

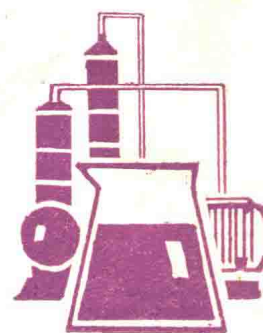
化工高等教育

HUAGONG GAODENG JIAOYU

1984 年化工院系硕士研究生

入学考试试题及题解专辑

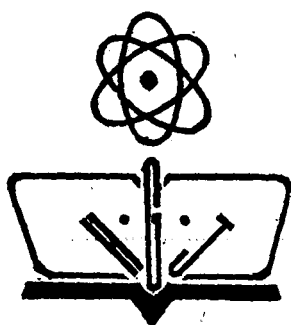
1984



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1984 年化工院系
硕士研究生入学试题
专 辑



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统一考试试题

政治理论试题(理科卷)

一、简答下列各题(每题4分,共20分)

1. 精神污染的实质是什么?
2. 陈独秀右倾投降主义的主要错误是什么?
3. 一九五〇年党的七届三中全会提出的党在当时的中心任务是什么?
4. 实践的基本特征是什么?
5. 资本积累的实质是什么?

二、扼要说明下列各题(每题10分,共20分)

6. 为什么说对立统一规律是辩证法的实质和核心?
7. 怎样理解社会主义生产目的的客观性?它与资本主义生产目的有什么根本不同?

三、论述题(每题15分,共60分)

必答题

8. 试述这次整党的必要性和任务。
9. 试述中国共产党成立的历史必然性及其伟大意义。
10. 试用社会主义社会基本矛盾原理说明社会主义制度的优越性。

选答题(从11, 12两题中任选一题)

11. 试述金融寡头在经济上、政治上的统治,并剖析资本主义民主的实质。
12. 试述我国发展多种经济形式,为什么必须坚持国营经济的主导地位?

英 语 试 卷

I. In each question, decide which of the four choices given will most suitably complete the sentence if inserted at the place marked. Put your choice in the brackets on the left. (15 points)

EXAMPLE:

- (A) To test his theory, the scientist set _____ an experiment.
A. up B. out C. upon D. forth
- () 1. I was caught _____ the rain yesterday.
A. in B. by C. with D. at
- () 2. I promise to look _____ the matter as soon as I get back to the head office.
A. into B. for C. in D. after
- () 3. They left prior _____ our arrival.
A. at B. to C. by D. of
- () 4. The teacher has repeatedly reminded him _____ it.
A. of B. for C. with D. to
- () 5. He is indifferent _____ hardships and dangers.
A. of B. at C. in D. to
- () 6. During that hard winter, the workers in Detroit went _____ strike.
A. into B. in C. on D. to
- () 7. John did it _____ his will.
A. at B. in C. to D. against
- () 8. Come and see me whenever _____.
A. you are convenient B. you will be convenient
C. it is convenient to you D. it will be convenient to you
- () 9. This _____ girl is Mary's cousin.
A. pretty little Swedish B. Swedish little pretty
C. Swedish pretty little D. little pretty Swedish
- () 10. It isn't quite _____ that he will be present at the meeting.
A. sure B. right C. certain D. exact
- () 11. Why is there _____ traffic on the streets in February than in May?
A. less B. fewer C. few D. little
- () 12. I should like to rent a house, modern, comfortable and _____ in a quiet environment.
A. before all B. first of all C. after all D. above all
- () 13. His few personal belongings make it possible for him to move from place to place _____.
A. in ease B. at ease C. with ease D. with easiness

