

# IELTS

## 雅思阅读真题及预测

# 4

曹书畅 主编

管永川 主审

内部资料·翻录必究

## 顶级名师推荐

王耀宁	环球雅思学校北京总校校长
曹书畅	北外雅思学校校长
胡 敏	新航道学校校长
刘 创	新航道雅思阅读、写作首席名师
刘洪波	原北京雅思学校校长
耿 耿	青岛新东方学校校长
何 钢	北京新东方北京雅思部门主任
刘 薇	环球雅思学校总校校长 雅思口语天后
彭新松	北京新东方总校雅思听力部门首席教师
祁连山	原环球雅思学校顶级阅读教师 北京泰迪学校 校长
乐 静	原北京新东方学校雅思阅读部门顶级教师
江 涛	80 天攻克雅思系列图书创始人
李国栋	EQ 英语 31 天高分公式创始人
张 皓	新航道雅思顶级听力教师

## 简 介

### 管永川

无忧雅思网 [www.51ielts.com](http://www.51ielts.com) 创始人，著名英语测试和教学专家，计算机及语言测试学硕士，澳洲 IDP 教育机构（雅思三大考试主办方之一）中国地区指定合作方，亚太地区雅思资讯网站排名连续 10 年第一。曾在美国、加拿大地区从事雅思、托福、SAT 等留学考试的中外交流合作，长期和雅思、托福领域顶级学校及著名教师进行合作交流、图书出版、机经编辑、预测解析等工作。到目前为止合作方包括英国使馆文化教育处、IDP、剑桥大学出版社、环球雅思学校、新航道、新东方、北外雅思等雅思官方机构和培训机构、为数百万雅思考生排忧解难，指引雅思考试的最新方向。自 2003 年开始，每年连续推出《无忧雅思机经》《无忧托福机经》各种版本，销量及下载量累计超过 500 万册次以上。



### 曹书畅

毕业于北京外国语大学，随后赴澳洲取得 MBA 硕士学位，期间一并攻读教育语言学的经典著作和辅修测试学，不断探索语言学源流，深入钻研各种出国留学考试，参与雅思、托福等出国留学考试的内部测试测评。回国后在众家国内顶级学校任教，从事雅思、托福、SAT 等考试的研发和教学工作。从事教育工作长达十年之久，2011 年创造雅思阅读、听力 11 种考点串联，开拓阅读领域教学新篇章。2012 年任职北京外国语大学雅思学院，开办 8 小时雅思全日制 A+A 保分课程，学员保分成功率达到 98%，缔造业绩又一个奇迹。2013 年联合业界顶级雅思研发团队（无忧雅思网）一同推出《每周雅思预报》和《雅思机经超详细》系列资料，受到业界顶级名师的联合推荐，在广大烤鸭们中产生轰动效应。



# Content 天文地理

Asian Space :Satellite Technology 亚洲空间卫星 .....	16
British Architecture 2 英国建筑 2 .....	23
Build a Medieval Castle 建造城堡 .....	28
Eco-Resort Management Practices 澳洲旅游岛 .....	34
Flight from reality? 飞行干扰 .....	40
London Swaying Footbridge 伦敦晃桥 .....	46
Museums & Theme Park 博物馆公园 .....	50
SETI (Search for E.T. Intelligence) 寻找外星生命 .....	56
The Exploration of Mars 火星探索 .....	62
Jupiter with The Shoemaker-Levy9's collision 彗星撞击木星...	69
Tidal Power ! in Britain 英国潮汐能 .....	76
Travel Accounts 游记 .....	81
Visions of Mars 火星探秘 .....	87
雅思阅读分类词汇 .....	94
答 案 .....	106

## 雅思阅读高分策略

雅思阅读考试中取得高分并不难。

首先，要深入透彻的理解雅思阅读考试的表面形式与实质特点。

然后，有针对性地培养雅思阅读能力和解题技巧，做到阅读实力的提升和十大题型解题技巧的完美结合。

下文分述之。

### 一、表面形式

#### ● 3 个部分

A 类阅读：三个部分分别为三篇长文章，每篇长度在 900 - 1000 个单词左右，学术类科普读物。

G 类阅读：第一部分通常有两篇较短的文章，阅读的是提供某种产品或服务的基本信息的广告类文章；第二部分稍复杂，阅读短信息，内容多为有关学习课程、学校介绍的信息；第三部分最难，阅读一篇篇幅较长的学术类文章。

#### ● 40 道题

A 类和 G 类阅读考试均为 40 道题。答案要求用铅笔填在答题卡上。

#### ● 60 分钟

A 类和 G 类阅读考试时间均为 60 分钟，紧接在雅思听力考试之后。阅读考试无额外的时间誊写答案。所以考试时答案应直接写在答题卡上。

#### ● 10 种题型

雅思考试官方按题型形式分为 10 种题型，但针对中国考生的学习习惯特点，培训机构一般在雅思教学培训中按解题思路的不同分为下面 10 种题型分别进行讲解。

● 9 分

雅思阅读评分标准 (A 类和 G 类)

学术类阅读		移民类阅读	
正确题数	分数	正确题数	分数
10—12	4	15—17	4
13—15	4. 5	18—19	4. 5
16—19	5	20—22	5
20—22	5. 5	23—24	5. 5
23—25	6	25—27	6
26—27	6. 5	28—29	6. 5
28—30	7	30—32	7
31—32	7. 5	33—34	7. 5
33—35	8	35—37	8
36—38	8. 5	38—39	8. 5
39—40	9	40	9

## 二、实质特点

● 考试目的

A 类: Study, 考查考生通过学术话题文章的阅读掌握所需信息, 理解并获取知识的能力。

G 类: Survival, 考查考生在英语国家中生活所必备的阅读能力。

● 文章题材

A 类文章内容主要由选自世界各大重要媒体 ( 相关网站如: [www.nature.com](http://www.nature.com); [www.nationalgeographic.com](http://www.nationalgeographic.com); [www.economist.com](http://www.economist.com) ) 的文章改写而成。内容涉及经济、教育、科技、医学、环境、能源、地质、海洋、动植物等方面问题。

G 类文章内容与日常生活息息相关。文章来自于布告、广告、官方文件、小册子、报纸、说明书、时间表、杂志, 以及学校的各种规章制度等。

文章体裁

A 类: 说明文和议论文, 三篇文章中必然有一篇包含详细的议论。

G 类: 说明文。

### ● 考试特点

雅思阅读部分由剑桥大学考试委员会和澳大利亚考试中心负责试题的编写, 所以阅读试题以前多以英国和澳大利亚的生活背景为主, 但现在的选材以更趋于国际化。

考试文章以大众题材为主, 不涉及专业性很强的文章, 以免给某些专业的考生造成优势或劣势。除选材多样化以外, 尽量设计多层次、多范畴信息题型, 从不同角度考查考生理解把握文章的能力。

雅思阅读考试没有专门设计语法和词汇的专项题型, 这是有别于其他外语考试形式的一个重要特征。相反, 在一些较难的文章之后还附带有一些提示的生词表或注解 (Glossary), 以帮助考生理解某些关键词语和定义, 从而更好点理解全文。这是因为雅思阅读考试既不是考查考生是否能理解每一个单词、每一句话的确切含义, 也不是考查在某一学科的专业能力, 而旨在评估考生的综合英语阅读能力。

### ● 重点考查技能

雅思 A 类阅读最大特点是阅读量大。三篇文章, 最常见的文章长度为 900 个单词左右一篇, 大部分考生在学习雅思之前很少接触此类长文章。因此, 如何在 10 分钟内快速的浏览完一篇文章, 把握文章结构大意, 留出更多的时间做题是提高雅思阅读成绩的关键。雅思阅读还强调考生 reading with purpose 的能力, 在大量的信息中找到自己想要的信息。这对考生今后对付国外大学教授布置的如山的课后阅读材料是大有裨益的。而且, 我们“有幸”生活在信息时代, 每个人都不缺乏信息, 相反都是 information overloaded。那么雅思阅读其实培养了我们一种基本的生存能力: 如何在信息的海洋中找到自己想要的部分, 而不是被信息所包围, 最终遭遇灭顶之灾。

所以, A 类阅读考试的考核重点是: 阅读文章时能正确理解文章, 把握文章主旨和结构; 做题时能回原文迅速找到考点具体信息, 理解文中的主要事实和某些特定的细节, 根据上下文猜出某些词句大意, 弄清句子间的逻辑关系, 能进行

一定的判断推理。

雅思 G 类考到的题目涉及考生在英语国家必备的生存技能，即是否具备获取、理解并处理基本信息的能力。就考核技能而言，雅思 G 类阅读主要涉及抓主旨、定位细节和比较信息，较少考核推理、判断与得出结论等学术技能。

### 三、雅思阅读实力提升

雅思阅读实力提升阅读实力的提升绝非一朝一夕之功。单词量和对英语语法的熟练程度是各类英语阅读考试高分的基石。雅思亦是如此。通常来说，达到大学英语六级水平的考生，其单词量（5500 左右）和语法程度达到雅思阅读的基本要求，再通过对雅思阅读特点和方法的掌握，可望在短期内达到 6 分以上的水平。

#### ● 单词

根据自己的英语基础制定出每天能够坚持的、切实可行的背单词计划。结合阅读文章记忆单词是颇为有效的方法。如脱离语言环境，孤立地背词汇，就很容易把单词的意义和正确用法遗忘或混淆。而且枯燥的单词书、字母表很容易让人疲倦和产生挫败感。在精读雅思文章的同时背单词，除了单词的收获，还能深入理解文章中的各类人文常识、趣味科普知识，从而产生每天坚持阅读、坚持背单词的兴趣和动力。另外，有效背记单词的另一个重要原则是：一定要反复多遍。背过的单词一定要定期的重复复习。

#### ● 语法

雅思的语法掌握侧重对句子的理解，应学会从句子的主干成分主谓结构入手，对并列句、比较句、指代句、复合句和双重否定句有充分的把握，注意人称、语态在句子中的变化，并结合句子上下文，正确地掌握其要表达的意思。要逐渐培养将一个长句子读成一个相对短的句子，即长句短读的能力。读完一个长句后自己能总结归纳，提炼其陈述的要点。

#### ● 加大阅读广度

以往在和雅思阅读 8 分以上的高分学员的交流中发现：学员们的单词量大小可能有所差异，但共同点却很明显：英语的累积阅读量大。有的是考前通读过多



种雅思阅读材料；有的是过去读过 TOEFL、GRE 和 GMAT 的各类文章，有的是因为工作的需要每天上网快速阅读英文参考文献……所以，积累和扩大自己的英语阅读量是迈向高分的必由之路。G 类考试的阅读中前两部分通常是实用性强的功能性短文，如菜单、产品说明、通知、住宿安排和广告等，非常贴近西方的实际生活，但对国内绝大多数考生而言很陌生。建议争取每天阅读一定量的原版英文报刊、书籍，如 Time、Reader's Digest 等，尤其注意其中的各类广告。而 A 类阅读则注意多阅读篇幅较长的科普文章或学术性议论文，建议每天坚持半小时以上浏览 [www.nature.com](http://www.nature.com)、[www.nationalgeographic.com](http://www.nationalgeographic.com)、[www.economist.com](http://www.economist.com)、[www.newscientist.com](http://www.newscientist.com) 等网站。它们的文风、常用词汇和句子结构都和雅思 A 类阅读相似。

### ● 提高阅读速度

雅思考试的阅读部分，无论是 A 类还是 G 类都是同时测试考生的阅读速度和理解的精确度。而如何快速的阅读完长文章，留出充足的时间回答各类题型，是考生必然面临的一个难题。要想提高阅读速度首先要改掉影响阅读速度的不良习惯。针对大多数考生的通病，提出下面四点注意事项：

1. 扩大眼睛扫描的宽度。要达到雅思阅读的速度，请注意训练自己一眼看过，至少阅读到 3 - 5 个单词
2. 阅读过程中只使用眼睛和大脑两大器官。不要用手指和笔引导阅读，不要小声读出来（使用了嘴和耳朵），不要在心中默读（能默读说明你一眼只看到一个单词）。
3. 遇到生词不用紧张，学会通过上下文猜测大意。
4. 有重点的阅读，把握文章结构和大意。

### ● 培养重要考核能力

有了以上基础，还要有针对性的训练和提高雅思阅读所要求的各种阅读能力。按照各种阅读能力对获得雅思高分的重要性排序，它们依次为：

把握长文章结构（Understanding framework of a passage）快速浏览长文章（Skimming）扫描特定信息（Scanning）理解复杂句子结构（Understanding complex structures）通过上下文猜测词义（Understanding meaning from context）形成概念（Forming a mental image）

## 雅思阅读真题词汇同意替换整理版

序号	题目单词	原文替换单词	衍生同意单词
1	scientist	expert	physicist, specialist, biologist, zoologist, chemist, researcher, professor, master, skeptics, advocate
2	revision	change, rather than, instead of, shift	correct, transformation, contrast, adjustment, turn, but, however, nevertheless, contrary
3	policy	way, philosophy organisation	rule, law, principle, guideline, decision government, department
4	explanation	explain	claim, conclusion, tell, instruct, demonstrate, declare, argue, believe, maintain, insist, emphasize, say, “”
5	reduce	decrease, drop, fall, slow	minus, decline, descend, down, cut, small, ressession, shrink, leak, downward, small
6	use	consume	apply, employ, utilize, adopt, make use of
7	irrigation	agriculture	food supply, water, canal, lake, ocean, sea, river, field, farmland, farmer, meadow
8	disuse	No	without, not, lack, impossible, improper, inappropriate, unnecessary, abandon, desert, give up, refuse, resist
9	environmental	eco-system	environment, surrounding, atmosphere, circumstance, situation, condition
10	effect	consequence	influence, impact, reflect, result, affect, conclusion, end, hence, thus, therefore, accordingly, outcome, finally, last, fruit, yield
11	financial	Finance	cost, economy, economic, bill, fee, fare, freight, money, consumption, expenditure, spend, tax, tariff, expense, duty, custom, currency, fund, invest, donation, scholarship, penny, pound, dollar, rent, deposit, value, worth。 。 。 。 \$
12	technology	technology	science, skill, machine, equipment, facility, infrastructure, tool, vehicle, technician, engineer

13	relevance	Relate	connect, link, contact, associate, relationship, intimate, get touch with
14	health	Disease	fitness, well-being, well, illness, cancer, cold, sanitation
15	concern	Worry	care, matter
16	increase	superior, extend	rise, up, ascend, more, accelerate, speed up, accumulate, peak, summit, grow, climb, upward, raise, high, soar, leap
17	surprising	unexpected, predict	unbelievable, incredible, terrific, amazing, forecast, anticipate, think, plan
18	need	Demand	call for, require, request, want, desire, eager, willing...
19	standard	Criteria	example, model, size, weight, specification, line, regulation, limit, restrict, criterion...
20	research	Study	investigation, researcher
21	dental	tooth, teeth	dentist
22	development	develop, advancement	promotion, improvement, high, progress, boost
23	population movement	migration	immigrant, shift, change
24	method	technique	approach, measure, way, technology, technical, strategy, skill, tool
25	early	prehistoric	long long ago, before, previous, former, 过去式, 1890s, 1980s, ancestor, precede, date back, precursor, primitive, original, aboriginal, archaeology
26	further	Next	then, advance, additional...
27	question	?	problem, issue, doubt, difficulty, suspicious, suspect
28	cause	Reason	lead to, result in/from, attribute, abscribe, due to, owing to, because, contribute, why, thanks to, hence, thus, therefore, accordingly, consequence
29	relationship	Relate	relavant, relative, friendship, fellowship

30	different	but, however	unlike, conversely, yet, nevertheless, nonetheless
31	between	Two	2, as well as, and, on the one hand...on the other hand, either...or..., both...and..., the former...the latter, couple with
32	measure	calibrate	test, scale, calculate, figure out
33	domestic water	drinking water	shower, WC, toilet, wash, irrigate
34	purify	clean, removal	clear, tidy, anti-bacteria, sanitation, remove, get rid of
35	farming industry	Farm	agriculture, peasant, farmer, farmland, field, pest, animal, herd, cultivate, plant
36	stage	first, second, third, then	finally, next, level, rank, grade, class...
37	term	be referred to as	definition, technical word, vocabulary, be defined as, be known as, be called, be termed as, expression
38	hidden	not appear	disappear, invisible, vanish, hide, underlie, escape, secret, buried, concealed, obscure, cover
39	chemical	pesticide, fertilizer	dirty, science, pollution, chemistry, DDT, poison
40	city	urban	downtown, metropolitan
41	positive	phenomenal	encouraging, promote, energetic, excellent, extraordinary, attractive, great, gorgeous, prominent, supportive, favorable
42	military	battle, battlefield	soldier, navy, army, air force, force, war, arm, gun, marine,
43	electronically	computer	electricity, current, battery, laptop, mobile phone, television, telephone, e-mail, internet
44	difficulty	barrier	not deal with, not handle, not tackle, shortcoming, disadvantage, mistake, drawback, ban, problem
45	first	coin	start, primary, elementary, primitive, original, initial, begin, find, discover, create, invention, build, construct, compose

