

(ECC01-0002E)

- The empirical formula of simplest sugar is

A) CH  
B) CH<sub>2</sub>O  
C) C<sub>6</sub>H<sub>6</sub>  
D) CHO

(ECC01-0003M)

- 0.5 mole of CH<sub>4</sub> and 0.5 mole of SO<sub>2</sub> 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 H<sub>2</sub> and 64 grams of O<sub>2</sub> combined together

A) 66 grams  
B) 18 grams  
C) 36 grams  
D) 66 grams

(ECC01-0005H)

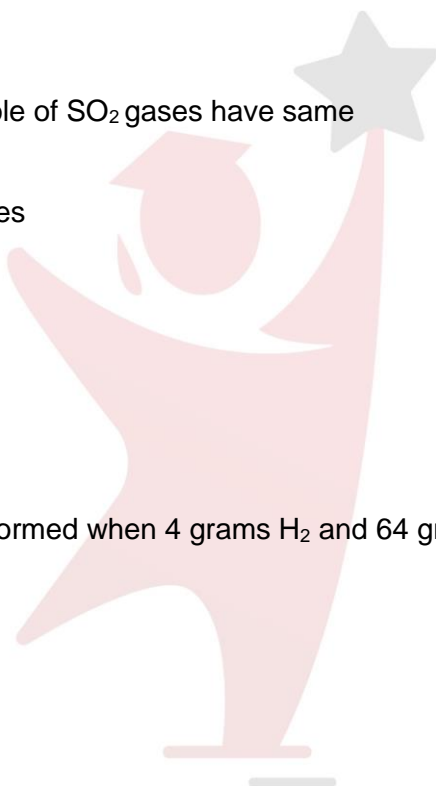
- The total number of covalent bonds in 4.5 grams of water is

A)  $6.02 \times 10^{23}$   
B)  $6.02 \times 10^{22}$   
C)  $3.01 \times 10^{22}$   
D)  $3.01 \times 10^{23}$

(ECC01-0006E)

- What is the volume in cm<sup>3</sup> of  $3.01 \times 10^{23}$  molecules of O<sub>2</sub> gas at S.T.P.?

A) 1000 cm<sup>3</sup>  
B) 11000 cm<sup>3</sup>  
C) 1120 cm<sup>3</sup>  
D) 11200 cm<sup>3</sup>



PARHO AUR  
**Chaaajao**

(ECC01-0007E)

- A compound having empirical formula  $C_3H_3O$  and its molecular mass is 110.02 its molecular formula is
  - A)  $C_3H_3O$
  - B)  $C_6H_6O_2$
  - C)  $C_9H_9O_2$
  - D)  $C_3H_6O_2$

(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

(ECC01-0011E)

- 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
  - D) It is always mono atomic

(ECC01-0012M)

- 9.8 grams of aqueous solution of  $\text{H}_2\text{SO}_4$  contains moles of  $\text{H}^+$  ions
  - A) 0.1
  - B) 0.2
  - C) 0.11
  - D) 0.01

(ECC01-0014E)