- ()14. Let us try to use our intellect to _____.
 A.the fullest benefit B.the best use
 C.the highest profit D.the greatest advantage
- ()15. They did not find _____ to prepare for the worst conditions they might meet.
 A.worth their while B.it worthwhile
 C.it worth D.it worthy
- ()16. You will soon _____ this climate and then the changes in temperature will not affect you.
 A.get used to B.get to
 C.get over D.get on with
- ()17. Water, when boiled, always _____ steam.
 A.gives in B.gives out C.gives off D.gives away
- ()18. Their plans for a big party _____.
 A.fell out B.fell away C.fell off D.fell through
- ()19. Badly beaten, the intruders _____ in disorder.
 A.fell off B.fell out C.fell back D.fell away
- ()20. The picnic _____ at last after being twice postponed
 A.came off B.came up C.put on D.went on
- ()21. Very few experts _____ with completely new answers to the world's economic problems.
 A.come to B.come round C.come up D.come on
- ()22. His face gave him _____ when he told a lie.
 A.off B.away C.up D.out
- ()23. Someone must have left the tap on, _____ the water was running over and flooding the bathroom.
 A.therefore B.for C.nevertheless D.moreover
- ()24. If that idea was wrong, the project is bound to fail, _____ good all the other ideas might be.
 A.whatever B.though C.whosoever D.however
- ()25. Take an umbrella with you in case of _____.
 A.it rains B.the rain C.rain D.raining
- ()26. The man over there is _____ our principal.
 A.no other but B.no other than
 C.no one than D.none other than
- ()27. The football match was televised _____ from the Workers' Stadium.
 A.alive B.life C.live D.lively
- ()28. The size of the audience, _____ we had expected, was well over one thousand.
 A.whom B.who C.as D.that

- I .** For each numbered blank in the following passage there are four choices labelled A, B, C, and D. Choose the best one and put your choice in the brackets below the passage. Read the whole passage before making your choice. (10 points)

Hot metal_____as it grows cooler.

- Ventilation, as we know, is a system or means of providing fresh air. It plays a very important part in the field of engineering. For instance, the automobile tunnel might _____ huge ventilation problems. Even in the days of smoky, coal-burning

Hudson River tunnel.

() 31. A. make	B. bring	C. raise	D. create
() 32. A. stoves	B. burners	C. boilers	D. engines
() 33. A. around	B. through	C. in	D. within
() 34. A. by	B. with	C. for	D. of
() 35. A. trial	B. pressure	C. examination	D. test
() 36. A. loaded	B. carried	C. crowded	D. transported
() 37. A. swept	B. overcome	C. hit	D. hurt
() 38. A. alive	B. living	C. live	D. lived
() 39. A. With	B. After	C. Because of	D. Despite
() 40. A. resumed	B. stopped	C. moved	D. started

III. Each sentence below is followed by four statements. One of the statements is a suggestion which can be made from the information given in the original sentence. Read the sentences carefully and make your choice. Put your choice in the brackets on the left. (10 points)

EXAMPLE:

- (C) Dr. Smith made a long speech in which he implied that he was a friend of the Dean's.
- A. Dr. Smith was not a friend of the Dean's.
 - B. Dr. Smith gave a talk in which he said he was a friend of the Dean's.
 - C. Dr. Smith suggested in his speech that he was a friend of the Dean's.
 - D. Dr. Smith made a moving speech in which he said he was a friend of the Dean's.
- () 41. I find it difficult to drive home my point to the students.
- A. I find it difficult to make my point fully understood by my students.
 - B. I find it difficult to drive my students home.
 - C. I want to point out that it is difficult to give my students lessons on driving.
 - D. My point is driving is especially difficult for my students
- () 42. You ought to stand up for him.
- A. You should get up when he comes in.
 - B. You should support him.
 - C. You shouldn't be afraid to argue with him.
 - D. You must be of the same height as he is.
- () 43. She took great pains to keep the rooms tidy.
- A. She was in great pain when she tried to keep the rooms tidy
 - B. she found it difficult to keep the rooms tidy.
 - C. She made great efforts to keep the rooms neat and clean.
 - D. She was unwilling to keep the rooms tidy.
- () 44. At first everything went well with the project but recently problems kept cropping up.
- A. At first the quality of the project was satisfactory but recently its quality kept declining.
 - B. The project proceeded smoothly at first but lately unexpected problems continually made their appearance.
 - C. At first the operation of the project went on smoothly, but lately something went wrong with its operation.
 - D. At first the project was thought to be satisfactory, but recently people found that there were actually lots of problems with the project.
- () 45. The search for ways of preserving foods is not new. Primitive man learned that he could make foods last by drying them. The greatest single advance

began in 1800 when a Frenchman, Nicolas Appert, discovered that he could preserve certain foods by sealing them in jars and keeping the air from them. The process was the start of the vast canning industry which brings us many foods in all seasons.

