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) 

Explanation:

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) $CH \equiv CH > CH_3 - C \equiv CH > CH_2 = CH_2 > CH_3 - CH_3$

Explanation:

$CH \equiv CH > CH_3 - C \equiv CH > CH_2 = CH_2 > CH_3 - CH_3$

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) $Q_P = \Delta U + P_{ext}\Delta V$

Explanation:
$Q_P = \Delta U + P_{ext}\Delta V$

18.

(d) - 56900 kJ
Explanation:
- 56900 kJ

19. **(a)** $\Delta G° = -RT \text{ In } K_p$

Explanation:
$\Delta G° = -RT \text{ In } K_p$

20.

(c) $\frac{d[NH_3]}{dt} = -\frac{2}{3}\frac{d[H_2]}{dt}$
Explanation:

$\frac{d[NH_3]}{dt} = -\frac{2}{3}\frac{d[H_2]}{dt}$

21.

(c) 7.75 x 10^{-1} mol L^{-1} s^{-1}

Explanation:

7.75 x 10^{-1} mol L^{-1} s^{-1}

22.

(c) XeF_2, XeF_4

Explanation:

XeF_2, 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) $CaO_{(s)} + SiO_{2(s)} \longrightarrow CaSiO_{3(s)}$

Explanation:

$CaO_{(s)} + SiO_{2(s)} \longrightarrow CaSiO_{3(s)}$

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) $[Ni(NH_3)_6]^{2+}$

Explanation:

$[Ni(NH_3)_6]^{2+}$

32.

(d) tetradentate

Explanation:

tetradentate

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

Explanation:

C - Br

34.

(d) Grignard’s reagent

Explanation:

Grignard’s reagent

35.

(d) $C_6H_5CH_2Cl$

Explanation:

$C_6H_5CH_2Cl$

36.

(b) hydrolysis

Explanation:

hydrolysis

37.

(d) aromatic electrophilic substitution reaction

Explanation:

aromatic electrophilic substitution reaction

38. **(a)** $(CH_3)_3COH$

Explanation:

$(CH_3)_3COH$

39.

(c) ethylene, ethoxyethane

Explanation:

ethylene, ethoxyethane

40.

(b) Acetaldehyde

Explanation:

Acetaldehyde

41. **(a)** $CH_3C \equiv N$

Explanation:

$CH_3C \equiv N$

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)** C_2

Explanation:
C_2

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