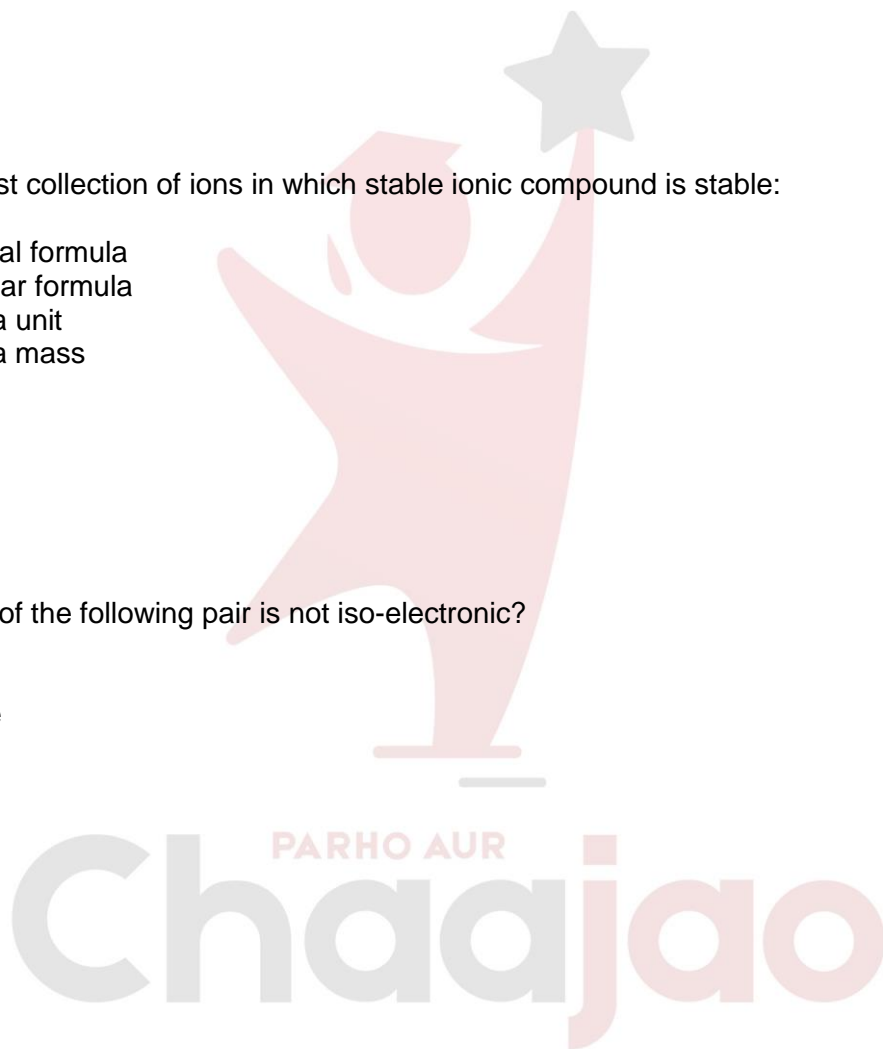
- The smallest collection of ions in which stable ionic compound is stable:
  - A) Chemical formula
  - B) Molecular formula
  - C) Formula unit
  - D) Formula mass

(ECC01-0015E)

- Which one of the following pair is not iso-electronic?
  - A)  $\text{CO}$ ,  $\text{N}_2$
  - B)  $\text{Na}^+$ ,  $\text{Ne}$
  - C)  $\text{Ca}$ ,  $\text{Ar}$
  - D)  $\text{K}^+$ ,  $\text{Ar}$

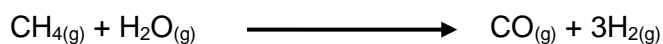
(ECC01-0018M)

- 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



(ECC01-0021M)