46	product	produce	vegetable, fruit, thing, article, item, object, physical, ware, goods...
47	abroad		oversea, foreign
48	local		native, our, domestic, own, themselves, civil
49	deliver	send	transport, traffic, sea, freight, airmail, EMS, post, import, export, convey
50	biological	gene, instinct	creature, biology, biologist, animal, tiger, snake, evolution
51	explanation	tell	explain, say, argue, claim, state, believe, maintain, insist, persist, doubt
52	experiment	lab	laboratory, subject, microscope, researcher
53	pupil	pupil	primary school, elementary school, education
54	identity	actor	identify, identification, student, son
55	statistical	数字	data, number, figure, census, demography, numeration
56	expect	predict, want	guess, think, estimate, anticipate, forecast, foresee
57	aim	goal	target, purpose
58	again	前缀 re-	back, second
59	common	general	public, people, person, society, social, share
60	topic	subject	theme, thesis, issue
61	conversation	talk	dialogue, speech, lecture, seminar
62	identify	identity	understand, know, acquaintance, recognize, realize, consider, opinion
63	improvement	advancement	great, promotion, propel, progress, positive, excellent, advantageous, remarkable, prominent, boost
64	official	government	officer, public servant, nation, country, worker, authority
65	location	boulevard	situation, place, sit, locate, situate, position, address, lane, road, street, avenue
66	actor	superstar	actress, player, personate, impersonate

67	pessimistic	worse	bad, negative, failure, fail, hopeless, harmful, inferior, tough
68	instantly	rapid	quickly, fast, speedy, immediately, promptly
69	well known	famous, notoriety	celebrated, noted, renowned, famed, illustrious
70	view	outlook	opinion, perspective, viewpoint, stand, sentiment, thought
71	bring	confer	supply, present, offer, give, apply
72	exchange	together	change, transform, communicate, associate, colleague, cooperation, collaborate
73	expertise	scientist	expert, master, researcher, engineer, physicist
74	different sports	a number of sports swimming, squash, golfer	a variety of sports, basketball, valleyball, football
75	visual imaging	camera, photo	see, view, picture, image, photograph, drawing, diagram
76	narrow	focus	specify, concentrate, shrink, decline, decrease
77	reproduce	copy, replicate	produce again, duplicate
78	optimum	best	greatest, first, leading
79	achievement	score	performance, accomplishment, skill, ability
80	event	championship	match, game, competition, olympic game, contest, sport activity, action
81	detailed	explicit	specific, elaborate, minute
82	potential	be liable to	may be, be able to, likely, possible, probable, be inclined to
83	difference	distinguish	distinction, different, differ, differentiate, unlike, contrast, contrary, adverse, discrimination, odds
84	the same as	like	equivalent, equal, parallel, similar, as, coincide...with, coincidence, resemble
85	entirely	totally	completely, utterly, undoubtedly, absolutely, whole

86	field	domain	kingdom, province, realm, scopes, sign, terrain
87	quickly	fast	swift, speedy, prompt, immediate, sudden
88	unpredictable	fluctuate	rebound, uncertain
89	big	massive	adequate, abundant, substantial, large quantity of, a great deal of, plenty of, accumulative, many, much, excessive
90	delieve	send	transmit, pass, hand over, submit, give
91	restrict	slow down	limit, confine, constrain, curb, minimal, few, smaller
92	pressing	urgent	clamant, emergent, exigent, hurry-up, imperative
93	such as	like	for example, for instance, as an illustration of, to illustrate, case
94	elderly people	old people	senior citizen, old folks, the elderly
95	sophisticated	developed	advanced, complicated, complex, intricate, perplexing, tangle some
96	fair	equal, equitable	disinterested, evenhanded, impartial, square, equality
97	target	goal	aim, cause, end, object, objective
98	vehicle	car, truck	automobile, motor vehicles, transportation means, bus, minibus, carriage, truck, van, traffic
99	unwanted material	waste	rubbish, trash, garbage, junk, litter, muck, sweeping
100	lifestyle	way	mode, method, manner, fashion

## Asian Space Satellite Technology

*The space age began with the launch of the Russian artificial satellite Sputnik in 1957 and developed further with the race to the moon between the United States and Russia. This rivalry was characterized by(advanced technology and huge budgets. In this process there were spectacular successes, some failures, but also many spin-offs. Europe, Japan, China, and India quickly joined this space club of the superpowers. With the advent of relatively low cost high performance mini-satellites and launchers, the acquisition of indigenous space capabilities by smaller nations in Asia has become possible. How, in what manner, and for what purpose will these capabilities be realized?*

- A** Rocket technology has progressed considerably since the days of ‘fire arrows’ (bamboo poles filled with gunpowder) first used in China around 500 BC, and, during the Sung Dynasty, to repel Mongol invaders at the battle of Kaifeng (Kai-fung fu) in AD 1232. These ancient rockets stand in stark contrast to the present-day Chinese rocket launch vehicles, called the ‘Long March’ , intended to place a Chinese astronaut in space by 2005 and, perhaps, to achieve a Chinese moon-landing by the end of the decade.
- B** In the last decade there has been a dramatic growth in space activities in Asia both in the utilization of space-based services and the production of satellites and launchers. This rapid expansion has led many commentators ( 评论员 ) and analysts to predict that Asia will become a world space power. The space age has had dramatic affects worldwide with direct developments in space technology influencing telecommunications, meteorological forecasting, earth resource and environmental monitoring, and disaster mitigation (flood, forest fires, and oil spills). Asian nations have been particularly eager to embrace these developments.
- C** New and innovative uses for satellites are constantly being explored with



potential revolutionary effects, such as in the field of health and telemedicine, distance education, crime prevention (piracy on the high seas), food and agricultural planning and production (rice crop monitoring). Space in Asia is very much influenced by the competitive commercial space sector, the emergence of low cost mini-satellites, and the globalization of industrial and financial markets. It is not evident how Asian space will develop in the coming decades in the face of these trends. It is, however, important to understand and assess the factors and forces that shape Asian space activities and development in determining its possible consequences for the region.

- D** At present, three Asian nations, Japan, China, and India, have comprehensive end-to-end space capabilities and possess a complete space infrastructure: space technology, satellite manufacturing, rockets, and spaceports ( 宇航中心 ). Already self-sufficient in terms of satellite design and manufacturing, South Korea is currently attempting to join their ranks with its plans to



develop a launch site and spaceport. Additionally, nations in Southeast Asia as well as those bordering the Indian subcontinent (Nepal, Pakistan, and Bangladesh) have, or are starting to develop, indigenous space programmes. The Association of Southeast Asian Nations (ASEAN) has, in varying degrees, embraced space applications using foreign technology and over the past five years or so its space activities have been expanding. Southeast Asia is predicted to become the largest and fastest growing market for commercial space products and applications, driven by telecommunications (mobile and fixed services), the Internet, and remote sensing applications. In the development of this technology, many non-technical factors, such as economics, politics, culture, and history, interact and play important roles, which in turn affect Asian technology.

E Asia, and Southeast Asia in particular, suffers from a long list of recurrent large-scale environmental problems including storms and flooding, forest fires and deforestation, and crop failures. Thus the space application that has attracted the most attention in this region is remote sensing. Remote sensing satellites equipped with instruments to take photographs of the ground at different wavelengths provide essential information for natural resource accounting, environmental management, disaster prevention and monitoring, land-use mapping, and sustainable development planning. Progress in these applications has been rapid and impressive. ASEAN members, unlike Japan, China, and India, do not have their own remote sensing satellites, however most of its member nations have facilities to receive, process, and interpret such data from American and European satellites. In particular, Thailand, Malaysia, and Singapore have world-class remote sensing processing facilities and research programmes. ASEAN has plans to develop (and launch) its own satellites and in particular remote sensing satellites. Japan is regarded as the dominant space power in Asia and its record of successes and quality of technologies are equal to those of the West. In view of the technological challenges and high risks involved in space activities, a very long, and expensive, learning curve has been followed to obtain those successes achieved. Japan's satellite

manufacturing was based on the old and traditional defense and military procurement methodologies as practiced in the US and Europe.

- F** In recent years there have been fundamental changes in the way satellites are designed and built to drastically reduce costs. The emergence of ‘small satellites’ and their quick adoption by Asian countries as a way to develop low-cost satellite technology and rapidly establish a space capability has given these countries the possibility to shorten their learning curve by a decade or more. The global increase of technology transfer mechanisms and use of readily available commercial technology to replace costly space and military standard components may very well result in a highly competitive Asian satellite manufacturing industry.
- G** The laws of physics are the same in Tokyo as in Toulouse, and the principles of electronics and mechanics know no political or cultural boundaries. However, no such immutability applies to engineering practices and management; they are very much influenced by education, culture, and history. These factors, in turn, have an affect on costs, lead times, product designs and, eventually, international sales. Many Asian nations are sending their engineers to be trained in the West. Highly experienced, they return to work in the growing Asian space industry. Win this acquisition of technical expertise, coupled perhaps with the world-renowned Japanese manufacturing and management techniques, be applied to build world-class satellites and reduce costs?

## Questions 28-32.....

The reading passage has seven paragraphs, A-G

Choose the correct heading for paragraphs A-G from the list below.

Write the correct number, i-ix, in boxes 28-32 on your answer sheet.

### List of Headings

- i Western countries provide essential assistance
- ii South East Asia hunger for space technology
- iii Innovative application compelled by competition
- iv An ancient invention which is related to the future
- v Military purpose of satellite
- vi Rockets for application in ancient China
- vii Space development in Asia in the past
- viii Non-technology factors counts
- ix Independence gained by an applicable satellite

28 Paragraph A

29 Paragraph B

30 Paragraph C

Paragraph D Example: Current space technology development in Asia

31 Paragraph E

32 Paragraph F

**Questions 33-36**.....

Match the following reasons for each question according to the information given in the passage Write the correct letter A-F in boxes 33-36 on your answer sheet.

- A Because it helps administrate the crops.
- B Because there are some unapproachable areas.
- C Because the economic level in that area is low.
- D Because there are influences from some other social factors.
- E Because it can be used in non-peaceful purpose.
- F Because disasters such as bush fire happened in Southeast Asia

- 33 Why remote-photographic technology is used to resolve environmental problems?
- 34 Why satellites technology is used in medicine area?
- 35 Why Asian countries satellite technology is limited for development?
- 36 Why satellites technology is deployed in agricultural area?

**Questions 37-40**.....

Do the following statements agree with the information given in Reading Passage 3

In boxes 3 7-40 on your answer sheet, write

**TRUE** if the sataement agrees with the information

**FALSE** if the statement contradicts the information

**NOT GIVEN** if there is no information on this

- 37 Ancient China had already deployed rockets as a military purpose as early as 500BC.
- 38 Space technology has enhanced literacy of Asia
- 39 Observation from satellites photos at different distances in some way help predict some natural catastrophes.
- 40 It is the commercial competition that hinders Asian technology development

## British Architecture 2

- A** Architecture is about evolution, not revolution. It used to be thought that once the Romans pulled out of Britain in the fifth century, their elegant villas, carefully-planned towns and engineering marvels like Hadrian's Wall simply fell into decay as British culture was plunged into the Dark Ages. It took the Norman Conquest of 1066 to bring back the light, and the Gothic cathedral-builders of the Middle Ages played an important part in the revival of British culture. However, the truth is not as simple as that Romano-British culture-and that included architecture along with language, religion, political organization and the arts-survived long after the Roman withdrawal. And although the Anglo-Saxons had a sophisticated building style of their own, little survives to bear witness to their achievements as the vast majority of Anglo-Saxon buildings were made of wood.
- B** Even so, the period between the Norman landing at Pevensey in 1066 and the day in 1485 when Richard III lost his horse and his head at Bosworth, ushering in the Tudors and the Early Modern period, marks a rare flowering of British building. And it is all the more remarkable because the underlying ethos (*n.* 道德思想) of medieval architecture was 'fitness for purpose'. The great cathedrals and parish churches that lifted up their towers to heaven were not only acts of devotion in stone; they were also fiercely functional buildings. Castles served their particular purpose and their battlements and turrets (*n.* 角楼) were for use rather than ornament. In a sense, the buildings of the 16th century were also governed by fitness for purpose-only now, the purpose was very different. In domestic architecture, in particular, buildings were used to display status and wealth.
- C** This stately and curious workmanship showed itself in various ways. A greater sense of security led to more outward-looking buildings, as opposed to the medieval arrangement where the need for defense created houses that faced inward onto a courtyard or series of courtyards. This allowed for much more in the way of exterior ornament. The rooms themselves tended to be bigger and

lighter-as an expensive commodity, the use of great expanses of glass was in itself a statement of wealth. There was also a general move towards balanced and symmetrical (*adj.* 对称的 ) exteriors with central entrances.

**D** With the exception of Inigo Jones (1573-1652), whose confident handling of classical detail and proportion set him apart from all other architects of the period, most early 17th century buildings tended to take the innocent exuberance of late Tudor work one step further. But during the 1640s and 50s the Civil War and its aftermath sent many gentlemen and nobles to the Continent either to escape the fighting or, when the war was lost, to follow Charles II into exile (*n.* 流放 ). There they came into contact with French, Dutch and Italian architecture and, with Charles's restoration in 1660, there was a flurry of building activity as royalists reclaimed their property and built themselves houses reflecting the latest European trends. The British Baroque was a reassertion of authority, an expression of absolutist ideology by men who remembered a world turned upside down during the Civil War. The style is heavy and rich, sometimes overblown and melodramatic. The politics which underpin it are questionable, but its products are breathtaking.

**E** The huge glass-and-iron Crystal Palace, designed by Joseph Paxton to house the Great Exhibition of 1851, shows another strand to 19th century architecture-one which embraced new industrial processes. But it wasn't long before even this confidence in progress came to be regarded with suspicion. Mass production resulted in buildings and furnishings that were too perfect, as the individual craftsman no longer had a major role in their creation. Railing against the dehumanising effects of industrialisation, reformers like John Ruskin and William Morris made a concerted effort to return to hand-crafted, pre-industrial manufacturing techniques. Morris's influence grew from the production of furniture and textiles, until by the 1880s a generation of principled young architects was following his call for good, honest construction.

**F** The most important trends in early 20th century architecture simply passed Britain by. Whilst Sropius was working on cold, hard expanses of glass, and Le



Corbusier was experimenting with the use of reinforced concrete frames, we had staid (*adj.* 保守的, 古板的) establishment architects like Edwin Lutyens producing Neo-Georgian and Renaissance country houses for an outmoded landed class. In addition there were slightly batty architect-craftsmen, the heirs of William Morris, still trying to turn the clock back to before the Industrial Revolution by ranking chairs and spurning new technology. Only a handful of Modern Movement buildings of any real merit were produced here during the 1920s and 1930s, and most of here were the work of foreign architects such as Serge Chermayeff, Berthold Lubetkin and Erno Goldfinger who had settled in this country.

**G** After the Second World War the situation began to change. The Modern Movement's belief in progress and the future struck a chord with the mood of post-war Britain and, as reconstruction began under Attlee's Labour government in 1945, there was a desperate (*adj.* 极严重的) need for cheap housing which could be produced quickly. The use of prefabricated elements, metal frames, concrete cladding and the absence of decoration—all of which had been embraced by Modernists abroad and viewed with suspicion by the British—were adopted to varying degrees for housing developments and schools. Local authorities, charged with the task of rebuilding city centers, became important patrons of architecture. This represented a shift away from the private individuals who had dominated the architectural scene for centuries.

**H** Since the War it has been corporate bodies like these local authorities, together with national and multinational companies, and large educational institutions, which have dominated British architecture. By the late 1980s the Modern Movement, unfairly blamed for the social experiments implicit in high-rise housing, had lost out to irony and spectacle in the shape of post-modernism, with its cheerful borrowings from anywhere and any period. But now, in the new Millennium, even post-modernism is showing signs of age. What comes next? Post-post—modernism?

**Questions 28-34** .....

Complete the sentences below.

Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

*Write your answers in boxes 28-34 on your answer sheet*

- 28 The Anglo-Saxon architecture failed to last because the buildings were constructed in \_\_\_\_\_
- 29 Different from the medieval architecture, the buildings of the 16th century represents \_\_\_\_\_
- 30 The glass was applied widely as an \_\_\_\_\_
- 31 Inigo Jones was skilled at handling \_\_\_\_\_ style.
- 32 William Morris favored the production of \_\_\_\_\_ made in pre-industrial manufacturing techniques.
- 33 The architects such as \_\_\_\_\_ provided the landlord with conservative houses.
- 34 After World War Two, the architect commission shifted from individual to \_\_\_\_\_



## Build a Medieval Castle

- A** Michel Guyot, owner and restorer of Saint Fargeau castle in France, first had the idea of building a 13th-century style fortress following the discovery that the 15th-century red bricks of his castle obscured the stone walls of a much older stronghold. His dream was to build a castle just as it would have been in the Middle Ages, an idea which some found mildly amusing and others dismissed as outright folly. However, Maryline Martin \_ project director-was inspired by the exciting potential for the venture to regenerate the region. It took several months to bring together and mobilise all the various different partners: architects, archaeologists and financial backers. A site in the heart of Guedelon forest was found: a site which offered not only all the resources required for building a castle-a stone quarry, an oak forest and a water supply-but in sufficient quantities to satisfy the demands of this gigantic site. The first team started work and on June 20th 1997 the first stone was laid.
- B** Unlike any other present-day building site, Michel Guyot's purpose is clear, he warmly welcomes members of the public to participate. The workers' role is to demonstrate and explain, to a wide audience, the skills of our forefathers. Stone quarrying, the building of vaulted ceilings, the blacksmith's work and the raising of roof timbers are just some of the activities which visitors can witness during a visit to Guedelon. The workers are always on hand to talk about their craft and the progress of the castle. Each year 60,000 children visit Guedelon with their schools. The site is an excellent educational resource, bringing to life the history of the Middle Ages. Guided tours are tailored to the school curriculum and according to age groups: activity trails for primary school children and interactive guided tours for secondary school children. Pupils of all ages have the opportunity to follow in the footsteps of medieval stonemasons by taking part in a stonecarving workshop or discover the secrets of the medieval master-builders at the geometry workshop.
- C** Workers in the Burgundy region of France are building a 13th century castle. They're not restoring an old castle. They're actually building a new old castle.

See the builders are constructing it from scratch. The craftsmen have been working for nearly ten years now but they're not even halfway done yet. That's because they're using only medieval tools and techniques. The World's Gerry Hadden takes us to the site of what will be the Guedelon Castle. Another reason said by Jean Francois, a member of Guedelon stone cutter's guild, for eight hours a day he bangs on a 13th century chisel with a 13th century iron mallet.

**D** The progress of construction has to give way to tourists side for their visits. The visitors from 2010, however unsightly they may be, are vital to the project. The initial funding came not from pillaging the local peasantry but from regional councils, the European Union and large companies. For the last 10 years, Guedelon, 100 miles southeast of Paris, has funded itself from its entrance fees. Last year it had a record 300,000 visitors, who paid almost € 2.5m, making it the second most-visited site in Burgundy. The most-visited site was the Hospice de Beaune, a beautiful 15th-century almshouse built 600 years before, or, if you prefer, 200 years "after", Guedelon.

**E** limestone is found in the construction of various local buildings, from the great and prestigious edifice of Ratilly castle to the more modest poyauidines houses. This stone contains 30-40% iron oxide; this can make it extremely hard to extract and dress. Having studied the block in order to determine and anticipate the natural fault lines of the stone, the quarrymen first carve a series of rectilinear holes into the block. Iron wedges are then hammered into this line of holes. The shockwaves produced by the quarrymen's sledgehammers cause the stone to split along a straight line. The highest quality blocks are dressed to produce lintels, voussoirs, corbels, ashlar etc. The medium quality blocks are roughly shaped by the stonecutters and used on the uncoursed curtain walls, and as facing stones on the castle's inner walls. There are water-filled clay pits



in the forest. Clay is taken from these pits, cleaned and pugged. It is then shaped in wooden moulds to form bricks. After the bricks have been left to air-dry, they are fired in a wood-fired kiln for about 12 hours, at roughly 1000°C .

**F** The mortar is the “glue” used to bind the castle’s stones. It is made up of precise doses of lime, sand and water. The people working there wear the tunics, skirts and headgear that they might have worn then, but they wear these over jeans and shoes with reinforced toes. They mix their mortar primarily as they would have done then, using sand they dig themselves, but they are not allowed to use the extremely effective hot lime from medieval days, because of its toxicity, and so they add a modern chemical ingredient instead, to achieve the same effect. Workers in the Mid Age obviously were unaware of it and some died earlier by inhaling toxic gas. And so, we met many wonderful people who do not pretend to be anything but modern human beings practicing an old technique and finding out what it would have felt like, as much as possible, to do it with only the resources of an older time.

**G** We also learned that even if there is a straight lintel across a doorway, you will usually find an arch of stones built into the wall differently. Because of the physics of an arch, which channels the weight above it down into whatever is supporting it at each side instead of pressing down in the middle, this helps to take a lot of the weight off of the lintel itself, whether it is free standing or buried in the wall against the impact of warfare. The arch is the strongest element for spanning space in stone architecture. This is why, in ancient ruins, you will often find the entire wall missing, and the arched windows and doorways still standing, in beautiful patterns against the sky.

**Questions 1-4** .....

Do the following statements agree with the information given in Reading Passage 1?

*In boxes 1-4 on your answer sheet, write*

<b>TRUE</b>	<i>if the statement agrees with the information</i>
<b>FALSE</b>	<i>if the statement contradicts the information</i>
<b>NOT GIVEN</b>	<i>if there is no information on this</i>

- 1 The French people would not abandon his idea in favor of realistic one.
- 2 One aim of the castle is let history to be known by public.
- 3 Short lifespan of workers was due to overdue heating.
- 4 Bricks were laid in different ways to avoid collapsing from an attack.

## Questions 5-10 .....

### Summary

Complete the following summary of the paragraphs of Reading Passage, using A-L from the following options for each answer. Write your answers in boxes 5-10 on your answer sheet.

#### Limestone Processing:

When 5 \_\_\_\_\_ found suitable block, they began to cut lines of 6 \_\_\_\_\_ into it. 7 \_\_\_\_\_ were used and knocked into and generated shockwaves to make stone 8 \_\_\_\_\_. Different qualities of blocks would be used in different place of castle. On the other hand, 9 \_\_\_\_\_ were shaped from clay in a mould and went through a process of 10 \_\_\_\_\_ for about 12 hours.

A	metal wedge	B	hammer handle	C	lift
D	Masons	E	patterns	F	heating
G	bricks	H	wood	I	experts
J	split	K	walls	L	holes



**Questions 11-13** .....

Choose three correct letters, A-F.

*Write your answers in boxes 11-13 on your answer sheet.*

Why does the castle building project last 10 years for just half progress?

- A**      They lack of enough funds
- B**      Guedelon castle needs a time-consuming design
- C**      Workers obeyed modern working hours
- D**      Their progress were delayed by unpredictable weather
- E**      Guedelon castle need to receive valuable visitors
- F**      They used old techniques and skills
- G**      Stone processing need more labour and time

## Eco-Resort Management Practices

- A** Ecotourism is often regarded as a form of nature-based tourism and has become an important alternative source of tourists. In addition to providing the traditional resort-leisure product, it has been argued that ecotourism resort management should have a particular focus on best-practice environmental management, an educational and interpretive component, and direct and indirect contributions to the conservation of the natural and cultural environment (Ayala, 1996).
- B** Couran Cove Island Resort is a large integrated ecotourism-based resort located south of Brisbane on the Gold Coast, Queensland, Australia. As the world's population becomes increasingly urbanised, the demand for tourist attractions which are environmentally friendly, serene and offer amenities ( 便利设施 ) of a unique nature, has grown rapidly. Couran Cove Resort, which is one such tourist attractions, is located on South Stradbroke Island, occupying approximately 150 hectares of the island. South Stradbroke Island is separated from the mainland by the Broadwater, a stretch of sea 3 kilometers wide. More than a century ago, there was only one Stradbroke Island, and there were at least four aboriginal tribes ( 原始部落 ) living and hunting on the island. Regrettably, most of the original island dwellers were eventually killed by diseases such as tuberculosis ( 肺结核 ), smallpox and influenza by the end of the 19th century. The second ship wreck on the island in 1894, and the subsequent destruction of the ship (the Cambus Wallace) because it contained dynamite, caused a large crater in the sandhills on Stradbroke Island. Eventually,



the ocean broke through the weakened land form and Stradbroke became two islands. Couran Cove Island Resort is built on one of the world's few naturally-occurring sand lands, which is home to a wide range of plant communities and one of the largest remaining remnants of the rare *livistona* (蒲葵) rainforest left on the Gold Coast. Many mangrove and rainforest areas, and Malaleuca Wetlands on South Stradbroke Island (and in Queensland), have been cleared, drained or filled for residential, industrial, agricultural or urban development in the first half of the 20th century. Farmers and graziers finally abandoned South Stradbroke Island in 1939 because the vegetation and the soil conditions there were not suitable for agricultural activities.



### SUSTAINABLE PRACTICES OF COURAN COVE RESORT

Being located on an offshore island, the resort is only accessible by means of water transportation. The resort provides hourly ferry service from the marina on the mainland to and from the island. Within the resort, transport modes include walking trails, bicycle tracks and the beach train. The reception area is the counter of the shop which has not changed in 8 years at least. The accommodation is an octagonal “Bure (草屋, 房子)”. These are large rooms that are clean but! The equipment is tired and in some cases just working. Our ceiling fan only worked on high speed for example. Beds are hard but clean, there is television, radio, an old air conditioner and a small fridge. These “Bures” are right on top of each other and night noises do carry so be careful what you say and do. The only thing is the mosquitos but if you forget to bring mosquito repellant they sell some on the island.

As an ecotourism-based resort, most of the planning and development of the attraction has been concentrated on the need to co-exist with the fragile natural environment of South Stradbroke Island to achieve sustainable development.

## WATER AND ENERGY MANAGEMENT

**C** South Stradbroke Island has groundwater at the centre of the island, which has a maximum height of 3 metres above sea level. The water supply is recharged by rainfall and is commonly known as an unconfined freshwater aquifer ( 蓄 水 层 ). Couran Cove Island Resort obtains its water supply by

tapping into this aquifer and extracting it via a bore system. Some of the problems which have threatened the island's freshwater supply include pollution, contamination and over-consumption. In order to minimise some of these problems, all laundry activities are carried out on the mainland. The resort considers washing machines as onerous to the island's freshwater supply, and that the detergents contain a high level of phosphates which are a major source of water pollution. The



resort uses LPG-power generation rather than a diesel-powered ( 柴油动力 ) plant for its energy supply, supplemented by wind turbine, which has reduced greenhouse emissions by 70% of diesel-equivalent generation methods. Excess heat recovered from the generator is used to heat the swimming pool. Hot water in the eco-cabins and for some of the resort's vehicles are solar-powered. Water efficient fittings are also installed in showers and toilets. However, not all the appliances used by the resort are energy efficient, such as refrigerators. Visitors who stay at the resort are encouraged to monitor their water and energy usage via the in-house television systems, and are rewarded with prizes (such as a free return trip to the resort) accordingly if their usage level is low.

## CONCLUDING REMARKS

**D** We examined a case study of good management practice and a pro-active sustainable ( 可 持 续 的 ) tourism stance of an eco-resort. In three years of

operation, Couran Cove Island Resort has won 23 international and national awards, including the 2001 Australian Tourism Award in the 4-Star Accommodation

51· 无忧雅思  
ielts

category. The resort has embraced and has effectively implemented contemporary environmental management practices. It has been argued that the successful implementation of the principles of sustainability should promote long-term social, economic and environmental benefits, while ensuring and enhancing the prospects of continued viability for the tourism enterprise. Couran Cove Island Resort does not conform to the characteristics of the Resort Development Spectrum, as proposed by Prideaux (2000). According to Prideaux, the resort should be at least at Phase 3 of the model (the National tourism phase), which describes an integrated resort providing 3-4 star hotel-type accommodation. The primary tourist market in Phase 3 of the model consists mainly of interstate visitors. However, the number of interstate and international tourists visiting the resort is small, with the principal visitor markets comprising locals and residents from nearby towns and the Gold Coast region. The carrying capacity of Couran Cove does not seem to be of any concern to the Resort management. Given that it is a private commercial ecotourist enterprise, regulating the number of visitors to the resort to minimize damage done to the natural environment on South Stradbroke Island is not a binding constraint. However, the Resort's growth will eventually be constrained by its carrying capacity, and quantity control should be incorporated in the management strategy ( 管理战略 ) of the resort.

## Questions 1-4 .....

Choose the correct letter, A, B, C or D.

Write your answers in boxes 1-4 on your answer sheet.

- 1 the Stradbroke became two islands
  - A by an intended destruction of the ship of the Cambus Wallace
  - B by an explosion of dynamite on a ship and following nature erosion
  - C by the movement sandhills on Stradbroke Island
  - D by the volcanic eruption on island
- 2 Why are laundry activities for the resort carried out on the mainland.
  - A In order to obtain its water supply via a bore system
  - B In order to preserve the water and anti-pollution
  - C In order to save the cost of installing onerous washing machines
  - D In order to reduce the level of phosphates in water around
- 3 What is the major water supplier in South Stradbroke Island is by
  - A desalining the sea water
  - B collecting the rainfall
  - C transporting from the mainland
  - D boring ground water
- 4 What is applied for heating water
  - A the LPG-power
  - B a diesel-powered plant
  - C the wind power
  - D the solar-power
- 5 what does, as the managers of resorts believe, the prospective future focus on
  - A more awards of for resort's accommodation
  - B sustainable administration and development in a long run
  - C Economic and environmental benefits for the tourism enterprise
  - D successful implementation the Resort Development Spectrum

### Questions 6-10 .....

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 6-10 on your answer sheet.

Being located away from the mainland, tourists can attain the resort only by 6 \_\_\_\_\_ in a regular service. Within the resort, transports include trails for walking or tracks for both 7 \_\_\_\_\_ and the beach train. The on-island equipment is old-fashioned which is barely working such as the 8 \_\_\_\_\_ overhead. There is television, radio, an old 9 \_\_\_\_\_ and a small fridge. And you can buy the repellent for 10 \_\_\_\_\_ if you forget to bring some.

### Questions 11-13 .....

Choose three correct letters among A-E

Write your answers in boxes 11-13 on your answer sheet.

What is true as to the contemporary situation of Couran Cove Island Resort in the last paragraph?

- A Couran Cove Island Resort goes for more eco-friendly practices
- B the accommodation standard only conforms to the Resort Development Spectrum of Phase 3
- C Couran Cove Island Resort should raise the accommodation standard and build more facilities
- D the principal group visiting the resort is international tourists
- E its carrying capacity will restrict the future business' expansion

## Flight from reality?

*Mobiles are barred, but passengers can tap away on their laptops to their hearts' content. Is one really safer than the other? In the US, a Congressional subcommittee grilled airline representatives and regulators about the issue last month. But the committee heard that using cellphones in planes may indeed pose a risk, albeit a slight one. This would seem to vindicate the treatment of Manchester oil worker Neil Whitehouse, who was sentenced last summer to a year in jail by a British court for refusing to turn off his mobile phone on a flight home from Madrid. Although he was only typing a message to be sent on landing, not actually making a call, the court decided that he was putting the flight at risk.*

- A** The potential for problems is certainly there. Modern airliners are packed with electronic devices that control the plane and handle navigation and communications. Each has to meet stringent safeguards to make sure it doesn't emit radiation that would interfere with other devices in the plane-standards that passengers' personal electronic devices don't necessarily meet. Emissions from inside the plane could also interfere with sensitive antennae on the fixed exterior.
- B** But despite running a number of studies, Boeing, Airbus and various government agencies haven't been able to find clear evidence of problems caused by personal electronic devices, including mobile phones. "We've done our own studies. We've found cellphones actually have no impact on the navigation system," says Maryanne Greczyn, a spokeswoman for Airbus Industries of North America in Herndon, Virginia. Nor do they affect other critical systems, she says. The only impact Airbus found? "Sometimes when a passenger is starting or finishing a phone call, the pilot hears a very slight beep in the headset," she says.
- C** The best evidence yet of a problem comes from a report released this year by Britain's Civil Aviation Authority. Its researchers generated simulated cellphone transmissions inside two Boeing aircraft. They concluded that the



transmissions could create signals at a power and frequency that would not affect the latest equipment, but exceeded the safety threshold established in 1984 and might therefore affect some of the older equipment on board. This doesn't mean "mission critical" equipment such as the navigation system and flight controls. But the devices that could be affected, such as smoke detectors and fuel level indicators, could still create serious problems for the flight crew if they malfunction.

