

2016 2017

2017 7

100

90

44

1

CH₄

A

B

C

D

2

d f

A 1 3 5 7

B 2 6 10 14

C 1 2 3 4

D 2 4 6 8

3

5

A Fe

B Mg

C B

D C

4

M

A. 7

B. 15

C. 11 15

D. 11 13

5

3d¹⁰4²

A A

B B

C A

D B

6.

A MnO₂

B Zn

C SiO₂

D C₆₀

7.

A

B $3^2 \quad 3$

C $1 \quad 2 \quad 3$

D $3d \quad 4d \quad 5d$

8

A H F

B H O

C H N

D H C

9

8

A PCl_3

B BF_3

C XeF_4

D HCl

10 Na Mg Al

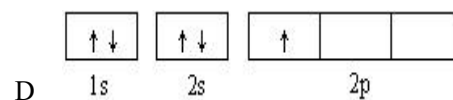
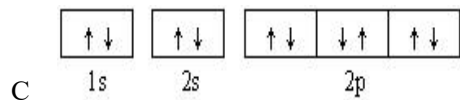
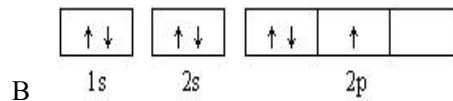
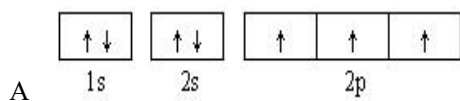
A $\text{NaOH} < \text{Mg(OH)}_2 < \text{Al(OH)}_3$

B $\text{Na} < \text{Mg} < \text{Al}$

C $\text{Na} > \text{Mg} > \text{Al}$

D $\text{Na} > \text{Mg} > \text{Al}$

11



12

A. SiO_2

B. CO $\quad \quad \quad \text{O}_2$

C. Fe^{3+} $\quad \quad \quad \text{KSCN}$

D. C SO_4

13

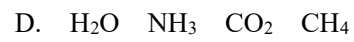
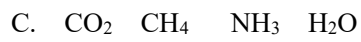
A 2 8 18 32 72 98

B 2 8 8 18 18 32

C 2 8 8 18 32 32

D 2 8 18 32 32 72

14



15

24

A 3

B 4

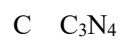
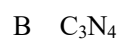
C 5

D 6

16



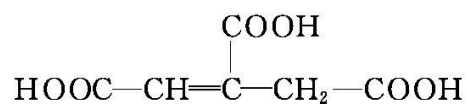
17



2



18



A.

B.

C.

D. 1 m l

33.6 L H₂

19

A

1² X

1² 2² Y

B

L

X

M

Y

C 2

X

3

Y

D

X Y

3

8

20 PCl_5 AlCl_3

PCl_5 AlCl_3 $[\text{PCl}_4]^+$ $[\text{AlCl}_4]^-$

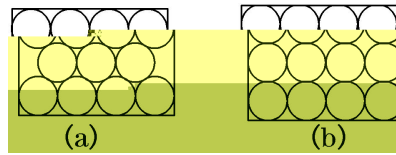
A

B $[\text{PCl}_4]^+$

C $[\text{AlCl}_4]^-$

D

21



A (a)

6

B (b)

4

C (a)

D (b)

22 SO_4^{2-}

3d

d-

d-

A CO_3^{2-}

B NCl_3

C ClO_3^-

D PH_3

23 5

A B C D E

1 _____
 2 _____
 3 _____
 4 _____
 5 _____

24. 10

:

a	
b	b a
c	
d	
e	M d

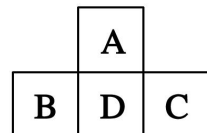
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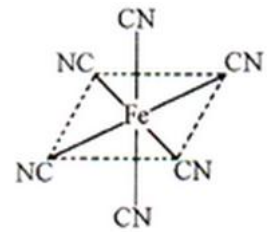
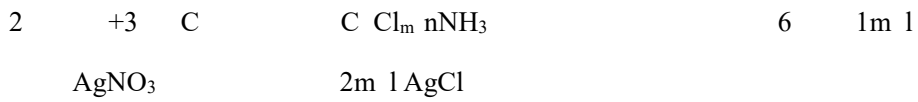
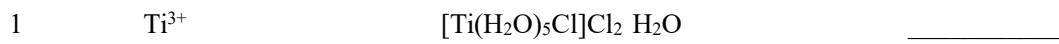
1 a _____
 2 b _____
 3 c _____
 4 d d_2H_4 _____
 5 e _____

