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RAINBOW

金榜考试系列丛书

IELTS 阅读・写作珍题

金榜科技 编著

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前 言

IELTS 考试全称为 International English Language Testing System,是由英国剑桥大学地方考试委员会(UCLE)、英国文化委员会(BC)和澳大利亚教育国际开发署(International Development Program of Australia Eclucation)三方联合举办的,是对母语为非英语的人士去英国、澳大利亚等国家留学或移民所进行的英语水平考试。目前,除英国、澳大利亚以外,加拿大、新西兰等英联邦国家也承认该考试成绩,并以该考试成绩作为进入这些国家大学学习或者移民的通行证,且我国公派到英国学习的访问学者和攻读硕士、博士学位的研究生均需参加这项考试。近几年美国也有80多所学校承认并接受 IELTS 考试成绩。

IELTS 考试分为 IELTS 学术类考试和 IELTS 普通类考试。前者针对 留学人员和访问学者,后者针对移民申请者。两种考试的听力和口语 试卷相同,阅读和写作另卷。

IELTS 考试分为听、说、读、写四个部分,每部分的满分为9分,总分为四个部分成绩相加除以4。

与 TOEFL 等考试相比, IELTS 考试的最大特点是对考生的英语交际能力进行测试, 重点放在以英语为工具解决专业学习和工作中的听、读、写、说等实际问题方面。

本书含有大量阅读和写作的全真模拟试题,其中也包括部分经典的历史真题,还附有详尽的答案和解题思路,非常适宜参加雅思考试的人员备考使用。考生如能将此书习题全部完成,就能够对雅思考试的各类题型、每题占用时间、解题技巧、作文格式等有充分的把握,对于考生适应考试并拿到高分有着很大的帮助。

近期我们还将推出"金榜考试系列丛书"中的《金榜 IELTS 应试技能》、《金榜 IELTS 口语训练》、《金榜 IELTS 词汇手册》、《金榜 IELTS 听力珍题》等,相信本套丛书的出版,能更好地帮助考生把握和通过雅思考试,实现人生的理想与辉煌。

编 者

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I IELTS 学术类阅读·写作珍题

阅读部分

一般由 3~4 篇文章构成,有 40 个左右的问题。最大特点是大部分问题不是传统的多项选择题。比如,试题中的一篇文章有 8 段,问题中列出 12 个小标题,要求考生根据每段的内容从 12 个小标题中选出本段的小标题。试题还可能要求考生从列出的十几个单词、词组中选择正确答案填入一篇短文,其中一部分词或词组为干扰性选项,答题时有时还需参考试题中的另一篇文章。再比如,文章描述某一过程(如某种比赛),要求考生把问题中列出的若干个步骤按其在过程中的先后顺序排序。由于干扰因素很多,猜对的可能性几乎为零。IELTS 考试阅读部分与其他阅读考试的另一重大区别是,IELTS 考试不仅不含语法和词汇题,反而可能会列出若干关键词和定义,以帮助考生更好地理解文章的内容。

写作部分

Task 1. 一般要求考生写一篇不少于 150 个词的短文描述所给的一个图(流程图、剖面图、曲线图等)或表,或根据一篇短交的内容写一份报告。比如,描述一个欧洲城市分别在 1950、1970 和 1990 年中各种交通车辆的运营情况。再比如,描述某一国家若干年内人口增减情况。试卷建议考生在 20 分钟内完成本部分。

Task 2. 一般要求考生就某个问题提出解决的方法,为某一观点辩护,比较或对比一些根据和意见,评价或反驳一些论点,或提供一般真实的报告。比如,"科学技术的发展将使传统文化丧失,这是不可避免的。科学技术与传统文化是不能共存的。在多大程度上你同意或不同意这个观点? 为你的回答提供论据。"再比如,你向英国一所大学申请留学生奖学金。申请书的最后部分要求你报告自己所从事的专业情况和将来的一些打算。试卷建议考生在 40 分钟内完成本部分。

IELTS 学术类模拟题一

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

PRACTICE TEST(Version One)

ACADEMIC READING TEST

Instructions

ALL ANSWERS MUST BE WRITTEN ON THE ANSWER SHEET

The test is divided as follows:

Reading Passage 1

Questions 1 ~ 15

Reading Passage 2

Questions 16 ~ 28

Reading Passage 3

Questions 29 ~ 40

Start at the beginning of the test and work through it. Your should answer all the questions. If you cannot do a particular question leave it and go on to the next. You can return to it later.