- D** Many planes still use equipment certified to the older standards, says Dan Hawkes, head of avionics at the CAA's Safety Regulation Group. The CAA study doesn't prove the equipment will actually fail when subjected to the signals, but does show there's a danger. "We've taken some of the uncertainty out of these beliefs," he says. Another study later this year will see if the cellphone signals actually cause devices to fail.
- E** In 1996, RTCA, a consultant hired by the Federal Aviation Administration in the US to conduct tests, determined that potential problems from personal electronic devices were "low". Nevertheless, it recommended a ban on their use during "critical" periods of flight, such as take-off and landing. RTCA didn't actually test cellphones, but nevertheless recommended their wholesale ban on flights. But if "better safe than sorry" is the current policy, it's applied inconsistently, according to Marshall Cross, the chairman of MegaWave Corporation, based in Boylston, Massachusetts. Why are cellphones outlawed when no one considers a ban on laptops? "It's like most things in life. The reason is a little bit technical, a little bit economic and a little bit political," says Cross.
- F** The company wrote a report for the FAA in 1998 saying it is possible to build an on-board system that can detect dangerous signals from electronic devices. But Cross's personal conclusion is that mobile phones aren't the real threat.



“You’d have to stretch things pretty far to figure out how a cellphone could interfere with a plane’s systems,” he says. Cellphones transmit in ranges of around 400, 800 or 1800 megahertz. Since no important piece of aircraft equipment operates at those frequencies, the possibility of interference is very low, Cross says. The use of computers and electronic game systems is much more worrying, he says. They can generate very strong signals at frequencies that could interfere with plane electronics, especially if a mouse is attached (the wire operates as an antenna ( 天线 ) or if their built-in shielding is somehow damaged. Some airlines are even planning to put sockets for laptops in seatbacks.

**G** There’s fairly convincing anecdotal evidence that some personal electronic devices have interfered with systems. Air crew on one flight found that the autopilot was being disconnected, and narrowed the problem down to a passenger’s portable computer. They could actually watch the autopilot disconnect

when they switched the computer on. Boeing bought the computer, took it to the airline’s labs and even tested it on an empty flight. But as with every other reported instance of interference, technicians were unable to replicate the problem.

**H** Some engineers, however, such as Bruce Donham of Boeing, say that common sense suggests phones are more risky than laptops, “A device capable of producing a strong emission is not as safe as a device which does not have any intentional emission,” he says. Nevertheless, many experts think it’s illogical that cellphones are prohibited when computers aren’t. Besides, the problem is more complicated than simply looking at power and frequency. In the air, the plane operates in a soup of electronic emissions, created by its own electronics and by ground-based radiation. Electronic devices in the cabin-especially those emitting a strong signal-can behave unpredictably, reinforcing other signals, for instance, or creating unforeseen harmonics that disrupt systems.

**I** Despite the Congressional subcommittee hearings last month, no one seems

51 • 无忧雅思  
ielts

to be working seriously on a technical solution that would allow passengers to use their phones. That's mostly because no one besides cellphone users themselves stands to gain a lot if the phones are allowed in the air. Even the cellphone companies don't want it. They are concerned that airborne signals could cause problems by flooding a number of the networks' base stations at once with the same signal. This effect, called bigfooting, happens because airborne cellphone signals tend to go to many base stations at once, unlike land calls which usually go to just one or two stations. In the US, even if FAA regulations didn't prohibit cellphones in the air, Federal Communications Commission regulations would.

**J** Possible solutions might be to enhance airliners' electronic insulation, or to fit detectors which warned flight staff when passenger devices were emitting dangerous signals. But "Cross complains that neither the FAA, the airlines nor the manufacturers are showing much interest in developing these. So despite Congressional suspicions and the occasional irritated (or jailed) mobile user, the industry's "better safe than sorry" policy on mobile phones seems likely to continue. In the absence of firm evidence that the international airline industry is engaged in a vast conspiracy to overcharge its customers, a delayed phone call seems a small price to pay for even the tiniest reduction in the chances of a plane crash. But you'll still be allowed to use your personal computer during a flight. And while that remains the case, airlines can hardly claim that logic has prevailed.

## Questions 14-17 .....

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 14-17 on your answer sheet.

The would-be risk surly exists, since the avionic systems on modern aircraft are used to manage flight and deal with \_\_\_\_\_ 14 Those devices are designed to meet the safety criteria which should be free from j interrupting \_\_\_\_\_ 15 The personal use of mobile phone may cause the sophisticated \_\_\_\_\_ 16 outside of plane to dysfunction. Though definite interference in piloting devices has not been scientifically testified, the devices such as those which detect \_\_\_\_\_ 17 in cabinet could be affected.

## Questions 18-22 .....

Use the information in the passage to match the Organization (listed A-E) with opinions or deeds below. Write the appropriate letters A-E in boxes 18-22 on your answer sheet.

A	British Civil Aviation Authority
B	Maryanne Greczyn
C	RTCA
D	Marshall Cross
E	Boeing company

- 18 Mobile usages should be forbidden in a specific time.
- 19 Computers are more dangerous than cell phones.
- 20 finding that the mobile phones pose little risk on flight' navigation devices
- 21 Disruption of laptop is not as dangerous as cell phones
- 22 The mobile signal may have impact on earlier devices.

**Questions 23-26 .....**

Do the following statements agree with the information given in Reading Passage2

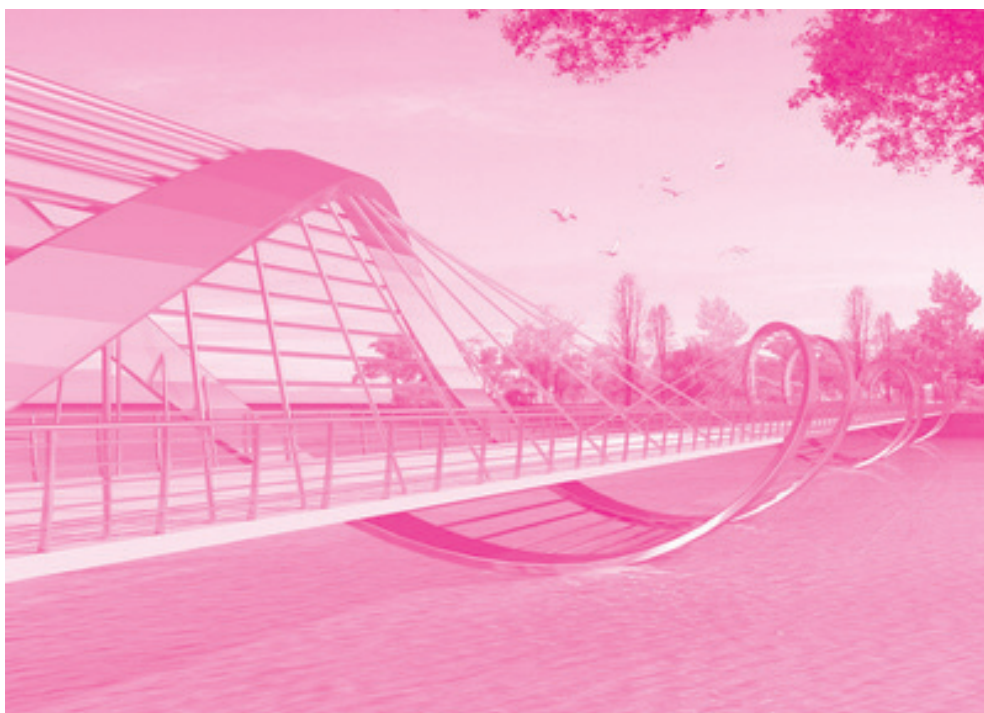
In boxes 23-26 on your answer sheet, write

<b>TRUE</b>	if the sataement agrees with the information
<b>FALSE</b>	if the statement contradicts the information
<b>NOT GIVEN</b>	if there is no information on this

- 23 It is well accepted that cell phones are prohibited because of their higher emission than computers’.
- 24 Some people believe that radio emission will interrupt the equipment on plane.
- 25 The signal interference-detecting device has not yet been developed because they are in priority for neither safety or economic reasons
- 26 FAA initiated open debate with Federal Communications Commission.

## London Swaying Footbridge

- A** In September 1996 a competition was organized by the Financial Times in association with the London Borough of Southwark to design a new footbridge across the Thames. The competition attracted over 200 entries and was won by a team comprising Arup (engineers), Foster and Partners (architects) and the sculptor Sir Anthony Caro.
- B** The bridge opened to the public on 10 June 2000. Up to 100,000 people crossed it that day with up to 2000 people on the bridge at any one time. At first, the bridge was still. Then it began to sway (*n.* 摇晃), just slightly. Then, almost from one moment to the next, when large groups of people were crossing, the wobble (*n.* 摇晃) intensified (*v.* 加强). This movement became sufficiently large for people to stop walking to retain their balance and sometimes to hold onto the hand rails for support. It was decided immediately to limit the number of people on the bridge, but even so the deck movement was sufficient to be uncomfortable and to raise concern for public safety so that on 12 June the bridge was closed until the problem could be solved.
- C** The embarrassed engineers found the videotape that day which showed the center span (*n.* 跨度) swaying about 3 inches side to side every second. The engineers first thought that winds might be exerting (*v.* 施以影响) excessive force on the many large flags and banners bedecking the bridge for its gala premiere. What's more, they also discovered that the pedestrians also played a key role. Human activities, such as walking, running, jumping, swaying, etc. could cause horizontal forces (*n.* 水平力、横向力) which in turn could cause excessive dynamic vibration (*n.* 震动) in the lateral (*adj.* 侧面的、横向的) direction in the bridge. As the structure began moving, pedestrians adjusted (*v.* 调整) their gait (*n.* 步法) to the same lateral rhythm (*n.* 节奏) as the bridge. The adjusted footsteps magnified (*v.* 放大) the motion—just like when four people all stand up in a small boat at the same time. As more pedestrians locked into the same rhythm, the increasing oscillations (*n.* 振荡) led to the dramatic swaying captured on film.



- D** In order to design a method of reducing the movements, the force exerted by the pedestrians had to be quantified and related to the motion of the bridge. Although there are some descriptions of this phenomenon in existing literature, none of these actually quantifies the force. So there was no quantitative analytical way to design the bridge against this effect. An immediate research program was launched by the bridge's engineering designers Ove Arup, supported by a number of universities and research organizations.
- E** The tests at the University of Southampton involved a person walking 'on the spot' on a small shake table. The tests at Imperial College involved persons walking along a specially built, 7.2m-long platform which could be driven laterally at different frequencies (*n. 频率*) and amplitudes (*n. 振幅*). Each type of test had its limitations. The Imperial College tests were only able to capture 7-8 footsteps, and the 'walking on the spot' tests, although monitoring many footsteps, could not investigate (*v. 调查研究*) normal forward walking. Neither test could investigate any influence of other people in a crowd on the

behavior of the individual being tested.

- F** The results of the laboratory tests provided information which enabled the initial design of a retro-fit to be progressed. However, the limitations of these tests was clear and it was felt that the only way to replicate (v. 复制) properly the precise conditions of the Millennium Bridge was to carry out crowd tests

on the bridge deck itself. These tests done by the Arup engineers could incorporate factors not possible in the laboratory tests. The first of these was carried out with 100 people in July 2000. The results of these tests were used to refine the load

## 51 • 无忧雅思 ielts

model for the pedestrians. A second series of crowd tests was carried out on the bridge in December 2000. The purpose of these tests was to further validate (v. 证实) the design assumptions and to load test a prototype damper installation (n. 安装). The test was carried out with 275 people.

- G** Unless the usage of the bridge was to be greatly restricted (v. 限制), only two generic options (n. 选择) to improve its performance were considered feasible (adj. 可行的). The first was to increase the stiffness of the bridge to move all its lateral natural frequencies out of the range that could be excited by the lateral footfall forces, and the second was to increase the damping of the bridge to reduce the resonant response.



### Questions 14-17 .....

Choose FOUR letters, A-H.

Write the correct letters in boxes 14-17 on your answer sheet.

Which FOUR of the following situation were witnessed on the opening ceremony of the bridge?

- A The frequency of oscillation increased after some time.
- B All the engineers went to see the ceremony that day.
- C The design of the bridge astonished the people.
- D Unexpected sideways movement of the bridge occurred.
- E Pedestrians had difficulty in walking on the deck.
- F The bridge fell down when people tried to retain their balance.
- G Vibration could be detected on the deck by the pedestrians.
- H It was raining when the ceremony began.

### Questions 18-22 .....

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN THREE WORDS** from the Reading Passage for each answer.

Write your answers in boxes 18-22 on your answer sheet.

After the opening ceremony, the embarrassed engineers tried to find out the reason of the bridge's wobbling. Judged from the videotape, they thought that 18 \_\_\_\_\_ and 19 \_\_\_\_\_ might create excessive force on the bridge. The distribution of 20 \_\_\_\_\_ resulted from human activities could cause 21 \_\_\_\_\_ throughout the structure. This swaying prompted people to start adjusting the way they walk, which in turn reinforced the 22 \_\_\_\_\_

## Museums & Theme Park

*History of the institutions that preserve and interpret the material evidence of the human race, human activity, and the natural world, as such, museums have a long history, springing from what may be an innate human desire to collect and interpret and having discernible origins in large collections built up by individuals and groups before the modern era. The word museum has classical origins. In its Greek form, mouseion, it meant “seat of the Muses ” and designated a philosophical institution or a place of contemplation. Use of the Latin derivation, museum, appears to have been restricted in Roman times mainly to places of philosophical discussion.*

- A** The conviction (确信有罪) that historical relics provide infallible(绝无错误的) testimony (证词) about the past is rooted in the nineteenth and early twentieth centuries, when science was regarded as objective and value free. As one writer observes: ‘Although it is now evident that artifacts(人工制品) are as easily altered as chronicles (历代记), public faith in their veracity (说老实话) endures: a tangible (可触摸的) relic seems ipso factorial(拉丁语: by fact itself).’ Such conviction was, until recently, reflected in museum displays. Museums used to look-and some still do — much like storage rooms of objects packed together in showcases: good for scholars who wanted to study the subtle differences in design, but not for the ordinary visitor, to whom it all looked alike. Similarly, the information accompanying the objects often made little sense to the lay visitor. The content and format of explanations dated back to a time when the museum was the exclusive domain of the scientific researcher.
- B** Recently, however, attitudes towards history and the way it should be presented have altered. The key word in heritage display is now ‘experience’, the more exciting the better and, if possible, involving all the senses. Good examples of this approach in the UK are the Jorvik Centre in York; the National Museum of Photography, Film and Television in Bradford; and the Imperial War Museum in London. In the US the trend emerged much earlier: Williamsburg has been

a prototype for many heritage developments in other parts of the world. No one can predict where the process will end. On so-called heritage sites the re-enactment (重新演戏) of historical events is increasingly popular, and computers will soon provide virtual reality experiences, which will present visitors with a vivid image of the period of their choice, in which they themselves can act as if part of the historical environment. Such developments have been criticized as an intolerable vulgarisation (通俗), but the success of many historical theme parks and similar locations suggests that the majority of the public does not share this opinion.

- C In a related development, the sharp distinction between museum and heritage sites on the one hand, and theme parks on the other, is gradually evaporating (蒸发). They already borrow ideas and concepts from one another. For example, museums have adopted story lines for exhibitions, sites have accepted ‘theming’ as a relevant tool, and theme parks are moving towards more authenticity and research-based presentations. In zoos, animals are no longer kept in cages, but in great spaces, either in the open air or in enormous greenhouses, such as the jungle and desert environments in Burgers’ Zoo in Holland. This particular trend is regarded as one of the major developments in the presentation of natural history in the twentieth century.
- D Theme parks are undergoing other changes, too, as they try to present more serious social and cultural issues, and move away from fantasy. This development is a response to market forces and, although museums and heritage sites have a special, rather distinct, role to fulfill, they are also operating in a very competitive environment, where visitors make choices on how and where to spend their free time. Heritage and museum experts do not have to invent stories and recreate historical environments to attract their visitors: their assets are already in place. However, exhibits must be both based on artifacts and facts as we know them, and attractively presented. Those who are professionally engaged in the art of interpreting history are thus in

51 • 无忧雅思  
ielts

a difficult position, as they must steer a narrow course between the demands of ‘evidence’ and ‘attractiveness’, especially given the increasing need in the heritage industry for income-generating activities.

**E** It could be claimed that in order to make everything in heritage more ‘real’, historical accuracy must be increasingly altered. For example, *Pithecanthropus erectus* (爪哇猿人) is depicted in an Indonesian museum with Malay facial features, because this corresponds to public perceptions. Similarly, in the Museum of Natural History in Washington, Neanderthal man is shown making a dominant gesture to his wife. Such presentations tell us more about contemporary perceptions of the world than about our ancestors. There is one compensation, however, for the professionals who make these interpretations: if they did not provide the interpretation, visitors would do it for themselves, based on their own ideas, misconceptions and prejudices. And no matter how exciting the result, it would contain a lot more bias than the presentations provided by experts.