- A. Nicolas Appert's most important contribution to canning industry is that air causes food to spoil.
- B. Nicolas Appert was the first person to preserve foods in jars.
- C. Nicolas Appert learned from the primitive men the method of preserving food.
- D. To preserve foods Nicolas Appert put them into sealed jars to let them dry up.

IV. Fill in the blanks with the words which best complete the meaning of the sentences. Put your choices in the brackets on the left. (10 points)

EXAMPLE:

The photo _____ happy memories of my early childhood.

- (B) A. refreshes B. brings to mind
 C. stimulates D. reminds myself
- () 46. It was the largest experiment we have ever had; it _____ six hours.
 A. ended B. finished C. was D. lasted
- () 47. The gloves were really too small, and it was only by _____ them that I managed to get them on.
 A. spreading B. squeezing C. extending D. stretching
- () 48. Although the false banknotes fooled many people, they did not _____ close examination.
 A. put up B. keep up C. stand up to D. look up to
- () 49. Today, housework has been made much easier by electrical _____.
 A. facilities B. appliances C. instruments D. equipment
- () 50. Charles has not the least _____ of giving up his research.
 A. intention B. idea C. play D. desire
- () 51. That shop doesn't have brown sugar in _____ at the moment, but they expect to have some tomorrow.
 A. storage B. stock C. sale D. demand
- () 52. The country has a system of _____, most of which date back to the nineteenth century.
 A. watercourses B. rivers C. canals D. channels
- () 53. The farmers had to wear heavy boots in the winter because the fields were so wet and _____.
 A. dusty B. earthy C. soiled D. muddy
- () 54. My brother likes eating very much but he isn't very _____ about the food he eats.

A. special B. peculiar C. particular D. unusual

()55. This is the _____ piano on which the composer created some of his greatest works.

A. actual B. genuine C. real D. original

V. Each question consists of a sentence with four underlined parts (words or phrases). These parts are labelled A, B, C, and D. Choose the part of the sentence that is incorrect and put your choice in the brackets on the left. Then write down the correct one on the line following the brackets. (10 points)

EXAMPLE.

Good manners should be observed whether one eats in a restaurant or in home.

A B C D

(D) at

56. One should not talk about unpleasant subjects for a social gathering. Also, we
 should avoid any subject that might hurt the feelings of the people you are with.

() _____

57. When we sit at the table, we must wait for everyone before start eating. Some-
times you have to wait until the head of the family begins eating.

() _____

58. Bob has sat at the table for a couple of hours and drank considerably more wine than is good for his health.

() _____

59. If you Ahad gone there to see the match, I'm sure you Bwould have enjoyed Cto see
the Chinese Football Team Dwin.

() - _____

60. The flour, eggs and milk should be well mixed as it is poured into the baking
 A B C D
 pan.

() _____

61. The names Jimmy, Billy and Bobby end in 'y' are used especially for children,
but they often continue into adult life.

() _____

62. This book costs_A me five yuan. As_B you have been a good friend to me, you may borrow my book as far as_C you keep it clean._D
- () _____
63. Of all the works of art shown_A in this exhibition hall the thing I like more_B is the needle-work_C produced_D by the workers of Shanghai.
- () _____
64. Because_A some of the representatives still_B not there, the conference is put off until_{C D} further notice.
- () _____
65. You've to hurry up if you want to buy something because_A there's_B hardly something_C left._D
- () _____

EXAMPLE.