Reading Passage 1

You should spend about 20 minutes on Ouestions 1 ~ 15 which are based on Reading Passage 1.

The Birth Of The Microwave

Chances are, you'll use a microwave oven at least once this week – probably (according to research) for heating up leftovers or defrosting something. Microwave ovens are so common today that it's easy to forget how rare they once were. As late as 1977, only 10% of U.S. homes had one. By 1995, 85% of households had at least one. Today, more people own microwaves than own dishwashers.

Magnetrons, the tubes that produce microwaves, were invented by British scientists in 1940. They were used in radar systems during World War II, and were instrumental in detecting German planes during the Battle of Britain. These tubes – which are sort of like TV picture tubes – might still be strictly military hardware if Percy Spencer, an engineer at Raytheon (a U.S. defense contractor), hadn't stepped in front of one in 1946. He had a chocolate bar in his pocket; when he went to eat it a few minutes later, he found that the chocolate had almost completely melted. That didn't make sense. Spencer wasn't hot – how could the chocolate bar be? He suspected the magnetron was responsible, so he tried an experiment. He put a bag of popcorn kernels in the tube. Seconds later, they popped. The next day, Spencer brought eggs and an old tea – kettle to work. He cut a hole in the side of the kettle, put an egg in it, and placed it next to the magnetron. Just as a colleague went to see what was happening, the egg exploded.

Spencer shared his discovery with his employers at Raytheon, and suggested manufacturing magnetron – powered ovens to sell to the public. Raytheon was interested. They had the capacity to produce 10000 magnetron tubes per week, but with World War II over, military purchases had been cut down to almost nothing. What better way to recover lost sales than to put a radar set disguised as a microwave oven in every American home? Raytheon agreed to back the project. The company patented the first "high frequency dielectric heating apparatus" in 1953. Then they held a contest to find a name for their product. Some came up with "Radar Range," which was later combined into the single word – Radarange.

Raytheon had a great product idea and a great name, but they didn't have an oven anyone could afford. The 1953 model was 5 ½ feet tall, weighed more than 750 pounds, and cost \$3000. Over the next 20 years, railroads, ocean liners and high – end restaurants were virtually the only Radarange customers. In 1955, a company called Tappan introduced the first microwave oven for average consumers; it was smaller than the Radarange, but still cost \$1295 – more than some small homes. Then in 1964, a Japanese company perfected a miniaturized magnetron, and Raytheon soon after introduced a Radarange

that used the new magnetron. It sold for \$495. But that was still too expensive for the average American family. Finally, in the 1980s, technical improvements lowered the price and improve the quality enough to make microwave ovens both affordable and practical. By 1988, 10% of all new food products in the U.S were microwaveable.

E Here is the first thing you should know about "microwaves": Like visible light, radio waves and X - rays, they are waves of electromagnetic energy. What makes the four waves different from each other? Each has a different length (wavelength) and vibrates at a different speed (frequency). Microwaves get their name because their wavelength is much shorter than electromagnetic waves that carry TV and radio signals. The microwaves in a microwave oven have a wavelength of about four inches, and they vibrate 2.5 billion times per second - about the same natural frequency as water molecules. That's what makes them so effective at heating food. A conventional oven heats the air in the oven, which then cooks the food. But microwaves cause water molecules in the food to vibrate at high speeds, creating heat. The heated water molecules are what cooks the food. Glass, ceramics and plastics contain virtually no water molecules, which is why they don't heat up in the microwave. When the microwave oven is turned on, electricity passes through the magnetron, the tube which produces microwaves. The microwaves are then channeled down a metal tube (waveguide) and through a slow rotating metal fan (stirrer), which scatters them into the part of the oven where the food is placed. The walls of the oven are made of metal, which reflects microwaves the same way that a mirror reflects visible light. So when the microwaves hit the stirrer and are scattered into the food chamber, they bounce off the metal walls and penetrate the food from every direction. Some ovens have a rotating turntable that helps food cook more evenly. Do microwaves cook food from the inside out? Some people think so, but the answer seems to be no. Microwaves cook food from the outside in, like conventional ovens. But the microwave energy only penetrates about an inch into the food. The beat that's created by the water molecules then penetrates deeper into the food, cooking it all the way through. This secondary cooking process is known as "conduction."