25 8

A B C D C

1 DC_2 _____
 2 B _____ C ()
 3 DA_2 _____
 4 B _____ D _____
 5 A D _____





4 A B

A			$0.2577g/100g H_2O$	
B			$0.0366g/100g H_2O$	

a A _____ B _____

b Cl^- P^{2+}

27 9

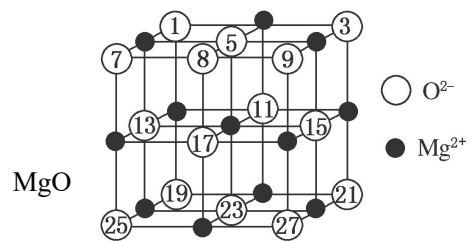
2017 5 5 $C919$ 4 $C919$
 2007

1 _____

2 MgO $NaCl$

O^{2-}

Mg^{2+}

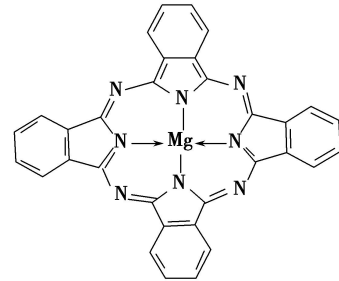


3 Mg

	NaF	MgF ₂
/K	1266	1534

4

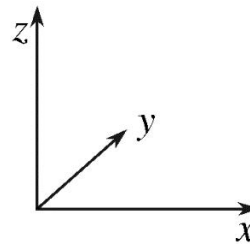
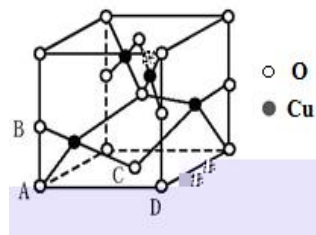
N



5

A 0

0 0 B 0 0 $\frac{1}{2}$ C $\frac{1}{2}$ $\frac{1}{2}$ 0 D _____



28 12

1

A CH₄ B H₂O C HF D CO(NH₂)₂

2 Ti(BH₄)₃ Ti(BH₄)₃ Ti³⁺ BH₄⁻

Ti³⁺ _____

Ti B H _____

BH₄⁻ _____

3

LiH Li⁺ _____ H⁻ > < =

M M

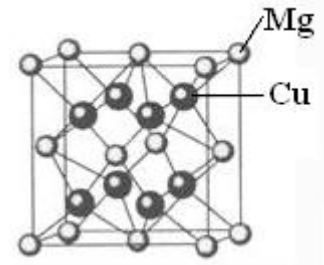
$I_1/\text{kJ m}^{-1}$	$I_2/\text{kJ m}^{-1}$	$I_3/\text{kJ m}^{-1}$	$I_4/\text{kJ m}^{-1}$	$I_5/\text{kJ m}^{-1}$
738	1451	7733	10540	13630

M _____

4 Mg-C

Mg-C g cm^{-3}

$a = \text{_____ cm}$ $d N_A$



2016 2017

2017 7

100

90

	1	2	3	4	5	6	7	8	9	10	11

	12	13	14	15	16	17	18	19	20	21	22

23 5

1 _____ 2 _____ 3 _____ 4 _____ 5 _____

24. 10

1 _____

2 _____

3 _____

4 _____

5 _____

25 8

1 _____

2 _____

3 _____

4 _____

5 _____

26 12

1 _____

2 _____

3 _____

4 a A _____ B _____

b _____

27 9

1 _____

2 _____

3 _____

4 _____

5 _____

28 12

1 _____

2 _____

3 _____

4 _____