Now our daughter is sitting next to Doris. At this time tomorrow she will be sitting next to Betty.

67. You haven't learnt the word-order in spoken questions yet but I'm sure you _____ (learn) it before the end of this week.
68. Our guest _____ no sooner _____ (take) off his raincoat than it began to rain again.
69. It is highly desirable that a new president _____ (appoint) for this college.
70. _____ (meet) with an accident, the newspaper correspondent was not able to send a cable.
71. That bad egg wore dark glasses to avoid _____ (recognize).
72. Rather than _____ (leave) everything to the last minute, he always prefers to start early.
73. Don't come today. I would rather you _____ (come) tomorrow.
74. Sammy looks as though he never _____ (get) a square meal, but in fact his

parents feed him very well.

75. If I had a bike, I _____ (lend) it to you yesterday.

VII. Translate the following sentences into English. (15 points)

1. 充分利用自然资源来为人类造福的愿望总有一天会实现。
2. 据我所知, 到目前为止, 这是他们所能想到的最好方案。
3. 随着科学与技术的普及, 电子计算机已越来越广泛地在各个领域中得到应用。
4. 通过深入的调查研究, 他们终于取得了大量的第一手资料。
5. 在我们的工作中失败是常事, 但我们决不能因此而灰心丧气。

VIII. Choose either of the following two passages. Only the underlined sentences are to be translated. (20 points)

(1)

(1) Electricity is such a part of our everyday lives and so much taken for granted nowadays that we rarely think twice when we switch on the light or turn on the radio. At night, roads are brightly lit, enabling people and traffic to move freely. Neon lighting used in advertising has become part of the character of every modern city. In the home, many labour-saving devices are powered by electricity. (2) Even when we turn off the bedside lamp and are fast asleep, electricity is working for us, driving our refrigerators, heating our water, or keeping our rooms air-conditioned. Every day, trains, trolley-buses, and trams take us to and from work. (3) We rarely bother to consider why or how they run-until something goes wrong.

One summer something did go wrong with the power plant that provides New York with electricity. For a great many hours, life came almost to a standstill. Trains refused to move and the people in them sat in the dark, powerless to do anything; (4) lifts stopped working, so that even if you were lucky enough not to be trapped between two floors, you had the unpleasant task of finding your way down hundreds of flights of stairs. Famous streets like Broadway and Fifth Avenue in an instant became as gloomy and uninviting as the most remote back streets. (5) People were afraid to leave their houses, for although the police had been ordered to stand by in case of emergency, they were just as confused and helpless as anybody else.

Meanwhile, similar disorder prevailed in the home. New York can be stifling in the summer and this year was no exception. Cool, air-conditioned apartments became furnaces. Food went bad in refrigerators. Cakes and joints of meat remained uncooked in cooling ovens. (6) People sat impatient and frightened in the dark as if an unseen enemy had landed from Mars. (7) One of the strange things that occurred during the power-cut was that some fifty blind people led many sighted workers home. (8)

When the lights came on again, hardly a person in the city can have turned on a switch without reflecting how great a servant he had at his finger-tips.

(2)

A mineral is a material that is mined, not grown. (1) In other words mineral substances which are found on the earth must be extracted by digging, boring holes, artificial explosions, or similar operations which make them available to us. some minerals, for example coal and oil, were originally living substances; others, like iron, never had life. (2) Coal and oil are the remains of plants and animals. Crude mineral ores and crude oil must be purified before they can be used.

(3) A stage in human civilization is often called by the name of the substance mainly used at that stage: the Stone Age, the Iron Age, and so on. The level of civilization reached by a society depends on the materials it can use, not only on those which are available. (4) The capacity to use a raw material depends on various factors, such as means of access, methods of extraction, and techniques of processing. In order to be purified, or combined into alloys, metals must be melted. For this purpose they must be placed in containers which can be heated to enormous temperatures. These containers or enclosed spaces are called furnaces. (5) Plants which refine crude ores are often located in countries other than those in which the crude ores are mined.