When sales of microwave ovens took off in the late 1980s, millions of cooks discovered the same thing: Microwaves just don't cook some foods as well as regular ovens do. The reason: Because microwaves cook by exciting the water molecules in food, the food inside the microwave oven rarely cooks at temperature higher than 212°F, the temperature at which water turns to steam. Conventional ovens, on the other hand, cook to temperatures as high as 550°F. High temperatures are needed to caramelize sugars and break down proteins, carbohydrates and other substances, and combine them into more complex flavors. So, microwave oven can't do any of this, and it can't bake, either.

Some people feel this is the microwave's Achilles heel. "The name 'microwave oven' is a misnomer," says Cindy Ayers, an executive with Campbell Soup. "It doesn't do what an oven does." "It's a glorified popcom popper," says Tom Vierhile, a researcher with Marketing Intelligence, a newsletter that tracks microwave sales. "When the microwave first came out, people thought they had stumbled on nirvana. It's not the appliance the food industry thought it would be. It's a major disappointment." Adds one cooking critic: "Microwave sales are still strong, but time will tell whether they have a future in the American kitchen."

Questions 1 ~ 5

Reading Passage 1 has six paragraphs. Choose the most suitable headings for paragraphs $B \sim F$ from the list of headings below. Write the appropriate numbers $(i \sim xi)$ in boxes $1 \sim 5$.

NB: There are more headings than paragraphs, so you will not use all of them. You may use any of the headings more than once.

List of Headings

- (i) Spencer's Discovery
- (ii) The Introduction of the Radarange
- (iii) Spencer's Invention
- (iv) The Birth of the Microwave
- (V) Essential Details about Microwaves
- (VI) Conduction Cooking
- (vii) The Future of the Microwaves
- (viii) How Food Is Cooked
- (IX) The Commercial Development of the Microwave
- (X) You and Your Microwave
- (XI) Limitations of the microwave

Example: Paragraph A Answer:

v

- 1. Paragraph B
- 2. Paragraph C
- 3. Paragraph D
- 4. Paragraph E
- 5. Paragraph F

Questions 6 ~ 9

Use No More Than Three Words to answer the following questions. Write your answers in boxes $6 \sim 9$ on your answer sheet.

- 6. What is the name given to the heat process that starts from the outside and moves to the inside?
- 7. The reason that regular ovens are slower is because they don't heat these as well.
- 8. We can think of a microwave as different from other types of light in terms of what two character-

— 5 —

istics?

9. What does light immediately do once it hits the metal walls in a microwave.

Questions 10 ~ 15

Do the following statements agree with the information given in Reading Passage 1? Write your answers in boxes $10 \sim 15$ on your answer sheet.

Yes if the statement agrees with the information

No if the statement contradicts the information

Not Given if there is no information on this in the passage

- 10. The microwave technology was invented by Spencer.
- 11. Regular ovens do not heat water molecules.
- 12. Raytheon couldn't make money out of microwave ovens at first.
- 13. The reason water molecules heat faster is not due to the fact that microwave light is stronger.
- 14. Microwaves can't heat food higher than an oven can.
- 15. Microwave sales are declining.

Reading Passage 2

You should spend about 20 minutes on Questions 16 ~ 28 which are based on Reading Passage 2.