**F** Human bias is inevitable, but another source of bias in the representation of history has to do with the transitory nature of the materials themselves. The simple fact is that not everything from history survives the historical process. Castles, palaces and cathedrals have a longer lifespan than the dwellings of ordinary people. The same applies to the furnishings and other contents of the premises. In a town like Leyden in Holland, which in the seventeenth century was occupied by approximately the same number of inhabitants as today, people lived within the walled town, an area more than five times smaller than modern Leyden. In most of the houses several families lived together in circumstances beyond our imagination. Yet in museums, fine period rooms give only an image of the lifestyle of the upper class of that era. No wonder that people who stroll around exhibitions are filled with nostalgia (乡愁); the evidence in museums indicates that life was so much better in the past. This notion is induced by the bias in its representation in museums and heritage centres.

**Questions 27-30** .....

The reading passage has six paragraphs, A-F

Choose the correct heading for paragraphs B-E from the list below.

Write the correct number, i-vii, in boxes 27-30 on your answer sheet.

**List of Headings**

- i Mixed views on current changes to museums
- ii Interpreting the facts to meet visitor expectations
- iii Historical function and review of museum
- iv Collections of factual proof
- v The global interpretation of change
- vi Current reviews and further suggestion
- vii Public attractions has few differences

- 27 Paragraph B
- 28 Paragraph C
- 29 Paragraph D
- 30 Paragraph E

## Questions 31-36 .....

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 31—36 on your answer sheet.

- 31 Which of the following of museums in the past is CORRECT compared with today's museums?
  - A embody history in a specific way.
  - B they are mainly designed for small group of people
  - C were more scary inside.
  - D preserved items well by administrators.
- 32 According to the Author, nowadays the trends in the heritage industry:
  - A their origins are in London.
  - B rely on film special effects .
  - C emphasis on personal involvement.
  - D first appeared in the US.
- 33 The writer describe the relationship between museums and theme parks:
  - A have similar tools for exhibition.
  - B try to impress audience with wild animals..
  - C often cooperate in work..
  - D are now difficult to separate them clearly than before.
- 34 In preparing exhibits, the writer says that the experts of museum should note:
  - A should stick on one objective.
  - B have to do some language translation work.
  - C have to balance conflicting priorities.
  - D should be free from commercial restrictions.
- 35 What does the author suggests that some museum exhibits in paragraph E
  - A fail to match visitor expectations.
  - B are based on the false assumptions of professionals.
  - C reveal more about present beliefs than about the past.
  - D allow visitors to make more use of their imagination.

- 36 In the end, author mentioned our view of history is biased because
- A only some durable articles preserved from the past.
  - B we especially like ancient castle.
  - C we tend to ignore things that make us angry.
  - D museum exhibits influenced by experts.

**Questions 37-40** .....

Do the following statements agree with the information given in Reading Passage 3?

In boxes 37-40 on your answer sheet, write

<b>TRUE</b>	if the sataement agrees with the information
<b>FALSE</b>	if the statement contradicts the information
<b>NOT GIVEN</b>	if there is no information on this

- 37 Customers likes go to theme parks which avoid serious facts.
- 38 According to the passage, less people visit theme parks than museums
- 39 The old castle of Leyden has barely changed from 17th century.
- 40 Museums may give a incorrect impression of how life used to be.

## SETI (Search for E.T. Intelligence)

*Space aliens and extraterrestrials have long been popular subjects of Hollywood movies and science fiction literature. But the idea of intelligent life in outer space is no longer limited to fiction. For the last 50 years, scientists and astronomers have been training their telescopes into space in the search for signs of intelligent life. Frank Drake is a trailblazer in that quest.*

*The question of whether we are alone in the Universe has haunted humanity for centuries, but we may now stand poised on the brink of the answer to that question, as we search for radio signals from other intelligent civilizations. This search, often known by the acronym SETI (search for extra-terrestrial intelligence), is a difficult one. Although groups around the world have been searching intermittently for three decades, it is only now that we have reached the level of technology where we can make a determined attempt to search all nearby stars for any sign of life.*

- A The primary reason for the search is basic curiosity-the same curiosity about the natural world that drives all pure science. Few will deny the profound importance, practical and philosophical, which the detection of interstellar communications will have. We want to know whether we are alone in the Universe. We want to know whether life evolves naturally if given the right conditions, or whether there is something very special about the Earth to have fostered the variety of life forms that we see around us on the planet. The simple detection of a radio signal will be sufficient to answer this most basic of all questions. In this sense, SETI is another cog ( 齿轮 ) in the machinery of pure science which is continually pushing out the horizon of our knowledge. However, there are other reasons for being interested in whether life exists elsewhere. For example, we have had civilisation on Earth for perhaps only a few thousand years, and the threats of nuclear war and pollution over the last few decades have told us that our survival may be tenuous. Will we last another two thousand years or will we wipe ourselves out? Since the lifetime of a planet like ours is several billion years, we can expect that, if other



civilizations do survive in our galaxy, their ages will range from zero to several billion years. Thus any other civilisation that we hear from is likely to be far older, on average, than ourselves. The mere existence of such a civilisation will tell us that long-term survival is possible, and gives us some cause for optimism. It is even possible that the older civilisation may pass on the benefits of their experience in dealing with threats to survival such as nuclear war and global pollution, and other threats that we haven't yet discovered.

**B** In discussing whether we are alone, most SETI scientists adopt two ground rules. First, UFOs (Unidentified Flying Objects) are generally ignored since most scientists do not consider the evidence for them to be strong enough to bear serious consideration (although it is also important to keep an open mind in case any really convincing evidence emerges in the future). Second, we make a very conservative assumption that we are looking for a life form that is pretty well like us, since if it differs radically from us we may well not recognise it as a life form, quite apart from whether we are able to communicate with it. In other words, the life form we are looking for may well have two green heads and seven fingers, but it will nevertheless resemble us in that it should communicate with its fellows, be interested in the Universe, live on a planet orbiting a star like our Sun, and perhaps most restrictively, have a chemistry, like us, based on carbon and water. We therefore feel that a discriminating search for signals deserves a considerable effort. The probability of success is difficult to estimate; but if we never search, the chance of success is zero.

**C** Even when we make these assumptions, our understanding of other life forms is still severely limited. We do not even know, for example, how many stars have planets, and we certainly do not know how likely it is that life will arise naturally, given the right conditions. However, when we look at the 100 billion stars in our galaxy (the Milky Way), and 100 billion galaxies in the observable Universe, it seems



inconceivable that at least one of these planets does not have a life form on it; in fact, the best educated guess we can make, using the little that we do know about the conditions for carbon-based life, leads us to estimate that perhaps one in 100,000 stars might have a life-bearing planet orbiting it. That means that our nearest neighbours are perhaps 100 light years away, which is almost next door in astronomical terms.

**D** An alien civilisation could choose many different ways of sending information across the galaxy, but many of these either require too much energy, or else are severely attenuated while traversing (横渡, 穿越) the vast distances across the galaxy. It turns out that, for a given amount of transmitted power, radio waves in the frequency range 1000 to 3000 MHz travel the greatest distance, and so all searches to date have concentrated on looking for radio waves in this frequency range. So far there have been a number of searches by various groups around the world, including Australian searches using the radio telescope at Parkes, New South Wales. Until now there have not been any detections from the few hundred stars which have been searched. The scale of the searches has been increased dramatically since 1992, when the US Congress voted NASA \$10 million per year for ten years to conduct a thorough

search for extra-terrestrial life. Much of the money in this project is being spent on developing the special hardware needed to search many frequencies at once. The project has two parts. One part is a targeted search using the world's largest radio telescopes, the American-operated telescope in Arecibo, Puerto Rico and the French



telescope in Nancy in France. This part of the project is searching the nearest 1000 likely stars with high sensitivity for signals in the frequency range 1000 to 3000 MHz. The other part of the project is an undirected search which is monitoring all of space with a lower sensitivity, using the smaller antennas of NASA's Deep Space Network.

- E** There is considerable debate over how we should react if we detect a signal from an alien civilisation. Everybody agrees that we should not reply immediately. Quite apart from the impracticality of sending a reply over such large distances at short notice, it raises a host of ethical questions that would have to be addressed by the global community before any reply could be sent. Would the human race face the culture shock if faced with a superior and much older civilisation? Luckily, there is no urgency about this. The stars being searched are hundreds of light years away, so it takes hundreds of years for their signal to reach us, and a further few hundred years for our reply to reach them. It's not important, then, if there's a delay of a few years, or decades, while the human race debates the question of whether to reply, and perhaps carefully drafts a reply.

## Questions 14-17 .....

Reading Passage 2 has five paragraphs, A-E.

Choose the correct heading for paragraphs B-E from the list of headings below.

Write the correct number, i-vii, in boxes 14-17 on your answer sheet.

### List of Headings

- i. Seeking the radio signals coming from other planets
- ii. Technical difficulty in replying a short notice immediately
- iii. The best strategies of responding to signals from other civilisations
- iv. Enormous distances to our planet's closest neighbours
- v. The expected and established assumptions underlying as to
- vi. the search for extra-terrestrial intelligence
- vii. Significances for the seeking for extra-terrestrial intelligence
- viii. Knowledge of extra-terrestrial life forms
- ix. Likelihood of extra-terrestrial life-forms on other planets
- x. Financial investment into a field that seems no return

14 Paragraph B

15 Paragraph C

16 Paragraph D

17 Paragraph E

## Questions 18-20 .....

Answer the questions below.

Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer. Write your answers in boxes 18-20 on your answer sheet.

- 18 What is the life expectancy (in years) of Earth?
- 19 What kind of signals from other intelligent civilizations are SETI scientists searching for?
- 20 How many stars are the world's most potent and enormous radio telescopes searching for?

## Questions 21-26 .....

Do the following statements agree with the views of the writer in Reading Passage 2?

In boxes 21-26 on your answer sheet, write

<b>TRUE</b>	if the statement agrees with the information
<b>FALSE</b>	if the statement contradicts the information
<b>NOT GIVEN</b>	if there is no information on this

- 21 Alien civilizations may be able to help the human in our planet to cope with problems that seriously matter.
- 22 SETI scientists are trying to find a life form that resembles humans in many ways.
- 23 The Americans and Australians have joined together into cooperative research projects.
- 24 signals from several stars have already been obtained by SETI scientists
- 25 The NASA project was bombarded with criticism from some members of Congress.
- 26 If human being receives a signal from outer space, it would be important to respond as swiftly as possible.

## The Exploration of Mars

- A** In 1877, Giovanni Schiaparelli, an Italian astronomer, made drawings and maps of the Martian surface that suggested strange features. The images from telescopes at this time were not as sharp as today's. Schiaparelli said he could see a network of lines, or canali. In 1894, an American astronomer, Percival Lowell, made a series of observations of Mars from his own observations of Mars from his own observatory at Flagstaff, Arizona, USA. Lowell was convinced a great network of canals had been dug to irrigate crops for the Martian race! He suggested that each canal had fertile vegetation on either side, making them noticeable from Earth. Drawings and globes he made show a network of canals and oases all over the planet.
- B** The idea that there was intelligent life on Mars gained strength in the late 19th century. In 1898, H.G. Wells wrote a science fiction classic, *The War of the Worlds* about an invading force of Martians who try to conquer Earth. They use highly advanced technology (advanced for 1898) to crush human resistance in their path. In 1917, Edgar Rice Burroughs wrote the first in a series of 11 novels about Mars. Strange beings and rampaging Martian monsters gripped the public's imagination. A radio broadcast by Orson Welles on Halloween night in 1938 of *The War of the Worlds* caused widespread panic across America. People ran into the streets in their pyjamas-millions believed the dramatic reports of a Martian invasion.
- C** Probes are very important to our understanding of other planets. Much of our recent knowledge comes from these robotic missions into space. The first images sent back from Mars came from Mariner 4 in July 1965. They showed a cratered and barren landscape, more like the surface of our moon than Earth. In 1969, Mariners 6 and 7 were launched and took 200 photographs of Mars's southern hemisphere and pole on fly-by missions. But these showed little more information. In 1971, Mariner 9's mission was to orbit the planet every 12 hours. In 1975, The USA sent two Viking probes to the planet, each with a lander and an orbiter. The landers had sampler arms to scoop up Martian rocks

and did experiments to try and find signs of life. Although no life was found, they sent back the first colour pictures of the planet's surface and atmosphere from pivoting cameras.

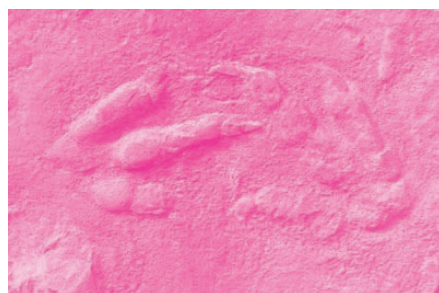
**D** The ALH84001 meteorite( 陨石 ) was found in December 1984 in Antarctica, by members of the ANSMET project; The sample was ejected from Mars about 17 million years ago and spent 11,000 years in or on the Antarctic ice sheets. Composition analysis by NASA revealed a kind of magnetite that on Earth, is only found in association with certain microorganisms. Some structures resembling the mineralized casts of terrestrial bacteria and their appendages (fibrils) or by-products (extracellular polymeric substances) occur in the rims of carbonate globules and preterrestrial aqueous alteration regions. The size and shape of the objects is consistent with Earthly fossilized nanobacteria, but the existence of nanobacteria itself is controversial.

**E** In 1965, the Mariner 4 probe discovered that Mars had no global magnetic field that would protect the planet from potentially life-threatening cosmic radiation ( 宇宙射线 ) and solar radiation; observations made in the late 1990s by the Mars Global Surveyor confirmed this discovery. Scientists speculate that the lack of magnetic shielding helped the solar wind blow away much of Mars's atmosphere over the course of several billion years. After mapping cosmic radiation levels at various depths on Mars, researchers have concluded that any life within the first several meters of the planet's surface would be killed by lethal doses of cosmic radiation. In 2007, it was calculated that DNA and RNA damage by cosmic radiation would limit life on Mars to depths greater than 7.5 metres below the planet's surface. Therefore, the best potential locations for discovering life on Mars may be at subsurface environments that have not been studied yet. Disappearance of the magnetic field may played an





significant role in the process of Martian climate change. According to the valuation of the scientists, the climate of Mars gradually transits from warm and wet to cold and dry after magnetic field vanished.



**F** No Mars probe since Viking has tested the Martian regolith (风化层) specifically for metabolism (新陈代谢) which is the ultimate sign of current life. NASA's recent missions have focused on another question: whether Mars held lakes or oceans of liquid water on its surface in the ancient past. Scientists have found hematite, a mineral that forms in the presence of water. Thus, the mission of the Mars Exploration Rovers of 2004 was not to look for present or past life, but for evidence of liquid water on the surface of Mars in the planet's ancient past. Liquid water, necessary for Earth life and for metabolism as generally conducted by species on Earth, cannot exist on the surface of Mars under its present low atmospheric pressure and temperature, except at the lowest shaded elevations for short periods and liquid water does not appear at the surface itself. In March 2004, NASA announced that its rover Opportunity had discovered evidence that Mars was, in the ancient past, a wet planet. This had raised hopes that evidence of past life might be found on the planet today. ESA confirmed that the Mars Express orbiter had directly detected huge reserves of water ice at Mars' south pole in January 2004.

**G** Two metres below the surface of the Atacama Desert there is an 'oasis' of microorganisms. Researchers from the Center of Astrobiology (Spain) and the Catholic University of the North in Chile have found it in hypersaline substrates thanks to SOLID, a detector for signs of life which could be used in environments similar to subsoil on Mars. "We have named it a 'microbial oasis' because we found microorganisms developing in a habitat that was rich in rock salt and other highly hygroscopic compounds that absorb water", explained Victor Parro, researcher from the Center of Astrobiology (INTA-CSIC, Spain) and coordinator of the study. "If there are similar microbes on



Mars or remains in similar conditions to the ones we have found in Atacama, we could detect them with instruments like SOLID” Parro highlighted.

**H** Even more intriguing, however, is the alternative scenario by Spanish scientists: If those samples could be found to have organisms that use DNA, as Earthly life does, as their genetic code. It is extremely unlikely that such a highly specialised, complex molecule like DNA could have evolved separately on the two planets, indicating that there must be a common origin for Martian and Earthly life. Life based on DNA first appeared on Mars and then spread to Earth, where it then evolved into the myriad forms of plants and creatures that exist today. If this was found to be the case, we would have to face the logical conclusion: we are all Martian. If not, we would continue to search the life of signs.

## Questions 27-32 .....

The reading Passage has seven paragraphs A-H.

Which paragraph contains the following information?

*Write the correct letter A-H, in boxes 27-32 on your answer sheet.*

NB You may use any letter more than once.

- 27      Martian evidence on Earth
- 28      Mars and Earth may share the same life origin
- 29      certain agricultural construction was depicted specifically
- 30      the project which aims to identify life under similar condition of Mars
- 31      Mars had experienced terrifying climate transformation
- 32      Attempts in scientific investigation to find liquid water

### Questions 33-36 .....

Choose the correct letter, A,B,C or D.

