

Solution
CHEMISTRY
MHT - CET - Chemistry

1.

(b) 1.9923×10^{-23} g

Explanation:

1.9923×10^{-23} g

2.

(a) no charge and having a mass of 1.00867 amu

Explanation:

no charge and having a mass of 1.00867 amu

3.

(d) $\cdot \ddot{X} :$

Explanation:

$\cdot \ddot{X} :$

4.

(c) It undergoes increase in oxidation number.

Explanation:

It undergoes increase in oxidation number.

5.

(c) Be

Explanation:

Be

6.

(b) Volume will become greater by a factor of 1.6.

Explanation:

Volume will become greater by a factor of 1.6.

7.

(c) Oil is continuous phase.

Explanation:

Oil is continuous phase.

8.

(d) $\text{CH} \equiv \text{CH} > \text{CH}_3 - \text{C} \equiv \text{CH} > \text{CH}_2 = \text{CH}_2 > \text{CH}_3 - \text{CH}_3$

Explanation:

$\text{CH} \equiv \text{CH} > \text{CH}_3 - \text{C} \equiv \text{CH} > \text{CH}_2 = \text{CH}_2 > \text{CH}_3 - \text{CH}_3$

9.

(a) - CH_3

Explanation:

- CH_3

10.

(b) option (a)

Explanation:

In fused state, ionic solids do not conduct electricity.

11.

(b) A_2B_5 **Explanation:** A_2B_5

12.

(c) Polonium**Explanation:**

Polonium

13.

(d) 140**Explanation:**

140

14.

(d) dissociation**Explanation:**

dissociation

15.

(d) $t_1 > t_2$ **Explanation:** $t_1 > t_2$

16.

(c) Temperature and melting point**Explanation:**

Temperature and melting point

17.

(d) $Q_p = \Delta U + P_{\text{ext}}\Delta V$ **Explanation:** $Q_p = \Delta U + P_{\text{ext}}\Delta V$

18.

(d) - 56900 kJ**Explanation:**

- 56900 kJ

19.

(a) $\Delta G^\circ = -RT \ln K_p$ **Explanation:** $\Delta G^\circ = -RT \ln K_p$

20.

(c) $\frac{d[\text{NH}_3]}{dt} = -\frac{2}{3} \frac{d[\text{H}_2]}{dt}$ **Explanation:**

$$\frac{d[\text{NH}_3]}{dt} = -\frac{2}{3} \frac{d[\text{H}_2]}{dt}$$

21.

(c) $7.75 \times 10^{-1} \text{ mol L}^{-1} \text{ s}^{-1}$

Explanation:

$7.75 \times 10^{-1} \text{ mol L}^{-1} \text{ s}^{-1}$

22.

(c) $\text{XeF}_2, \text{XeF}_4$

Explanation:

$\text{XeF}_2, \text{XeF}_4$

23.

(c) perchloric acid

Explanation:

perchloric acid

24.

(c) basic

Explanation:

basic

25.

(c) all d block elements are lustrous

Explanation:

all d block elements are lustrous

26.

(c) $\text{CaO}_{(s)} + \text{SiO}_{2(s)} \rightarrow \text{CaSiO}_{3(s)}$

Explanation:

$\text{CaO}_{(s)} + \text{SiO}_{2(s)} \rightarrow \text{CaSiO}_{3(s)}$

27. (a) Mn^{2+} is more stable with high 3rd ionization energy

Explanation:

Mn^{2+} is more stable with high 3rd ionization energy

28.

(d) $3d^4$

Explanation:

$3d^4$

29. (a) ethylenediamine

Explanation:

ethylenediamine

30. (a) coordination sphere

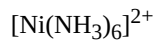
Explanation:

coordination sphere

31.

(b) $[\text{Ni}(\text{NH}_3)_6]^{2+}$

Explanation:



32.

(d) tetradentate

Explanation:

tetradentate

33. **(a)** C - Br

Explanation:

C - Br

34.

(d) Grignard's reagent

Explanation:

Grignard's reagent

35.

(d) $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$

Explanation:

$\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$

36.

(b) hydrolysis

Explanation:

hydrolysis

37.

(d) aromatic electrophilic substitution reaction

Explanation:

aromatic electrophilic substitution reaction

38. **(a)** $(\text{CH}_3)_3\text{COH}$

Explanation:

$(\text{CH}_3)_3\text{COH}$

39.

(c) ethylene, ethoxyethane

Explanation:

ethylene, ethoxyethane

40.

(b) Acetaldehyde

Explanation:

Acetaldehyde

41. **(a)** $\text{CH}_3\text{C} \equiv \text{N}$

Explanation:

$\text{CH}_3\text{C} \equiv \text{N}$

42.

(d) Option (B)

Explanation:

Azo coupling reaction is a nucleophilic aromatic substitution reaction.

43.

(d) 4

Explanation:

4

44.

(b) 1° amine

Explanation:

1° amine

45.

(b) N-ethylethanamide

Explanation:

N-ethylethanamide

46.

(a) C₂

Explanation:

C₂

47.

(c) two to ten

Explanation:

two to ten

48.

(c) monomer

Explanation:

monomer

49.

(c) addition polymer

Explanation:

addition polymer

50.

(d) solid mass

Explanation:

solid mass