Overtaking Concorde

The obvious response of airlines faced with overcrowded airports such as those in Tokyo, Osaka, Honk Kong and many others is to put more people into each aircraft, meaning that big is beautiful. For trunk routes, wide – bodied jets are the way to go for economic efficiency. Aircraft and engine manufacturers have done their bit by tweaking airframes to reduce drag and fuel – burn over the years, bringing basic operating costs down.

But this path of development is now approaching the end of worthwhile technological improvements, with only two new extensions left. First involves the Airbus A330 and the Boeing 777, both now being developed, which will both be seen in the colours of various Asian airlines in the mid to late 1990s. When these designs are pushed to their ultimate form over a few years of increasing engine power, both will be in effect twin – engined 747s so far as capacity is concerned – high – volume people movers ideal for Asia's regional trunk routes.

3 The second path is to scale up capacity using four engines, and Airbus and Boeing are both looking — 6 —

at designs for what will be effectively giant 747s, with $600 \sim 700$ seats and either side – by – side double fuse-lages (Airbus) or a full – length double deck (Boeing). Neither type is expected to appear in less than 10 years, but when they do, among obvious applications will be trans – Pacific and Asia – Europe routes.

But the speeds of these new types will be in the same range as that of virtually all jet transports since their inception in the 1950s and 1960s: Mach 0.8 ~ 0.85 (80% ~ 85% of the speed of sound), a zone mandated by the limits of subsonic aerodynamics, the historic cost of materials and, latterly, environmental considerations such as noise and air – pollution from engines.

The only exception used in commercial service is the Anglo – French Concorde, still flying regular supersonic trips across the Atlantic 15 years after its introduction. But Concorde has been the shoal on which other dreams of supersonic airliners have foundered: a spectacular technical success for its time, it was an equally spectacular commercial failure, with only 14 entering commercial service. It is too noisy, too small, drinks fuel and has only been viable – at premium fares – because its development costs were written off by the British and French governments.

The message for those with supersonic ambitions has been that if you cannot do better than Concorde, do not even try.

However, parts of the philosophy which led to Concorde still apply, and are leading to hopes that supersonic transport may be only a matter of 15 ~ 20 years away. First is that everyone would like to reach their destination faster, instead of spending boring hours confined in a metal tube. And second is that increasing an aircraft's speed also increases its potential productivity, meaning less units needed to do the same amount of work.

Various consortia in the US, Europe and Japan are now undertaking studies to define the market, the product and the technology necessary to bring this about, though the target date of 2005 is thought to be highly optimistic by most. Some of the efforts seem to focus on high technology for its own sake, with applications to be found later: Japan, for instance, has teamed up with four major Western engine manufacturers in an eight year, US \$ 224 million programme to develop a "variable cycle" turbo – ramjet capable of operating at Mach 5, or about 4800 km per hour.

But a study by Boeing indicates that, for commercial success, a supersonic transport should fly at about half this speed, or only slightly faster than Concorde, for economic and environmental reasons. Boeing's thinking was the result of its involvement in a project with the US National Aeronautics and Space Administration to look at commercial supersonic flight in 1986. By 1988, impressed with the apparent potential shown by its studies, Boeing set up a team to do preliminary design work and look at technological development.

Boeing's market projections were based on worldwide passenger flows doubling by the year 2000 to 4.8 million passengers a day, or a rate of 5.9% a year – slightly higher than its own more recent estimate of 5.2%. Boeing then looked at the scheduled international market, which accounts for 23% of the

total, and took out routes of less than 2500 nautical miles as uneconomic for supersonic flight. It also eliminated routes which are mostly over land, because of concern about sonic booms. What remains in the year 2000, says Boeing, is a group of trans – Pacific, Asia – Europe and trans – Atlantic routes which will account for 315000 passengers a day, a figure which will grow to 607000 a day by 2015. This, according to Boeing, is a potential market for 1000 ~ 1500 supersonic transports with 5000 nautical miles' range, a cruising speed of Mach 2.4 and a capacity of 250 ~ 300 passengers.

With this design basis, a non – stop Los Angeles – Tokyo trip would take only four hours and 18 minutes, compared with 10 hours 18 minutes today. And even with one stop on longer flights, the time saved is dramatic: Los Angeles to Sydney would be 7 hours 18 minutes, including an hour's stop in Honolulu, compared with today's non – stop subsonic flying time of 14 hours.