Write your answers in boxes 33-36 on your answer sheet.

- 33** How did Percival Lowell describe Mars in this passage?
- A Perfect observation location is in Arizona.
  - B Canals of Mars are broader than that of the earth.
  - C Dedicated water and agriculture trace is similar to the earth.
  - D Actively moving Martian lives are found by observation.
- 34** How did people change their point of view towards Mars from 19th century?
- A They experienced Martian attack.
  - B They learned knowledge of mars through some literature works
  - C They learned new concept by listening famous radio program.
  - D They attended lectures given by famous writers.
- 35** In 1960s, which information is correct about Mars by a number of Probes sent to the space?
- A It has a landscape full of rock and river
  - B It was not as vivid as the earth
  - C It contained the same substance as in the moon
  - D It had different images from the following probes
- 36** What is the implication of project proceeded by technology called SOLID inAtacama Desert?
- A It could be employed to explore organisms under Martian condition.
  - B This technology could NOT be used to identify life on similar condition of Mars.
  - C Atacama Desert is the only place that has a suitable environment for organisms.
  - D Life had not yet been found yet in Atacama Desert.

## Questions 37-40 .....

Do the following statements agree with the information given in Reading Passage 1?

In boxes 37-40 on your answer sheet, write

<b>TRUE</b>	<i>if the sataement agrees with the information</i>
<b>FALSE</b>	<i>if the statement contradicts the information</i>
<b>NOT GIVEN</b>	<i>if there is no information on this</i>

- 37 Technology of Martian creature was superior than what human had at that time in every field according to The War of the Worlds.
- 38 Proof sent by Viking probes has not been challenged yet.
- 39 Analysis on meteorite from Mars found a substance which is connected to some germs.
- 40 According to Victor Parro, their project will be deployed on Mars after they identified DNA substance on earth.

## Jupiter with The Shoemaker-Levy9's collision

- A** Jupiter is the largest planet in the solar system. Its diameter is 88,846 miles (more than 140,000 kilometers), more than 11 times that of Earth, and about one-tenth that of the sun. It would take more than 1,000 Earths to fill up the volume of the giant planet. When viewed from Earth, Jupiter appears brighter than most stars. It is usually the second brightest planet—after Venus. Jupiter is composed of a relatively small core of metal (iron and silicates surrounded by hydrogen). In the depths of the planet the hydrogen is so compressed that it is metallic in form; further from the centre where the inner atmosphere is stretched about 20000 km, the pressure is lower and the hydrogen is in its normal molecular form. The Jovian cloud tops visible from Earth consist primarily of methane and ammonia ( 甲烷和氨水 ). There are other elements and compounds lurking in the cloud tops and below which are thought to be responsible for the colors seen in the atmosphere.

### How does Jupiter come to form?

- B** The Origin theory is a mystical problem. In our own solar system inside or around asteroid belt, there are four rocky planets close to the Sun, each formed in the way described follow-Mercury, Venus, Earth and Mars: The first stars which formed from primordial ( 原始的 ) hydrogen and helium produced in the big bang ( 大爆炸 ), cannot have had any planets, because there were no heavy elements available from which they could be built up. Planetary systems are all second-generation (or later) systems. As the parent cloud of gas and dust from which our Solar System was being formed, began to shrink, any rotation it possessed made it spin faster and faster, and as the core of the cloud collapsed to form a star, some of the material from which it was forming was held out from the centre of the cloud by residual spin, and the material settled down into a dusty disc around the young star. Close to a young star,

the lightest material in the disc, comprising mainly hydrogen and helium ( 氦 ) gas, is blown away by the heat of the star and solar radiation. The material left behind is made up of billions of tiny grains of dust that collide and stick together, building up larger lumps. The lumps ( 突起部 ) of matter may be a few millimetres across and are settling into a thinner disc around the star. The process of accretion-lumps growing by sticking together carries on until the original dust grains have become lumps of rock about one kilometre across, similar to the asteroids that orbit in profusion between Mars and Jupiter today. Once the pieces of rock reach this size, they begin to tug on each other significantly through gravitation, pulling them into swarms that orbit around the star together, bumping into one another from time to time. Gravitation pulls the pieces more and more tightly together, with the largest lumps (which have the strongest gravitational ( 引力的 ) pull) attracting more and more material, growing to become terrestrial planets and their satellites.

- C Then there is a belt of cosmic rubble ( the asteroid belt 小行星带 ), a ring representative in many ways of the kind of material from which the inner planets formed. The material in this ring could never settle down to become a planet itself because it is continuously being disturbed by the gravitational influence of Jupiter, the largest planet in the solar system. Beyond the asteroid belt, there are four “gas giant” planets, Jupiter, Saturn, Uranus and Neptune ( 海王星 ). These are probably typical of planets that form at large distances from their parent star, planets in which the primordial volatile material has been retained, so that even though they may contain a small rocky core, they are mostly made of gas and ices. Beyond the gas giants, at a great distance, comes small, rocky Pluto, an anomaly, and possibly a comet or asteroid, captured and held in a fixed orbit.

### Shoemaker-Levy 9

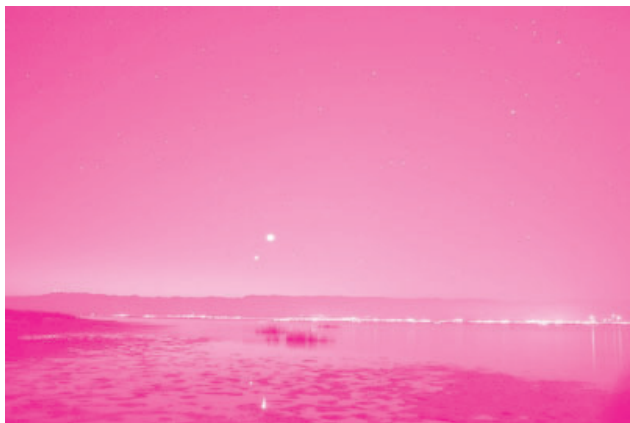
- D In March 1993, astronomers Eugene Shoemaker, Carolyn Shoemaker, and David H. Levy discovered a comet near Jupiter. The comet was found orbiting planet Jupiter and is believed to have been captured from the Sun around two

decades earlier. The comet, later named Shoemaker-Levy 9, probably once orbited the sun independently, but had been pulled by Jupiter's gravity into an orbit, the diameter of which becomes smaller, around the planet. When the comet was discovered, it had broken into 21 pieces. The comet probably had broken apart when it passed close to Jupiter.

### The collision

**E** According to David Levy, a half-mile-wide object should hit the Earth on the average of once every 100,000 years. However, small objects the size of a grain of sand or a piece of gravel hit the Earth each minute. The frequency with which a 100-meter asteroid/comet hits Earth is about once every 100 years. The chances could be higher or lower because these small objects are not easy to see with our telescopes, so their number is not well known. Calculations revealed that the cemetery fragments were on course to collide with Jupiter during July 1994, and that each fragment could deliver an energy equivalent to approximately 500,000 million tons of TNT. The prospect of celestial fireworks on such a grand scale immediately captured the attention of astronomers worldwide! Scientists hoped to learn much about the effects of a collision between a planet and a comet. Astronomers at all the major telescopes on Earth turned their instruments toward Jupiter at the predicted collision times. Scientists also observed Jupiter with the powerful Hubble Space Telescope, which is in orbit around Earth; and the remotely controlled space probe Galileo (伽利略空间探测器), which was on its way to Jupiter.

**F** The fragments fell on the back side of Jupiter as viewed from Earth and the Hubble Space Telescope (哈勃望远镜). But the rotation of Jupiter carried the impact sites around to



the visible side after less than half an hour. Scientists estimate that the largest fragments were about 0.3 to 2.5 miles (0.5 to 4 kilometers) in diameter. The impacts were directly observable from Galileo, which was within about 150 million miles (240 million kilometers) from Jupiter. However, damage to certain of the probe's instruments limited its ability to record and send data. The impacts caused large explosions, probably due to the compression, heating, and rapid expansion of atmospheric gases. The explosions scattered comet debris over large areas, some with diameters larger than that of Earth. The debris gradually spread into a dark haze of fine material that remained suspended for several months in Jupiter's upper atmosphere. If a similar comet ever collided with Earth, it might produce a haze (薄雾) that would cool the atmosphere and darken the planet by absorbing sunlight. If the haze lasted long enough, much of Earth's plant life could die, along with the people and animals that depend on plants.

- G** The smaller cemetery fragments plunged into Jupiter rapidly disintegrated and left little trace; three of the smallest fragments, namely T, U and V left no discernible traces whatsoever. However, many of the cemetery fragments were sufficiently large to produce a spectacular display. Each large fragment punched through the cloud tops, heated the surrounding gases to some 20,000 K on the way, and caused a massive plume or fireball up to 2,000 km in diameter to rise above the cloud tops. Some days after collision the impact sites began to evolve and fade as they became subject to the dynamics of Jupiter's atmosphere. No-one knows how long they will remain visible from Earth, but it is thought that the larger scars may persist for a year or more. The interest of professional astronomers in Jupiter is now waning and valuable work can therefore be performed by amateurs in tracking the evolution of the collision scars. The scars are easily visible in a modest telescope, and a large reflector will show them in some detail. There is scope for valuable observing work from now until Jupiter reaches conjunction with the Sun in November 2004.



## Questions 14-17 .....

Choose the correct letter, A, B, C or D.

Write your answers in boxes 14-17 on your answer sheet.

- 14 People believe the origin of planets of inner asteroid belt can be
- A somewhat an inaccurate and too broad theory
  - B a sophisticated mystery though certain speculation has been proposed
  - C a totally wrong speculation
  - D totally explained by the theory made
- 15 When did the planet of Jupiter come to form?
- A when there were no heavy elements
  - B at the same time as the big bang happened
  - C during the generation of first stars
  - D when our Solar System was being formed
- 16 According to the passage, what is true for the “gas giant” planets?
- A They are at large distances from their parent star.
  - B The original volatile material has been lost
  - C They contain gas and ices core.
  - D Each is possibly a comet or asteroid, captured and held in a fixed orbit.
- 17 Astronomers and scientists on Earth stared their instruments toward Jupiter at the predicted collision times mainly because
- A hoped to calculate the real risk of the collision between the Earth and a comet.
  - B hoped to learn unknown knowledge of a collision between a planet and a comet.
  - C hoped to collect data about the structure of the Jupiter
  - D hoped to test the powerful Hubble Space Telescope

## Questions 18-23 .....

Complete the following summary of the paragraphs of Reading Passage 2, Choose the appropriate letter from A-L and write your answers in boxes 18-23 on your answer sheet.

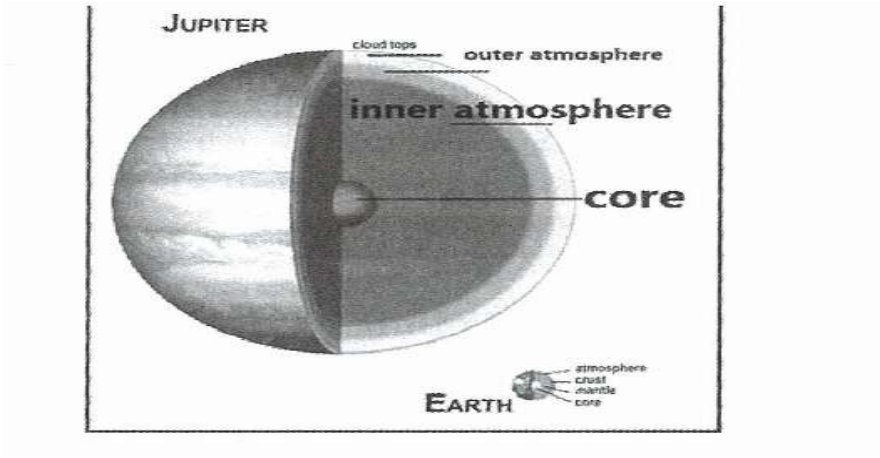
A wider	B smaller	C expansion	D collision
E 20 years	F 30 years	G 100 years	H gathered
I calculation	J released	K gravity	L pulled

The comet of Shoemaker is thought to have been orbiting the Jupiter at least for 18\_\_\_\_\_. The comet probably once orbited the sun independently, but had been pulled by Jupiter's 19\_\_\_\_\_ into an orbit around the planet. When the diameter of orbit becomes 20\_\_\_\_\_ with Jupiter's force, it came closer and had broken into 21-pieces. According to David Levy, the possibility with which a 100-meter asteroid/comet hits Earth is about once every 21\_\_\_\_\_. The chances could be higher or lower and their number is not well determined.

Calculations revealed that the cemetery fragments were on course to collide with Jupiter during July 1994. Finally, the fragments collide into the back side of Jupiter as viewed from Earth and the Hubble Space Telescope. Large explosion from the impacts 22\_\_\_\_\_ the huge, hot atmospheric gases. And the comet debris gradually expanded into a dark dust of material that 23\_\_\_\_\_ suspended for months in Jupiter's upper atmosphere.

Questions 24-26 .....

Filling the table, Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.



Main part of the Jupiter	Main elements or molecules	Size
core	24_____	twice as wide as earth
inner atmosphere	Normal 25_____	20000 km
outer atmosphere	methane and ammonia	More than 26_____ Km (as diameter)

## Tidal Power ! in Britain

*Tidal power, also called tidal energy, is a form of hydropower that converts the energy of tides into useful forms of power-mainly electricity. Although not yet widely used, tidal power has potential for future electricity generation. Tides are more predictable than wind energy and solar power. Among sources of renewable energy, tidal power has traditionally suffered from relatively high cost and limited availability of sites with sufficiently high tidal ranges or flow velocities, thus constricting its total availability. However, many recent technological developments and improvements, both in design and turbine technology, indicate that the total availability of tidal power may be much higher than previously assumed, and that economic and environmental costs may be brought down to competitive levels. Undersea turbines which produce electricity from the tides are set to become an important source of renewable energy for Britain. It is still too early to predict the extent of the impact they may have, but all the signs are that they will play a significant role in the future.*

- A** Operating on the same principle as wind turbines, the power in sea turbines comes from tidal currents which turn blades similar to ships' propellers, but, unlike wind, the tides are predictable and the power input is constant. The technology raises the prospect of Britain becoming self-sufficient in renewable energy and drastically reducing its carbon dioxide emissions. If tide, wind and wave power are all developed, Britain would be able to close gas, coal and nuclear power plants and export renewable power to other parts of Europe. Unlike wind power, which Britain originally developed and then abandoned for 20 years allowing the Dutch to make it a major industry, undersea turbines could become a big export earner to island nations such as Japan and New Zealand.
- B** Tidal sites have already been identified that will produce one sixth or more of the UK's power-and at prices competitive with modern gas turbines and

undercutting those of the already ailing nuclear industry. One site alone, the Pentland Firth, between Orkney and mainland Scotland, could produce 10% of the country's electricity with banks of turbines under the sea, and another at Alderney in the Channel Islands three times the 1,200 megawatts of Britain's largest and newest nuclear plant, Sizewell B, in Suffolk. Other sites identified include the Bristol Channel and the west coast of Scotland, particularly the channel between Campbeltown and Northern Ireland.

- C Work on designs for the new turbine blades and sites are well advanced at the University of Southampton's sustainable energy research group. The first station is expected to be installed off Lynmouth in Devon shortly to test the technology in a venture jointly funded by the department of Trade and Industry and the European Union. AbuBakr Bahaj, in charge of the Southampton research, said: 'The prospects for energy from tidal currents are far better than from wind because the flows of water are predictable and constant. The technology for dealing with the hostile saline environment under the sea has been developed in the North Sea oil industry and much is already known about turbine blade design, because of wind power and ship propellers. There are a few technical difficulties, but I believe in the next five to ten years we will be installing commercial marine turbine farms.' Southampton has been awarded £215,000 over three years to develop the turbines and is working with Marine Current Turbines, a subsidiary of IT power, on the Lynmouth project. EU research has now identified 106 potential sites for tidal power, 80% round the coasts of Britain. The best sites are between islands or around heavily indented coasts where there are



- strong tidal currents.
- D** A marine turbine blade needs to be only one third of the size of a wind generator to produce three times as much power. The blades will be about 20 metres in diameter, so around 30 metres of water is required. Unlike wind power, there are unlikely to be environmental objections. Fish and other creatures are thought unlikely to be at risk from the relatively slow-turning blades. Each turbine will be mounted on a tower which will connect to the national power supply grid via underwater cables. The towers will stick out of the water and be lit, to warn shipping, and also be designed to be lifted out of the water for maintenance and to clean seaweed from the blades.
- E** Dr Bahaj has done most work on the Alderney site, where there are powerful currents. The single undersea turbine farm would produce far more power than needed for the Channel Islands and most would be fed into the French Grid and be re-imported into Britain via the cable under the Channel.
- F** One technical difficulty is cavitation, where low pressure behind a turning blade causes air bubbles. These can cause vibration and damage the blades of the turbines. Dr Bahaj said: 'We have to test a number of blade types to avoid this happening or at least make sure it does not damage the turbines or reduce performance. Another slight concern is submerged debris floating into the blades. So far we do not know how much of a problem it might be. We will have to make the turbines robust because the sea is a hostile environment, but all the signs are good that we can do it.'

