formula?
 - A) Determination % of each element
 - B) Determination of gram atoms of each elements
 - C) Determination of isotopes of each elements
 - D) Determination of atomic ratio of elements

(ECC01-0010M)

- Which of the following salts will have greater positive charge in its molar aqueous solution keeping in mind that solution as a whole remains neutral?
 - A) CaCl₂
 - B) KCI
 - C) NH₄CI
 - D) NaCl

(ECC01-0011E)

- A molecule is the smallest particle of a substance because
 - A) It has positive charge on it.
 - B) It exists independently
 - C) It decomposes into ions PARHO AU
 - D) It is always mono atomic

(ECC01-0012M)

- 9.8 grams of aqueous solution of H₂SO₄ contains moles of H⁺ ions
 - A) 0.1
 - B) 0.2
 - C) 0.11
 - D) 0.01

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0349-7869821 Page 3 of 9





(ECC01-0013M)

- The pressure of vapours when sent to the ionization chamber in mass spectrometer is
 - A) 10⁻⁵ to 10⁻⁶ torr
 - B) 10⁻⁶ to 10⁻⁷ torr
 - C) 10⁻⁷ to 10⁻⁸ torr
 - D) 10⁻³ to 10⁻⁴ torr

(ECC01-0014E)

- The smallest collection of ions in which stable ionic compound is stable:
 - A) Chemical formula
 - B) Molecular formula
 - C) Formula unit
 - D) Formula mass

(ECC01-0015E)

- Which one of the following pair is not iso-electronic?
 - A) CO, N₂
 - B) Na+, Ne
 - C) Ca, Ar
 - D) K⁺, Ar

(ECC01-0016H)

- Which one of the following is not a molecular ion?
 - A) N₂+
 - B) CH₄+
 - C) C₇ H₈+
 - D) NH4⁺

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(ECC01-0017H)

- Atoms of the elements must be containing in nucleus
 - A) Proton
 - B) Proton and neutron
 - C) Neutron
 - D) Electron and neutron

(ECC01-0018M)

- Actual yield of a chemical reaction is always less than theoretical yield because
 - A) Side reaction
 - B) Wastage of products
 - C) Reversible reactions
 - D) All of these

(ECC01-0019M)

- The number of isotopes of elements with even mass number and even atomic number are
 - A) 280
 - B) 300
 - C) 154
 - D) 54

(ECC01-0020M)

- Which one of the following is not the mono isotopic elements?
 - A) Arsenic
 - B) Uranium
 - C) Iodine
 - D) Gold

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0349-7869821 Page 5 of 9





(ECC01-0021M)

Methane reacts with steam to form CO and H₂

 $CH_{4(g)} + H_2O_{(g)} \longrightarrow CO_{(g)} + 3H_{2(g)}$

What volume of hydrogen gas can be obtained from 100 cm³ of methane at STP?

- A) 300 cm³
- B) 200 cm³
- C) 150 cm³
- D) 100 cm³

(ECC01-0022E)

- 1.4 gm of N₂ reacts with hydrogen, what will be volume of NH₃ at S.T.P?
 - A) 224 cm³
 - B) 22.4 dm³
 - C) 2.24 dm³
 - D) 1.12 dm³

(ECC01-0023M)

- One mole of an organic compound is completely burn in oxygen. Which compound produces exactly three moles of water?
 - A) C₄H₁₀
 - B) C₄H₉OH
 - C) C_2H_5OH
 - D) C₃H₈

(ECC01-0024M)

- Which of the following contains the same number of molecules as 9g of water?
 - A) 2g of hydrogen gas
 - B) 14g of nitrogen gas
 - C) 32g of oxygen gas
 - D) 44g of carbon dioxide

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0349-7869821 Page 6 of 9





(ECC01-0025H)

- An element E forms a hydride EH₃ which contains 90.0% of E, by mass. What is the relative • atomic mass of E?
 - A) 27
 - B) 87
 - C) 30
 - D) 90



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Page 7 of 9

45

Answers Key		
1	В	
2	В	
3	D	
4	С	
5	D	
6	D	
7	В	
8	A	
9	С	
10	A	
11	B	
12	B	
13	В	
14	C	
15	C	
16	D	
17	A	
18	D	
19	C	
20	В	
21	Α	
22	C	
23	C	
P24RHO A	UR B	
25	A	

BUY SUBSCRIPTION TO UNLOCK ALL THE CONTENT 11 ÷.,

0349-7869821





Page 8 of 9



BUY SUBSCRIPTION TO UNLOCK ALL THE CONTENT

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0349-7869821 Page 9 of 9

45