Major considerations for Boeing were that the supersonic aircraft should be able to use existing airports, comply with the latest noise regulations and not require exotic fuels such as liquid hydrogen. This means new technology for engines, and according to Boeing, various promising leads have been identified which should lead to meeting goals set for noise and exhaust emission standards. Boeing says that meeting the noise goals "Will be a difficult but achievable task," and points to engine – manufacturers' research into ways of reducing emissions of oxides of nitrogen which harm the earth's ozone layer.

While use of supersonic aircraft from existing airports might help to cut the rate of growth of fleets, given that less units will produce more work, there is a downside to this argument. If a supersonic aircraft performs twice as many trips as its subsonic counterpart, it will be on the ground twice as often, and therefore taking up parking bays, immigration and customs facilities and other airport services for twice as long.

The need for additional airports and better facilities is therefore not going to disappear. Without them, the number of trips in which time spent in airports exceeds flying time will merely increase as aircraft speed rises.

Questions 16 ~ 19

In the box below are what are / were to be done in the aircraft making industry. Answer the following questions by choosing letters $A \sim H$ in the box below. Please note that some questions need more than one letter. Write your answers in boxes $16 \sim 19$ on your answer sheet.

- A. Develop the latest models of four engined jumbo jets.
- B. Increase aircraft's productivity.
- C. Send people to their destinations more quickly.
- D. Renew study of and ultimately the production of supersonic iets.
- E. Use liquid hydrogen as fuel to increase engine power.
- F. Develop the latest models of two engined jumbo jets.
- G. Build more airports and improve airport facilities.
- H. Improve technology for engines so as to reduce noise and oxide of nitrogen.

- 16. According to the passage, what three in the above list are actions taken to fly more people and fly them faster?
 - 17. Which one in the above list is an action taken to produce better engines for supersonic jets?
- 18. Which one in the above list is an action to be taken to cope with an increase of passengers travelling by air?
 - 19. Which two in the above list are reasons for future supersonic transport?

Questions 20 ~ 23

Complete the table below. Write your answers in boxes 20 ~ 23 on your answer sheet.

	departure	arrival	time	stopover(Y/N)
supersonic	Los Angeles	(20)	4 hr 18 min	N
subsonic	Los Angeles	Tokyo	(21)	N
supersonic .	Los Angeles	Sydney	7 hr 18 min	(22)
subsonic	Los Angeles	Sydney	14 hr	(23)

Questions 24 ~ 28

Use No More Than One or Two Words to answer the following questions. Write your answers in boxes $24 \sim 28$ on your answer sheet.

Example:							860
						Answer:	
How many C	oncorde aircraf	ts are now in	commercial	service?			14

- 24. What is the likely speed that the new supersonic jets will fly at?
- 25. What is the capacity that Boeing is aiming at for the new supersonic jets?
- 26. What is the approximate number of passengers travelling by air today?
- 27. What is the number of passengers in the year of 2015 that Boeing is now thinking of when projecting the market potential for supersonic aircraft?
 - 28. What is the main idea of Reading Passage 2?

Choose one letter from below and write it in box 28 on your answer sheet.

- A. Concorde was a technical success but a commercial failure.
- B. There is a renewed interest in commercial supersonic transport.
- C. There are many problems to solve in order to improve supersonic aircraft.
- D. Increasing concerns for environmental considerations mean good bye to commercial supersonic transport.

Reading Passage 3

You should spend about 20 minutes on Questions 29 ~ 40 which are based on Reading Passage 3.

Dante Tours the inferno

It wasn't until refrigerator – size boulders began hurtling down from above that the scientists sitting in an Anchorage, Alaska, control room started to get seriously worried until then the robot known as Dante II had successfully negotiated a steep, muddy descent and ambled unconcernedly through hot steam and poisonous gases. But even a 3 – m – tall, 770 – kg automation has its limits, and multiton chunks of rock moving at high speed were beyond Dante's. "That big one," said Carnegie Mellon University robotics expert John Bares, pointing nervously at a video screen after a rockslide, "would've wiped us out."