Although much was known previously about the chemical properties of aluminum and their application to practical uses, (6) it was not until sixty years ago that a method of extracting aluminum ore was found which could lead to a cheap large-scale process.

(7) In the past few decades men behaved as if their supplies of minerals were inexhaustible. (8) But now it is realized that supplies of some of them are limited, and it is even possible to give a reasonable estimate of their "expectation of life," the time it will take to exhaust all known sources and reserves of these materials.

But in the case of minerals it is especially difficult to give a reliable estimate of reserves because surveys have not been completed and it is not certain that all sources are known. Uranium provides a good example of this fact.

英 文 试 卷 题 解

- I 1. A 2. A 3. B 4. A 5. D 6. C 7. D 8. C
 9. A 10. C 11. A 12. D 13. C 14. D 15. B 16. A

17. C 18. D 19. C 20. A 21. C 22. B 23. B 24. D
 25. C 26. D 27. C 28. C 29. B 30. B
 I. 31. D 32. D 33. B 34. B 35. D 36. A 37. B 38. A
 39. D 40. A
 III. 41. A 42. B 43. C 44. B 45. A
 IV. 46. D 47. D 48. C 49. B 50. A 51. B 52. C 53. D
 54. C 55. A
 V. 56. (A)at 57. (C)we 58. (B)drunk 59. (C)seeing
 60. (C)before 61. (A)ending 62. (C)as long as 63. (B)most
 64. (A)with 65. (C)anything
 VI. 66. have had 67. will have learned
 68. had...taken 69. (should)be appointed
 70. Having met 71. being recognized
 72. leave 73. came
 74. got 75. would have lent

- VII. 1. The wish of fully utilizing the natural resources for the benefit of mankind will eventually come true.
 2. To my knowledge, this is the best program they can conceive of so far.
 3. With the popularization of science and technology, computer has found an increasingly wide application in all fields.
 4. Through an intensive investigation they have finally obtained abundant firsthand information.
 5. In our work it's nothing unusual to be confronted with failures but we should in no way be discouraged on that account.

VIII. 英译汉

(1)

- (1) 电在我们的日常生活所占的地位是这样的重要，而且现在人们还认为有电是完全理所当然的事，所以我们在开电灯或开收音机时就很少会再去想一想电是怎么来的。
 (2) 即使在我们关掉了床头灯深深地进入睡乡时，电也在为我们工作，它帮我们开动冰箱，帮我们烧水或使我们房间里的空调机保持运转。
 (3) 在车辆出毛病之前，我们就不会去费脑筋想一下它们为什么会开动或怎样开动。
 (4) 电梯停了，因此即使你幸而没有被困在两个楼层的中间，你也得去完成一项不愉快的任务：即摸黑往下走几百级楼梯。
 (5) 尽管警察都已接到命令，要作好准备以应付紧急情况，但人们还是不敢出门，因为警察也同其它任何人一样感到不知所措和无能为力。
 (6) 人们焦急不安、惊慌失措地坐在黑暗中，好象有一名来自火星的看不见的敌人已登上了地球。
 (7) 停电期间所发生的事件中有过这样一件事：大约有五十名盲人给许多有视力的职工带

路，把他们送回家。

- (8) 当电灯再亮时，城里的人在揷电灯开关之前，几乎没有一个人不仔细想一想，他随时都能有一个多么能干的仆人来为他服务啊。

(2)

- (1) 换言之，矿物就是存在于地球上的而且必须经过挖掘、钻孔、人工爆炸或类似作业才能获得的物质。
- (2) 煤和油是植物和动物的残体。原矿石和原油必须加以精炼才能使用。
- (3) 人类文明的各个时期通常是人们在各个时期所主要使用的物质名称而命名的，例如石器时代、铁器时代，等等。
- (4) 使用原料的能力大小取决于各种因素，例如，获取原料的手段、开采方法和加工技术。
- (5) 提炼原矿石的厂房设备通常不是设在开采原矿石的国家而是设在其它国家。
- (6) 直到六十年前人们才发现一种开采铝矿石的方法，从而有可能从中得出一种成本低廉、大规模提炼的炼铝法。
- (7) 在过去的几十年间，人们对待矿物的态度是：仿佛他们可以永远不断地得到矿物供应。
- (8) 可是现在他们认识到，其中有些矿物的蕴藏量是很有限的，他们甚至还可以较合理地估计出这些矿石“可望存在多少年”，也就是说，经过多少时间之后，这些矿物的全部已知矿源和蕴藏量将被耗尽。

