

Solution

CHEMISTRY

MHT - CET - Chemistry

1.

(d) 1.2×10^{23}

Explanation:

1.2×10^{23}

2.

(d) ii and iii

Explanation:

ii and iii

3.

(d) CaI_2

Explanation:

CaI_2

4.

(c) MnO_4^-

Explanation:

MnO_4^-

5.

(b) option (c)

Explanation:

It is used as an oxidizing agent in organic synthesis.

6.

(b) $2X \text{ lit atm mol}^{-1} \text{ K}^{-1}$

Explanation:

$2X \text{ lit atm mol}^{-1} \text{ K}^{-1}$

7.

(c) Lyophilic colloids are irreversible.

Explanation:

Lyophilic colloids are irreversible.

8.

(b) n-propane

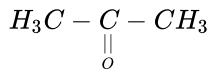
Explanation:

n-propane

9.

(c) $H_3C - C = O - CH_3$

Explanation:



10.

(b) 2

Explanation:

2

11.

(b) four

Explanation:

four

12.

(c) 1

Explanation:

1

13.

(c) 158 g mol^{-1}

Explanation:

158 g mol^{-1}

14.

(c) 183 g mol^{-1}

Explanation:

183 g mol^{-1}

15. **(a)** 0.2 M

Explanation:

0.2 M

16.

(d) option (C)

Explanation:

option (C)

17.

(d) - 800 cal

Explanation:

- 800 cal

18. **(a)** option (c)

Explanation:

$\Delta U = W \neq 0, Q = 0$

19.

(c) $-76.1 \text{ kJ mol}^{-1}$

Explanation:

$-76.1 \text{ kJ mol}^{-1}$

20.

(c) $\frac{\ln 2}{k}$

Explanation:

$$\frac{\ln 2}{k}$$

21.

(d) 1

Explanation:

1

22. (a) Option (b)

Explanation:

mixture of 85 % Ar and 15 % H₂ is filled in electric bulb to increase life of filament.

23.

(b) sp³ d²

Explanation:

$$sp^3 d^2$$

24.

(b) It is a dehydrating agent

Explanation:

It is a dehydrating agent

25.

(c) La(OH)₃ (Z = 57)

Explanation:

$$La(OH)_3 \text{ (Z} = 57\text{)}$$

26.

(d) green

Explanation:

green

27.

(c) iron pyrites

Explanation:

iron pyrites

28.

(b) 14

Explanation:

14

29. (a) +3, 6

Explanation:

+3, 6

30. (a) [Cr(NH₃)₆][Co(CN)₆]

Explanation:

$$[Cr(NH_3)_6][Co(CN)_6]$$

31.

(d) I and III

Explanation:

I and III

32.

(b) $[\text{Pt}(\text{NH}_3)_2\text{Cl}_4]$, $\text{K}_2[\text{PtCl}_6]$

Explanation:

$[\text{Pt}(\text{NH}_3)_2\text{Cl}_4]$, $\text{K}_2[\text{PtCl}_6]$

33.

(d) 2-amino-2-methylpropane

Explanation:

2-amino-2-methylpropane

34.

(c) CCl_4 , CHI_3 , DDT, CHCl_3

Explanation:

CCl_4 , CHI_3 , DDT, CHCl_3

35.

(b) laevo rotatory

Explanation:

laevo rotatory

36. **(a)** methanol

Explanation:

methanol

37.

(b) monohydric alcohols

Explanation:

monohydric alcohols

38. **(a)** Propanone

Explanation:

Propanone

39.

(d) A, C, D, B

Explanation:

A, C, D, B

40.

(c) 2-methylbutanal

Explanation:

2-methylbutanal

41.

(c) amide

Explanation:

amide

42. (a) sodium salt of phthalic acid + ethylamine

Explanation:

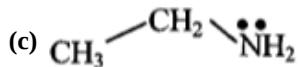
sodium salt of phthalic acid + ethylamine

43. (a) $\text{NH}_4^+ < \text{R}-\text{NH}_3^+ < \text{R}_2\text{NH}_2^+ < \text{R}_3\text{N}^+-\text{H}$

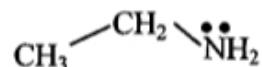
Explanation:

$\text{NH}_4^+ < \text{R}-\text{NH}_3^+ < \text{R}_2\text{NH}_2^+ < \text{R}_3\text{N}^+-\text{H}$

44.



Explanation:



45. (a) $\text{C}_2\text{H}_5\text{N}(\text{CH}_3)_2$

Explanation:

$\text{C}_2\text{H}_5\text{N}(\text{CH}_3)_2$

46. (a) carboxyl and amino

Explanation:

carboxyl and amino

47.

- (c) I, II, III

Explanation:

I, II, III

48.

- (b) Polycarbonates

Explanation:

Polycarbonates

49.

- (c) phenol + methanal

Explanation:

phenol + methanal

50.

- (b) binding nature

Explanation:

binding nature