In the end, it was a misstep, not a rock, that toppled Dante, and only after the robot had completed its main mission: a detailed study of the crater floor 90 m below the rim of Alaska's active Mount Spurr volcano that included a 3 - D survey of the hellish terrain and an analysis of gases issuing from belching vents. Among the significant results: the first maps of the crater's surface, normally hidden by out - croppings and haze. Dante also discovered scant sulfur dioxide and hydrogen sulfide in the noxious air, implying that the volcano, which erupted in 1992, will probably stay quiet for a while.

But important as this news was to the volcano experts and the people of Anchorage, just 130 km from Mount Spurr, the volcano study was perhaps the least noteworthy part of the robot's mission. Despite the final slipup, which toppled Dante and left it stranded on the steep mountain slope, the 10 – day trek went a long way toward proving the potential of a technology that could let humans explore a wide range of sites too hazardous to visit in person – other volcanoes, deep caves, the barren wastes of Antarctica, the ocean floor and even the surfaces of the moon and Mars. "The robot has performed like a champ," says David Lavery, manager of the Telerobotics Research Program at the U.S. National Aeronautics and Space Administration, which paid for most of Dante II's \$ 1.7 million development cost.

Dante II is the brainchild of Bares and William Whittaker, the principal research scientist at Camegie Mellon's robotics lab and a legend among robot designers. Whittaker helped design the machine that cleaned up the reactor in Three Mile Island, Pennsylvania, after its near meltdown in 1979, and he oversaw development of a system that will automatically inspect the heat – resistant tiles on NASA's space shuttles.

Dante is perhaps his most sophisticated product. Its vaguely spider – like aluminum body has eight legs, four of which are always on the ground; that provides maximum stability as the machine moves forward at a top speed of 90 cm per minute, stepping lightly over obstacles more than 1 m high. Eight on

- board video cameras enable scientists to view the terrain. Even more useful is a laser - ranging system - a sort of light - based radar - that makes 30000 distance measurements every second and generates a virtual - reality computer image of the landscape. Says Bares: "It gives us a very complete picture of what's around us."

What makes Dante II truly revolutionary, however, is its four computers and their controlling software. Although the robot was connected by cable to a power generator and transmitter at the crater rim, which let the scientists direct it via a satellite hookup to the control room, Dante II can operate independently at times and did for nearly half the mission, negotiating its own path through the boulders.

That skill will be crucial if a Dante – like robot is sent to another world. On Mars, for example, says Lavery, contact would probably be limited to once a day, and even then the enormous distances would result in a minimum 10 – minute time lag in communications. Dante II is not quite smart enough for full autonomy, but considering that it took less than a year to design and build, it is remarkably close to self – sufficient. Says Lavery: "The consensus was, if we had another four or five months, we would have had that ability."

Another barrier to sending robots to the planets is weight: every kilogram sent into space is expensive. At nearly a ton, Dante II would break the bank. Whittaker is already thinking about lighter models, though. And while NASA's Lavery cautions that Dante II is still "far from any sort of flight opportunity," he acknowledges that much of the technology used aboard Dante II may find its way into future space missions. In fact, NASA wants to launch a robot explorer toward Mars as early as 1996. And a private company working with Carnegie Mellon scientists hopes to send a Dante – like robot to the moon in 1997. The purely commercial purpose: to gather images for a gamelike, virtual – reality tour across the lunar surface.

In the meantime, Dante II - type robots should be in hot demand from earthbound volcanologists, 11 of whom have died exploring active craters in the past few years. As for Dante III, or whatever Whittaker calls the next generation, its task will be to spare humans from facing even greater dangers on other worlds.

Questions 29 ~ 32

Complete the table of the details of Dante II below. Write your answers in bases $29 \sim 32$ on your answer sheet.

Item	Detail			
Example: Height	3 m			
Weight	(29)			
(30)	90 cm per minute			
Body material	(31)			
Designed by	(32)			