### Questions 14-17 .....

Reading Passage 2 has six paragraphs, A-F.

Which paragraph contains the following information?

*Write the correct letter, A-F, in boxes 14—17 on your answer sheet.*

NB You may use any letter more than once.

- 14 the location of the first test site
- 15 bringing the power produced on one site back into Britain again
- 16 a potentially promising alternative energy for island countries
- 17 possibility of applying technique from another field due to its stable feature

### Questions 18-22 .....

Choose FIVE letters, A—I.

*Write the correct letters in boxes 18-22 on your answer sheet.*

Which FIVE of the following statements about tidal power are made by the author?

- A It is best produced in the scene of particular coastlines.
- B It would take place all other ways of energy in Britain.
- C It is a more reliable source of energy than wind power.
- D It would cut down on air pollution.
- E It could generate a lot of carbon dioxide to the environment.
- F It could contribute to the closure of many existing power stations in Britain.
- G It could be the most expensive energy in Britain.
- H It could be a means of increasing national income.
- I It could compensate for the shortage of inland sites.

## Questions 23-26 .....

### Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than two words from the Reading Passage for each answer. Write your answers in boxes 23-26 on your answer sheet.

Marine turbine has small environmental impact , for example, sea life would not in danger due to the fact that blades are comparatively 23 \_\_\_\_\_. Each tower equipped with turbine can be raised for 24 \_\_\_\_\_ and extracted seaweed from the blades. However, one practical issue is that air bubble may result from the 25 \_\_\_\_\_ (behind blades ) . This is known as 26 \_\_\_\_\_ .



## Travel Accounts

- A** There are many reasons why individuals have traveled beyond their own societies. Some travelers may have simply desired to satisfy (v. 满足) curiosity about the larger world. Until recent times, however, trade, business dealings, diplomacy, political administration, military campaigns, exile, flight from persecution, migration, pilgrimage, missionary efforts, and the quest for economic or educational opportunities were more common inducements for foreign travel than was mere curiosity. In the 20th century, with the development of increasingly fast, reliable, and inexpensive forms of long-distance transport, mass tourism emerged as a major global promoter of foreign travel.
- B** Records of foreign travel appeared soon after the invention of writing, and fragmentary (*adj.* 碎片的) travel accounts appeared in both Mesopotamia and Egypt in ancient times. After the formation of large, imperial states in the classical world, travel accounts emerged as a prominent literary genre in many lands, and they held especially strong appeal for rulers desiring useful knowledge about their realms. The Greek historian Herodotus reported on his travels in Egypt and Anatolia in researching the history of the Persian wars. The Chinese envoy Zhang Qian described much of central Asia as far west as Bactria (modern-day Afghanistan) on the basis of travels undertaken in the first century BC while searching for allies for the Han dynasty. Hellenistic and Roman geographers such as Ptolemy, Strabo, and Pliny the Elder relied on their own travels through much of the Mediterranean world as well as reports of other travelers to compile vast compendia of geographical knowledge.
- C** During the postclassical era (about 500 to 1500 CE), trade and pilgrimage emerged (v. 出现) as major incentives for travel to foreign lands. Muslim merchants sought trading opportunities throughout much of the eastern hemisphere. They described lands, peoples, and commercial products of the Indian Ocean basin from east Africa to Indonesia, and they supplied the first written accounts of societies in sub-Saharan west Africa. While merchants



set out in search of trade and profit, devout Muslims traveled as pilgrims to Mecca to make their hajj and visit the holy sites of Islam. Since the prophet Muhammad's original pilgrimage to Mecca, untold millions of Muslims have followed his example, and thousands of hajj accounts have related their experiences. One of the best known Muslim travelers, Ibn Battuta, began

his travels with the hajj but then went on to visit central Asia, India, China, sub-Saharan Africa, and parts of Mediterranean Europe before returning finally to his home in Morocco. East Asian travelers were not quite so prominent as Muslims during the postclassical era, but they too followed many of the highways and sea lanes of the eastern hemisphere. Chinese merchants frequently visited southeast Asia and India, occasionally venturing even to east Africa, and devout East Asian Buddhists undertook distant pilgrimages. Between the 5th and 9th centuries CE, hundreds and possibly even thousands of Chinese Buddhists traveled to India to study with Buddhist teachers, collect sacred texts, and visit holy sites. Written accounts recorded the experiences of many pilgrims, such as Faxian, Xuanzang, and Yijing. Though not so numerous as the Chinese pilgrims, Buddhists from Japan, Korea, and other lands also ventured abroad in the interests of spiritual enlightenment.

- D** Medieval (*adj.* 中世纪的) Europeans did not hit the roads in such large numbers as their Muslim and east Asian counterparts during the early part of the postclassical era, although gradually increasing crowds of Christian pilgrims flowed to Jerusalem, Rome, Santiago de Compostela (in northern Spain), and other sites. After the 12th century, however, merchants, pilgrims, and

missionaries from medieval Europe traveled widely and left numerous travel accounts, of which Marco Polo's description of his travels and sojourn in China is the best known. As they became familiar with the larger world of the eastern hemisphere—and the profitable commercial opportunities that it offered—European peoples worked to find new and more direct routes to Asian and African markets. Their efforts took them not only to all parts of the eastern hemisphere, but eventually to the Americas and Oceania as well.

**E** If Muslim and Chinese peoples dominated travel and travel writing in postclassical times, European explorers, conquerors, merchants, and missionaries took center stage during the early modern era (about 1500 to 1800 CE). By no means did Muslim and Chinese travel come to a halt in early modern times. But European peoples ventured to the distant corners of the globe, and European printing presses churned out thousands of travel accounts that described foreign lands and peoples for a reading public with an apparently insatiable appetite for news about the larger world. The volume of travel literature was so great that several editors, including Giambattista Ramusio, Richard Hakluyt, Theodore de Bry, and Samuel Purchas, assembled numerous travel accounts and made them available in enormous (*adj.* 大量的) published collections.

**F** During the 19th century, European travelers made their way to the interior regions of Africa and the Americas, generating a fresh round of travel writing as they did so. Meanwhile, European colonial administrators devoted numerous writings to the societies of their colonial subjects, particularly in Asian and African colonies they established. By mid century, attention was flowing also in the other direction. Painfully aware of the military and



technological prowess (*n.* 超凡技术, 英勇) of European and Euro-American societies, Asian travelers in particular visited Europe and the United States in hopes of discovering principles useful for the reorganization of their own societies. Among the most prominent of these travelers who made extensive use of their overseas observations and experiences in their own writings were the Japanese reformer Fukuzawa Yukichi and the Chinese revolutionary Sun Yat-sen.

**G** With the development of inexpensive and reliable means of mass transport, the 20th century witnessed explosions both in the frequency of long-distance travel and in the volume of travel writing. While a great deal of travel took place for reasons of business, administration, diplomacy, pilgrimage, and missionary work, as in ages past, increasingly effective modes of mass transport made it possible for new kinds of travel to flourish. The most distinctive of them was mass tourism, which emerged as a major form of consumption for individuals living in the world's wealthy societies. Tourism enabled consumers to get away from home to see the sights in Rome, take a cruise through the Caribbean, walk the Great Wall of China, visit some wineries in Bordeaux, or go on safari in Kenya. A peculiar variant of the travel account arose to meet the needs of these tourists: the guidebook, which offered advice on food, lodging, shopping, local customs, and all the sights that visitors should not miss seeing. Tourism has had a massive economic impact throughout the world, but other new forms of travel have also had considerable influence in contemporary times. Recent times have seen unprecedented waves of migration, for example, and numerous migrants have sought to record their experiences and articulate their feelings about life in foreign lands. Recent times have also seen an unprecedented development of ethnic consciousness, and many are the intellectuals and writers in diaspora who have visited the homes of their ancestors to see how much of their forebears' values and cultural traditions they themselves have inherited. Particularly notable among their accounts are the memoirs of Malcolm X and Maya Angelou describing their visits to Africa.

## Questions 28-35 .....

Complete the table below.

Write **NO MORE THAN TWO WORDS** from Reading Passage 3 for each answer.

Write your answer in boxes 28-35 on your answer sheet.

TIME	DESTINATION	TRAVELER	PURPOSE
Classical era	Egypt and Anatolia	Herodotus	To obtain information on 28_____
1 <sup>st</sup> century BC	Central Asia	Zhang Qian	To seek 29_____
Roman Empire	Mediterranean	Ptolemy, Strabo, Pliny the Elder	To gather 30_____
Post-classical era	Eastern Hemisphere	Muslims	For business and 31_____
5 <sup>th</sup> to 9 <sup>th</sup> centuries CE	India	Asian Buddhists	To study with 32_____ and for spiritual enlightenment
Early modern era	Distant places of the globe	The Europeans	To meet the public's expectation for the outside
19 <sup>th</sup> century	Asia, Africa	Colonial administrator	To provide information on the 33_____ they conquer
By the mid-century of the 1800s	Europe and United States	Sun Yat-sen, Fukuzawa Yukichi	To learn 34_____ for the reorganization of their societies
20 <sup>th</sup> century	Mass tourism	People from 35_____ countries	For entertainment

## Questions 36-40 .....

Choose the correct letter, A, B, C or D.

Write the correct letter in box 36-40 on your answer sheet.

- 36** Why did some people travel in the early days?
- A to do research on themselves
  - B to write travel books
  - C to have a better understanding of other people and places
  - D to study local culture
- 37** The travelers' accounts are a mirror to themselves,
- A because they help them to be aware of local histories.
  - B because travelers are curious about the world.
  - C because travelers could do more research on the unknown.
  - D because they reflect the writers' own experience and social life.
- 38** Most of the people who went to holy sites during the early part of the postclassical era are
- A Europeans.
  - B Muslim and East Asians.
  - C Americans.
  - D Greeks.
- 39** During the early modern era, a large number of travel books were published to
- A provide what the public wants.
  - B encourage the public's feedback.
  - C gain profit.
  - D prompt trips to the new world.
- 40** What stimulated the market for traveling in the 20th century?
- A the wealthy
  - B travel books
  - C delicious food
  - D mass transport

## Visions of Mars

*Robot explorers transform a distant object of wonder into intimate terrain.*

- A** Mars has long exerted a pull on the human imagination. The erratically moving red star in the sky was seen as sinister or violent by the ancients: The Greeks identified it with Ares, the god of war; the Babylonians named it after Nergal, god of the underworld. To the ancient Chinese, it was Ying-huo, the fire planet. Even after Copernicus proposed, in 1543, that the sun and not the Earth was the center of the local cosmos, the eccentricity of Mars's celestial motions continued as a puzzle until, in 1609, Johannes Kepler planetary orbits as ellipses, with the sun at one focus.
- B** In that same year Galileo first observed Mars through a telescope. By the mid-17th century, telescopes had improved enough to make visible the seasonally growing and shrinking polar ice caps on Mars, and features such as Syrtis Major, a dark patch thought to be a shallow sea. The Italian astronomer Giovanni Cassini was able to observe certain features accurately enough to calculate the planet's rotation. The Martian day, he concluded, was forty minutes longer than our twenty-four hours; he was only three minutes off. While Venus, a closer and larger planetary neighbor, presented an impenetrable cloud cover, Mars showed a surface enough like Earth's to invite speculation about its habitation by life-forms.
- C** Increasingly refined telescopes, challenged by the blurring effect of our own planet's thick and dynamic atmosphere, made possible ever more detailed maps of Mars, specifying seas and even marshes where seasonal variations in presumed vegetation came and went with the fluctuating ice caps. One of the keenest eyed cartographers of the planet was Giovanni Schiaparelli, who employed the Italian word canali for perceived linear connections between presumed bodies of water. The word could have been translated as "channels," but "canals" caught the imagination of the public and in particular that of Percival Lowell, a rich Boston Brahmin who in 1893 took up the cause of the

canals as artifacts of a Martian civilization. As an astronomer, Lowell was an amateur and an enthusiast but not a crank. He built his own observatory on a mesa near Flagstaff, Arizona, more than 7,000 feet high and, in his own words, “far from the smoke of men”; his drawings of Mars were regarded as superior to Schiaparelli’s even by astronomers hostile to the Bostonian’s theories. Lowell proposed that Mars was a dying planet whose highly intelligent inhabitants were combating the increasing desiccation of their globe with a system of irrigation canals that distributed and conserved the dwindling water stored in the polar caps.

**D** This vision, along with Lowell’s stern Darwinism, was dramatized by H. G. Wells in one of science fiction’s classics, *The War of the Worlds* (1898). The Earth-invading Martians, though hideous to behold and merciless in action, are allowed a dollop of dispassionate human sympathy. Employing advanced instruments and intelligences honed by “the immediate pressure of necessity,” they enviously gaze across space at “our own warmer planet, green with vegetation and grey with water, with a cloudy atmosphere eloquent of fertility, with glimpses through its drifting cloud wisps of broad stretches of populous country and narrow, navy-crowded seas.”

**E** In the coming half century of Martian fancy, our neighboring planet served as a shadowy twin onto which earthly concerns, anxieties, and debates were projected. Such burning contemporary issues as colonialism, collectivism, and industrial depletion of natural resources found ample room for exposition in various Martian Utopias. A minor vein of science fiction showed Mars as the site, more or less, of a Christian afterlife; C. S. Lewis’s *Out of the Silent Planet* (1938) invented an unfallen world, Malacandra. Edgar Rice Burroughs’s wildly popular series of Martian romances presented the dying planet as a rugged, racially diverse frontier where, in the words of its Earthling superhero John Carter, life is “a hard and pitiless struggle for existence.” Following Burroughs, pulp science fiction, brushing aside possible anatomical differences, frequently mated Earthlings and Martians, the Martian usually the maiden in the match, and the male a virile Aryan aggressor from our own tough planet. The



etiolated, brown-skinned, yellow-eyed Martians of Ray Bradbury's poetic and despairing *The Martian Chronicles* (1950) vanish under the coarse despoilment that human invasion has brought.

- F** But all the fanciful Martian megafauna—Wells's leathery amalgams of tentacles and hugely evolved heads; American journalist Garrett Serviss's 15-foot-tall quasi red men; Burroughs's 10-foot, 4-armed, olive-skinned Tharks; Lewis's beaver-like hrossa and technically skilled pffltriggi; and the "polar bear-sized creatures" that Carl Sagan imagined to be possibly roaming the brutally cold Martian surface—were swept into oblivion by the flyby

51· 无忧雅思  
ielts

photographs taken by Mariner 4 on July 14, 1965, from 6,000 miles away. The portion of Mars caught on an early digital camera showed no canals, no cities, no water, and no erosion or weathering. Mars

more resembled the moon than the Earth. The pristine craters suggested that surface conditions had not changed in more than three billion years. The dying planet had been long dead.

- G** Two more Mariner flybys, both launched in 1969, sent back 57 images that, in the words of the NASA release, "revealed Mars to be heavily cratered, bleak, cold, dry, nearly airless and generally hostile to any Earth-style life-forms." But Mariner 9, an orbiter launched in 1971, dispatched, over 146 days, 7,000 photographs of surprisingly varied and violent topography: volcanoes, of which the greatest, Olympus Mons, is 13 miles high, and a system of canyons, Valles Marineris, that on Earth would stretch from New York City to Los Angeles. Great arroyos and tear-shaped islands testified to massive floods in the Martian past, presumably of water, the sine qua non of life as Earth knows it. In 1976 the two Viking landers safely arrived on the Martian surface; the ingenious chemical experiments aboard yielded, on the question of life on Mars, ambiguous results whose conclusions are still being debated into the 21st century.

- H** In the meantime, our geographical and geological intimacy with Mars grows. The triumphant deployment of the little Sojourner rover in 1997 was followed

in 2004 by the even more spectacular success of two more durable rovers, Spirit and Opportunity. In four years of solar-powered travels on the red planet, the twin robots have relayed unprecedentedly detailed images, including many clearly of sedimentary rocks, suggesting the existence of ancient seas. The stark, russet-tinged photographs plant the viewer right on the surface; the ladderlike tracks of Spirit and Opportunity snake and gouge their way across rocks and dust that for eons have rested scarcely disturbed under salmon pink skies and a pearlescent sun. In this tranquil desolation, the irruption of our live curiosity and systematic purpose feels heroic.

