

Solution

CHEMISTRY

MHT - CET - Chemistry

1. (a) 0.4 g

**Explanation:**

0.4 g

2.

(d) Balmer series

**Explanation:**

Balmer series

3.

(d)  $\text{:}\ddot{\text{O}}\text{:}$

**Explanation:**

$\text{:}\ddot{\text{O}}\text{:}$

4.

(c) +3

**Explanation:**

+3

5. (a) metal hydrides

**Explanation:**

metal hydrides

6. (a) 1 : 1

**Explanation:**

1 : 1

7.

(b) For a given mass, nickel metal sheet having smooth surface is a good adsorbent compared to nickel metal sheet having rough surface.

**Explanation:**

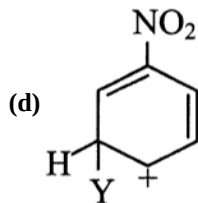
For a given mass, nickel metal sheet having smooth surface is a good adsorbent compared to nickel metal sheet having rough surface.

8. (a) but-2-ene

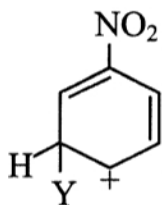
**Explanation:**

but-2-ene

9.



**Explanation:**



10.

(c) Molecular

**Explanation:**

Molecular

11.

(b) covalent network, molecular

**Explanation:**

covalent network, molecular

12.

(a)  $ABO_3$

**Explanation:**

$ABO_3$

13. (a) 500 mm Hg, 0.4, 0.6

**Explanation:**

500 mm Hg, 0.4, 0.6

14.

(c) 0.1 to 2

**Explanation:**

0.1 to 2

15.

(c) 1 g

**Explanation:**

1 g

16.

(c)  $T > 425 \text{ K}$

**Explanation:**

$T > 425 \text{ K}$

17.

(a) +99 kJ

**Explanation:**

+99 kJ

18. (a)  $70 \text{ J K}^{-1} \text{ mol}^{-1}$

**Explanation:**

$70 \text{ J K}^{-1} \text{ mol}^{-1}$

19.

(b) is positive

**Explanation:**

is positive

20. (a)  $2^{(n-m)}$

**Explanation:**

$$2^{(n-m)}$$

21.

(b)  $[A]_t = -kt + [A]_0$

**Explanation:**

$$[A]_t = -kt + [A]_0$$

22. (a) Helium

**Explanation:**

Helium

23. (a) Tellurium

**Explanation:**

Tellurium

24.

(b) (i) - (d), (ii) - (c), (iii) - (b), (iv) - (a)

**Explanation:**

(i) - (d), (ii) - (c), (iii) - (b), (iv) - (a)

25.

(b) Option (b)

**Explanation:**

Mo/Fe is used in Fischer Tropsch process in the synthesis of gasoline.

26. (a) Smelting

**Explanation:**

Smelting

27. (a) niobium(V) and protactinium(V)

**Explanation:**

niobium(V) and protactinium(V)

28.

(b)  $[Xe] 4f^7 5d^1$

**Explanation:**

$$[Xe] 4f^7 5d^1$$

29.

(b) Option (b)

**Explanation:**

The stability of the coordination complex is inversely proportional to the value of equilibrium constant.

30.

(d) Secondary valencies can be satisfied by negative ions or neutral molecules or both.

**Explanation:**

Secondary valencies can be satisfied by negative ions or neutral molecules or both.

31.

(d) 2

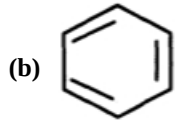
**Explanation:**

2

32. **(b)** 10 Dq  
**Explanation:**  
10 Dq
33. **(d)** polar  
**Explanation:**  
polar
34. **(d)** 4-bromobenzyl cyanide  
**Explanation:**  
4-bromobenzyl cyanide
35. **(a)** warming with magnesium in dry ether  
**Explanation:**  
warming with magnesium in dry ether
36. **(a)** 1,2-dibromoethane  
**Explanation:**  
1,2-dibromoethane
37. **(a)** Ether  
**Explanation:**  
Ether
38. **(c)**  $\text{CH}_3\text{CH}_2\text{OH}$   
**Explanation:**  
 $\text{CH}_3\text{CH}_2\text{OH}$
39. **(c)** all of these  
**Explanation:**  
all of these
40. **(d)** ethane and sodium carbonate  
**Explanation:**  
ethane and sodium carbonate
41. **(a)** Friedel-Craft's acylation  
**Explanation:**  
Friedel-Craft's acylation
42. **(a)** Carbylamine reaction  
**Explanation:**  
Carbylamine reaction

SATISH SCIENCE  
ACADEMY

43.



**Explanation:**



44.

(c) form hydrogen bonds with water

**Explanation:**

form hydrogen bonds with water

45.

(b) ammonia

**Explanation:**

ammonia

46.

(b) III and IV

**Explanation:**

III and IV

47.

(a) Tyrosine

**Explanation:**

Tyrosine

48.

(d) vulcanization

**Explanation:**

vulcanization

49.

(c) All of these

**Explanation:**

All of these

50.

(c) Water

**Explanation:**

Water