清华大学试题

试题编号 0101 专业 各专业 考试科目 综合考试

一、选择题请根据题意在选出的答案前打“√”。遗漏或选错者扣分。例：氯化银是一种

(A) 蓝色结晶 (B) 难溶性的白色固体 (C) 可溶于水的共价化合物

1. 与其他金属元素相比较, 第一主族元素在下列性质中数值较高者有

(A) 原子(摩尔)体积 (B) 1摩尔单质汽化所需的能量 (C) 单质的沸点

2. 加入纯水后, 可提高其 pH 值的氢化物有

(A) NH_3 (B) HBr (C) CH_4

3. 制备无水氯化铝的方法是

(A) 将过量铝加入稀盐酸中, 反应完毕后蒸干所得溶液

(B) 往盐酸中加入氢氧化铝, 反应完毕后蒸干所得溶液

(C) 在氯气流中加热铝箔(或条)

4. 如果 X 与 Y 分别代表原子序数为 9 与 20 的两种元素。它们形成的稳定化合物应当是

(A) 共价性 YX (B) 离子性 YX (C) 共价性 YX_2 (D) 离子性 YX_2

5. 下列重量的气体中, 在 25°C , 1 大气压下占据体积 > 4 升的有

(A) 8.0 克 SO_2 (B) 5.5 克 CO_2 (C) 4 克 O_2 (D) 10 克 Ar

(已知 $\text{C} = 12$, $\text{O} = 16$, $\text{S} = 32$, $\text{Ar} = 40$)

6. 金属钠应保存在

(A) 酒精中 (B) 煤油中 (C) 液氨中 (D) 空气中 (E) 水银中

7. 加热 KClO_3 固体制取 60 毫升氧气(室温及 1 大气压下的体积)时, 所须分解的氯酸钾摩尔数为

(A) 0.164×10^{-3} (B) 0.250×10^{-3} (C) 1.64×10^{-3} (D) 2.50×10^{-3}

(E) 3.75×10^{-3}

8. 具有 $\text{Ar}3d^64s^0$ 电子组态的基态离子可能是

(A) Mn(II) (B) Fe(III) (C) Co(III) (D) Ni(II) (E) Cr(V)

9. 不稳定核 $^{212}_{81}\text{Pb}$ 呈 β 辐射蜕变, 其半衰期为 10 小时。下列结论中错误的是

(A) 产物质量数为 212 (B) 产物原子序数为 81

(C) 20 小时后, 原来这种同位素只剩下 $1/4$

10. 下列分子在液相时, 其分子间相互作用力的减弱次序是

$\text{H}_2\text{O} \cdots \text{H}_2\text{O}$ $\text{HF} \cdots \text{HF}$ $\text{CH}_3\text{COCH}_3 \cdots \text{CH}_3\text{COCH}_3$ $\text{C}_2\text{H}_5\text{OH} \cdots \text{C}_2\text{H}_5\text{OH}$
I II III IV

(A) I II III IV (B) II III I IV (C) II I IV III (D) II I III IV

11. 氧化 1 摩尔 Mn^{2+} 所需的 $\text{S}_2\text{O}_8^{2-}$ 摩尔数为

(A) 0.4 (B) 0.5 (C) 1.0 (D) 2.0 (E) 2.5

12. 下列分子中在形成配价键时能接受一对电子的是

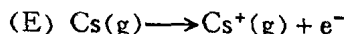
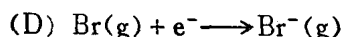
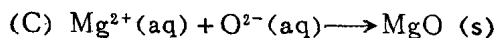
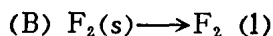
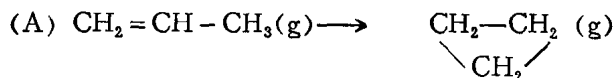
- (A) NH_3 (B) AlCl_3 (C) CH_4 (D) PCl_3