- Methane reacts with steam to form CO and H<sub>2</sub>



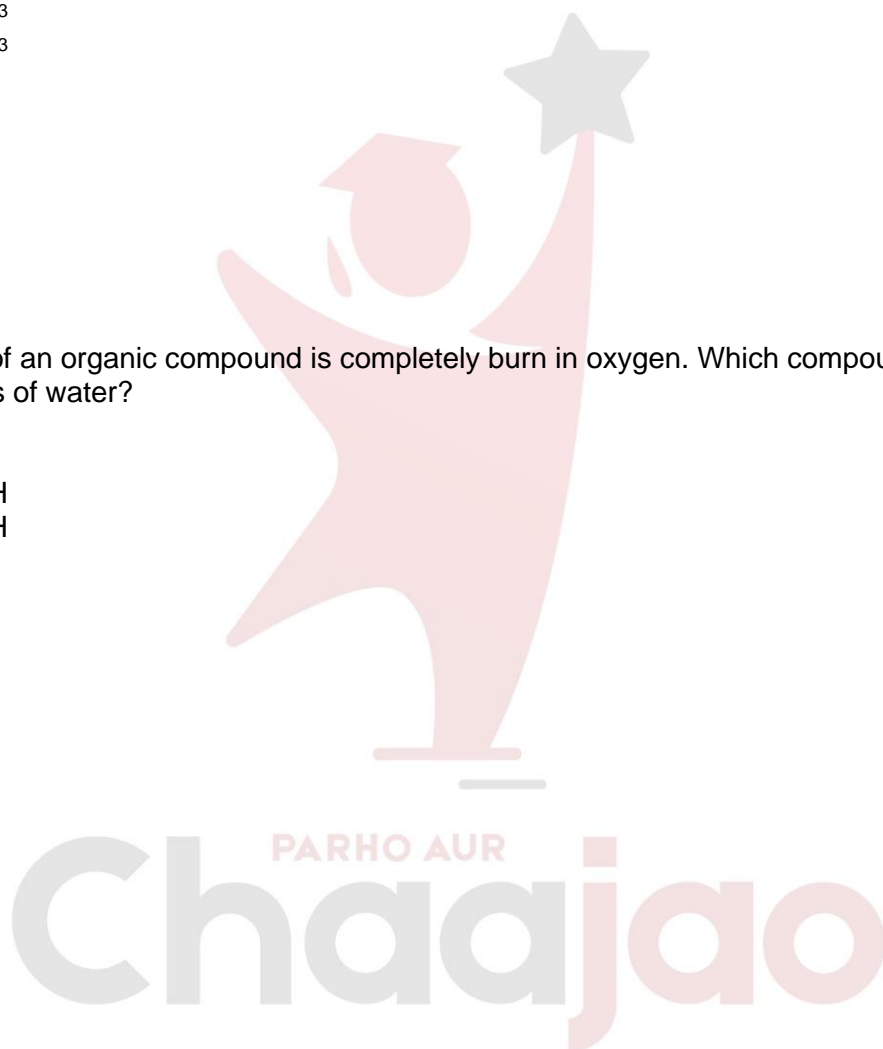
What volume of hydrogen gas can be obtained from 100 cm<sup>3</sup> of methane at STP?

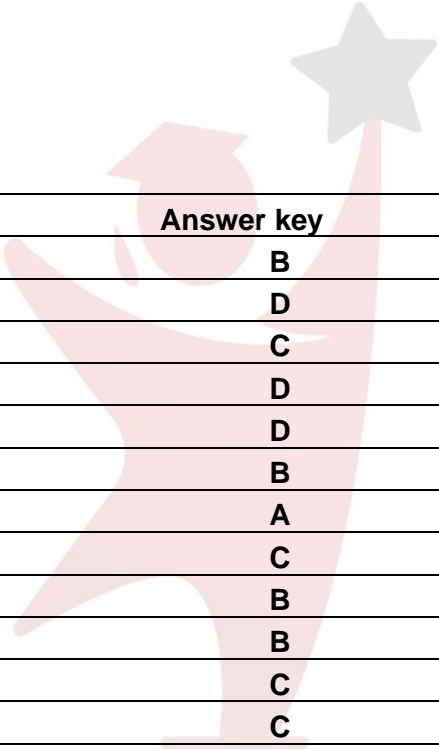
- A) 300 cm<sup>3</sup>
- B) 200 cm<sup>3</sup>
- C) 150 cm<sup>3</sup>
- D) 100 cm<sup>3</sup>

(ECC01-0023M)

- One mole of an organic compound is completely burnt in oxygen. Which compound produces exactly three moles of water?

- A) C<sub>4</sub>H<sub>10</sub>
- B) C<sub>4</sub>H<sub>9</sub>OH
- C) C<sub>2</sub>H<sub>5</sub>OH
- D) C<sub>3</sub>H<sub>8</sub>





Answer key	
1	B
2	D
3	C
4	D
5	D
6	B
7	A
8	C
9	B
10	B
11	C
12	C
13	D
14	A
15	C

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