13. 元素 P.Q.R.S.T (代号) 的电负性依次为 0.7, 1.1, 1.6, 2.5, 1.7。

下列二元化合物(或化学键)中, 价键离子性最强的是

- (A) P-T (B) P-Q (C) R-S (D) T-S (E) Q-T

14. 下列诸过程中焓变最大的是



15. 一种难溶的 $\text{Fe}(\text{III})$ 盐在水溶液中电离式为 $\text{Fe}_2\text{X}_3(\text{s}) \rightleftharpoons 2\text{Fe}^{3+}(\text{aq}) + 3\text{X}^{2-}(\text{aq})$ 若此盐的溶度积为 K_{sp} , 平衡时水中的 $[\text{Fe}^{3+}](\text{aq})$ 等于

- (A) $(K_{\text{sp}})^{\frac{1}{2}}$ (B) $\left(\frac{2}{3} K_{\text{sp}}\right)^{\frac{1}{2}}$ (C) $\left(\frac{8}{27} K_{\text{sp}}\right)^{\frac{1}{3}}$ (D) $\left(\frac{2}{3} K_{\text{sp}}\right)^{\frac{1}{3}}$ (E) $\left(\frac{8}{27} K_{\text{sp}}\right)^{\frac{1}{3}}$

16. 用高锰酸钾稀溶液滴定草酸(用 H_2SO_4 酸化)时, 反应速度在滴定开始后一段时间内突然增大, 理由是

- (A) 产生的 Mn^{2+} 有催化作用 (B) 滴定液 pH 值升高
(C) 反应放热, 提高了体系温度 (D) 硫酸除去产物中的水, 使平衡很快右移。

17. 下列物质在与金属离子形成络合物(或络离子)时, 不能起配位体作用的有

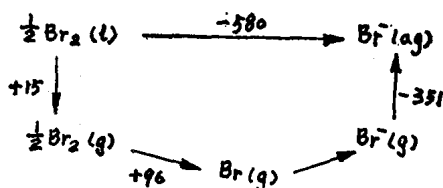
- (A) $\text{C}_6\text{H}_5\text{NH}_2$ (B) CH_3NH_2 (C) NH_4^+ (D) NH_3 (E) $\text{C}_2\text{H}_4(\text{NH}_2)_2$

18. 反应 $2\text{COF}_2(\text{g}) \rightleftharpoons \text{CO}_2(\text{g}) + \text{CF}_4(\text{g})$

当 CO_2 为 8 摩, CF_4 为 5 摩, COF_2 为 3 摩时体系达到平衡。已知此反应为吸热反应, 下列结论中不正确的是

- (A) $K_p = K_c = \frac{40}{9}$ (B) 正反应的 ΔG° 为负值 (C) 只改变压力对上述平衡状态不产生影响 (D) 只改变温度对上述平衡状态不产生影响

19. 从下列循环中, 可求出溴的电子亲和能($\text{KJ} \cdot \text{mol}^{-1}$)为



- (A) -820 (B) -340 (C) -118 (D) +118 (E) +340

20. 7.5% KCl 溶液的渗透压接近于($K=40, \text{Cl}=35.5, \text{O}=16, \text{H}=1, \text{C}=12$)

- (A) 5.8% 蔗糖溶液 (B) 5.8% 葡萄糖溶液 (C) 2.0 摩尔浓度的蔗糖溶液
(D) 1.0M 葡萄糖溶液 (E) 4.0M 葡萄糖溶液

二、填充题 请根据题意填入, 最好是简明正确。