**I** Now the Phoenix mission, with its surpassingly intricate arm, scoop, imagers, and analyzers, takes us inches below the surface of dust, sand, and ice in Mars's north polar region. Spoonfuls of another planet's substance, their chemical ingredients volatilized, sorted, and identified, become indexes to cosmic history. Meanwhile, the Mars Reconnaissance Orbiter, the newest of three operational spacecraft circling the planet, feeds computers at the University of Arizona with astoundingly vivid and precise photographs of surface features. Some of these false-color images appear totally abstract, yet they yield to knowledgeable eyes riches of scientific information.

**J** The dead planet is not so dead after all: Avalanches and dust storms are caught on camera, and at the poles a seasonal sublimation of dry ice produces erosion and movement. Dunes shift; dust devils trace dark scribbles on the delicate surface. Whether or not evidence of microbial or lichenous life emerges amid this far-off flux, Mars has become an ever nearer neighbor, a province of human knowledge. Dim and fanciful visions of the twinkling fire planet have led to panoramic close-ups beautiful beyond imagining.

**Questions 1-5** .....

The reading Passage has seven paragraphs A-J.

Which paragraph contains the following information?

*Write the correct letter A-J, in boxes 1-5 on your answer sheet.*

NB You may use any letter more than once.

- 1        People from Mars and people from our planet fall in love with each other
- 2        the accurate calculation of Martian day by an astronomer
- 3        the highest volcano on Mars
- 4        various writings with Mars as the background
- 5        imaginative ideas the ancients had about Mars

## Questions 6-10 .....

Use the information in the passage to match the robot explorers (listed A-F) with deeds below. Write the appropriate letters A-F in boxes 6-10 on your answer sheet.

NB you may use any letter more than once

- |   |                             |
|---|-----------------------------|
| A | Mariner 4                   |
| B | Mariner 9                   |
| C | Viking lander               |
| D | Spirit and Opportunity      |
| E | Phoenix                     |
| F | Mars Reconnaissance Orbiter |

- 6 It did tests on the possibility of life on Mars but no definitive conclusions have been made by now.
- 7 It dig the surface of Mars and made analysis of substance collected.
- 8 Photos collected by this robot explorer denied the existence of the horrible creatures previously described in some books.
- 9 It got the energy from the Sun and sent pictures suggesting that seas could have existed on Mars long time ago.
- 10 Photos from the robot explorer display that the landscape of Mars is quite different from what has been traditionally depicted.

**Questions 11-13** .....

Do the following statements agree with the information given in Reading Passage 1?

In boxes 11-13 on your answer sheet, write

<b>TRUE</b>	if the statement agrees with the information
<b>FALSE</b>	if the statement contradicts the information
<b>NOT GIVEN</b>	if there is no information on this

- 11 Giovanni Schiaparelli proposed that the interconnected bodies of water were canals built by intelligent livings on Mars.
- 12 Human beings will land on Mars in 20 years.
- 13 With the help of robot explorers, Mars is no longer as distant as it appears to be.

## 雅思阅读分类词汇

### 常见花卉

azalea 杜鹃花  
begonia 秋海棠  
Brazil 巴西木  
cactus 仙人掌  
camellia 山茶花  
carnation 麝香石竹 (康乃馨)  
Chinese enkianthus 灯笼花  
Chinese flowering crab-apple 海棠花  
chrysanthemum 菊花  
dahlia 大丽花  
daisy 雏菊  
datura 曼陀罗  
epiphyllum 昙花  
fringed iris 蝴蝶花  
fuchsia 倒挂金钟  
gardenia 栀子  
India canna 美人蕉  
jasmine 茉莉  
lilac 丁香  
lily 百合  
mangnolia 木兰花  
mangnolia 玉兰花  
morning glory 牵牛 (喇叭花)  
narcissus 水仙花  
oleander 夹竹桃  
orchid 兰花

pansy 三色堇  
peony 牡丹  
peony 芍药  
phalaenopsis 蝶兰  
rose 玫瑰  
rose 月季  
setose asparagus 文竹  
touch-me-not (balsam) 凤仙花  
tulip 郁金香  
violet, stock violet 紫罗兰  
water hyacinth 凤眼

### 环境问题

conservation 保护, 保存  
environmentalist = conservationist  
acid 酸; 酸的  
alkali 碱;  
carbon 碳 (C) vs. charcoal (炭)  
carbon dioxide, carbon monoxide  
fume exhaust fumes vs. smoke, fog, smog  
petroleum 石油 petrol (BE) = gasoline/  
gas (AE)  
ozone 臭氧 (o + zone) ozone layer  
ooze 渗出 渗出物  
radiation 辐射 ultraviolet (UV) radiation~  
radioactive  
greenhouse 温室 greenhouse effect/gases

solar 太阳的  
phenomenon 现象  
catastrophe = disaster, cataclysm  
deterioration 恶化  
extinction 灭绝  
species endangered species  
drought 干旱  
recurrent 反复发生的 re + (oc)cur + rent  
vs. concurrent  
inundate 淹没  
embankment 筑堤 (em + bank + ment)  
sediment 沉积 (物) = deposit  
delta 三角洲 the Pearl River Delta  
alluvial 冲积的  
desertification 沙漠化 desert vs. dessert  
dust-storm 沙尘暴  
barren 贫瘠的, 不育的, 无效的  
attributable 归因于 be attributable to...  
deforestation 滥砍滥伐 (森林)  
log 原木, 日志 伐木 vs. logo  
vegetation 植物, 植被 vs. vegetable,  
vegetarian  
habitat 栖息地  
ecosystem 生态系统  
viability  
demographic 人口统计的  
interdependence  
counterbalance 使平衡, 弥补  
mechanism 机理, 机制  
precipitation 陡降, 降水  
circulation 流通, 循环

typhoon, tornado, hurricane  
meteorology 气象 (学)  
volcano 火山  
eruption 喷发 volcanic eruption  
granite 花岗岩  
imminent = impending vs. eminent  
Celsius 摄氏的  
Fahrenheit 华氏的  
latitude 纬度 longitude, altitude  
tropical (the) tropics tropical/torrid zone,  
temperate zone, frigid zone  
glacier 冰川  
dump 倾倒, 倾销  
contaminate 弄脏  
recycle 回收再利用  
irreversible 不可逆的 (= irrevocable)  
reclaim 开垦, 改造 à reclamation  
contentious 有争议的  
opt 选择 n  
prioritize 优先考虑

## 生物、生理

molecule 分子  
amino acids (氨基酸)  
protein 蛋白质  
enzyme 酶 (proteins that are produced  
by cells and act as catalysts in specific  
biochemical reactions)  
catalyst 催化剂  
chlorophyll 叶绿素 “chloro-” :

photosynthesis 光 合 作 用 (photo + synthesis) photosynthetic  
 botany 植物学 botanist, botanical  
 flora 植物群  
 fauna 动物群  
 bacterium bacteria (pl.) 细菌  
 fungus fungi (pl.) 真菌  
 algae alga (pl.) 海藻  
 herb  
 carnation 康乃馨  
 fade 凋谢, 褪色  
 organism 机体, 组织  
 arthropod 节肢动物 vs. anthropoid  
 reptile 爬行动物  
 amphibian 两栖动物  
 mammal 哺乳动物  
 primate 灵长目动物  
 evolution 进化  
 anthropoid 类人猿 ( “anthrop” : human-kind) anthropology, philanthropy v.s. ape, gorilla, chimpanzee  
 gene 基因 DNA (deoxyribonucleic acid)  
 genetics 遗传学 genetical  
 helix 螺旋, 螺旋状物... analyze every single gene within the double helix of humanity' s DNA  
 identical 同一的  
 mutation 突变 mutable, immutable, mutant  
 predator 捕食者  
 embryo 胚胎

roe 鱼子 caviar 鱼子酱  
 tadpole 蝌蚪 frog, toad  
 caterpillar 毛毛虫 (cater + pillar)  
 grasshopper 蚱蜢, 蝗虫 (= locust)  
 cricket 蟋蟀; 板球  
 butterfly vs. moth  
 pollen 花粉 传粉 pollination  
 hive 蜂房  
 larva larvae (pl.) 幼虫 vs. lava  
 pupa 蛹  
 penguin 企鹅 vs. dolphin ( 海豚 )  
 raccoon 浣熊 vs. kangaroo ( 袋鼠 )  
 hibernate 冬眠 (=hole up)  
 torpid 麻木的, 蛰伏的 vs. torpedo ( 鱼雷 )  
 cerebral ( 大 ) 脑的  
 hemisphere 半球 (hemi + sphere)  
 cortex 脑皮层  
 migraine 偏头疼  
 somatic 躯体的  
 limb 四肢 upper/lower limb  
 anatomy 解剖, 剖析  
 paralyze 使 瘫 痪 (=incapacitate, immobilize)  
 artery 动脉 vein 静脉  
 gland 腺体  
 pancreas 胰  
 hormone 荷尔蒙, 激素  
 cholesterol 胆固醇  
 efficacy 功效 vs. efficiency, effectiveness



## 心理

theorem 原理, 定理 v.s. theory  
methodology 方法论 ;  
physiology 生理学 ;  
psychiatry 精神病学  
correlation 相互关系  
sensation 感觉, 知觉; sensational  
perception 感知, 认知  
intuition 直觉; intuitive  
ESP 第六感 Extrasensory Perception  
motivate 激励 motivation  
incentive 激励因素  
ESP 第六感 Extrasensory Perception  
motivate 激励  
incentive 激励因素  
stimulus 刺激  
disorder 紊乱, 失调  
dysfunction 机能障碍  
dissonance 不和谐, 不一致  
trauma 创伤  
anxiety 焦虑 = anxiousness  
depression 沮丧  
insomnia 失眠  
phobia 恐惧 ( 症 ) à suffix: -phobia  
acrophobia 恐高症  
xenophobia 仇外者, 惧外者  
claustrophobia 幽闭恐怖症  
allergy 过敏 ( 症 ), 反感 He is allergic  
to card playing.  
propensity 倾向 \*Most boys have a

propensity of playing with machinery.=  
tendency, inclination  
paranoid 偏执的 paranoia 偏执狂  
workaholic 工作狂 (alcoholic)  
symptom 症状  
diagnosis 诊断 (n.)  
electroencephalogram 脑电图  
electrocardiogram ( 心电图 )  
assertive 武断的  
therapy 治疗法  
hypnotism 催眠术 (~ hypnotize)  
prescribe 开药方 vs. subscribe, describe,  
antidepressant 抗抑郁药  
tranquilizer 镇静药  
side-effect (+s) 副作用  
immune 免疫的, 免除的  
rehabilitation 复原, 康复  
relapse 旧病复发, 故态复萌 vs. elapse  
流逝 ( 子在川上曰: 逝者如斯夫, 不  
舍昼夜! )  
chronic 慢性的  
adulthood 成人期  
puberty 青春发动期  
adolescence 青 春 期 (the time of life  
between puberty and adulthood)  
emotional 情绪的  
affective 情感的  
sane 神智健全的 insane  
superstition 迷信  
telepathy 传心术, 通灵术  
apathy 无感情, 无兴趣, 冷漠 (=

indifference)

pathology 病理学, 病理, 病变

delusion 迷惑, 欺瞒 vs. illusion

disorientation 迷失 (dis + orientation)~

disoriented

pervert 使反常 / 变态 反常 / 变态者

introspection 内省 vs. retrospection 回顾, 反省

sublimation 纯化, 升华

personality = personal characteristics

multiple personality 多重人格

innate 天赋的 in + nate (nature)= inborn,

congenital

attribute 属性

trait 特征, 品质 national traits 国民性 vs. traitor 叛逆者

## 文化

homogeneous 同质的 vs. homosexual,

heterosexual

mainstream 主流, 主流的

dialect 方言 (vs. accent)

discrepancy 差异

misconception 误解 (mis + concept + ion)= misunderstanding

barrier 障碍 (物) = barricade

discrimination 区别, 歧视 racial/sexual

discrimination

hierarchy 等级制度

heir + arch (govern) + y

insularity 岛国性质

\*British industry has often been criticized for its linguistic insularity.

microcosm 小天地

nostalgia = homesickness

patriot 爱国者

compatriot 同胞, 同胞的 com + patriot

vernacular 本地的, 本国的 本地话, 本

国话 \*the vernacular languages of India

immigration 移入~ immigrant, immigrate

v.s. emigration (~ emigrant, emigrate)

Antipodes 澳大利亚和新西兰 (非正式用法)

permeate 渗透, 弥漫 \*Smoke permeated the house.

entrepreneur 企业家 entrepreneurship

practitioner 开业者, 从业者

celebrity 名人 luminary, VIP

proxy 代理人

anecdote 轶事

notoriety 恶名 notorious

counterpart 对应人, 对等物 \*Who's George Bush's counterpart in China? (Hu Jintao ^^)

peer 同等的人 凝视, 窥视

subordinate 下级, 下级的

tactics 战术, 技巧 vs. strategy (战略, 策略) marketing strategy v.s. selling tactics

nuance 细微差别

benchmarking 类比分析

punctual 准时的, 守时的

absenteeism 旷工

flextime 弹性工作时间

harass 骚扰 harassment \*Mary said that Gary had sexually harassed her.

redundancy 冗余, 冗员

network redundancy

downsize 裁员 (~ lay off)

ballot 投票 (= vote)

impartial 不偏不倚的

lobby 大堂 (n.) 游说 (v.)

shortlist (BE) (供最后挑选或考虑的)

候选人名单

equilibrium 平衡, 均衡

questionnaire 调查表, 问卷

quantitative 定量的 vs. qualitative

contingency 偶然性, 偶然事件

incur 招致 incur debts/hatred/danger vs. occur, concur, recur

ethical 伦理的, 符合伦理的

dubious 疑惑的, 可疑的 \*People were dubious about the result.

manifestation 显示, 证明 manifest

subtitle 字幕, 副标题 subsidiary, submarine, subway (BE: underground, tube), suburb (~ downtown, uptown, outskirts)

dubbing 配音录制

vogue 时尚 = chic

bizarre 奇异的 vs. weird (怪异的)

mediocre 平庸的

dietitian 饮食学家

connoisseur 行家, 鉴赏家

## 教育

accommodation (膳宿) 供应 = room and board

lodging 寄宿 (处)

lease 出租 “for lease”, “to let” v.s. rent

tenant 房客, 佃户

landlord 房东 landlady 房东太太 tenant 租客

housemate, roommate, dormmate, schoolmate, classmate

dormitory 寝室 dorm

au pair 为换取房间、住处、及学习某家语言的机会而为该家做家务的年轻外国人

reciprocal 相互的, 互惠的

hostel 宿舍, 客栈

youth hostel 青年旅馆

real estate 房地产

vicinity = neighborhood

flat 平的, 瘪的 flat tire 公寓 = apartment vs. condo, studio

bond = deposit

linen 亚麻的 亚麻织品, 床单 = bed linen

utensil 器皿

stationery 文具 vs. stationary 固定的

laundry 洗衣, 洗衣店

cafeteria 自助餐厅 = canteen

cater 满足 ( 需要 )

aerobics 有氧健身操 “aero” : air

badminton 羽毛球 ( 运动 )

baseball 棒球 baseball bat

squash 壁球 ( 运动 )

amateur vs. professional

gathering 聚会 v.s. meeting, reunion

excursion 远足 = outing, expedition

commonwealth 共和国, 联邦

Commonwealth 英联邦

tertiary 第三的

post-secondary postgraduate,

postdoctoral, post-sale, postwar

illiterate 文盲 不识字的 literacy

discipline 学科, 纪律 v.s. subject

terminology 术语

faculty ( 大学的 ) 系、科, 全部教员

dean ( 大学 ) 教务长

curriculum 课程 extracurricular 课外的

syllabus 课程提纲

calendar 日历, 日程 schedule, agenda,

timetable

compulsory 强制的, 必修的 elective 选修的

examiner vs. examinee

recruit 招生, 招募 recruitment = enroll

prestige 声望, 威信 prestigious

esteem 尊敬 n. & v.

aptitude 智力 SAT: School Aptitude Test

matriculation 录取入学

vocation 职业 = calling, occupation, career

abbreviation 缩略 ( 词 ) abridge 缩短, 删节

transferable ( 学分等 ) 可转换的

scholarship 奖学金 = fellowship

tutorial 辅导 ( 课 ) tutor = lecturer, instructor

pedagogue 教员, 学究 pedagogy 教育学, 教学法

lexicography 词典编撰

assignment 任务, ( 课外 ) 作业

dissertation 论文 (= thesis)

credential 证明, 文凭 credentials

alumni 校友 ( 男 ) vs. alumnae

overestimate 高估 vs. underestimate

decipher 解码, 解释 = decode

caliber 才干

## 科技

ubiquitous 普遍存在的 = omnipresent

omniscient, omnipotent

versatile ( 人 ) 多才多艺的, ( 物 ) 通用的

alchemy 炼金术

transmute 变形, 变质

arduous 艰巨的 = strenuous

pitfall 陷阱, 未预见之困难

metallurgy 冶金

alloy 合金

aluminum = aluminium (BE)	calcium,	patent 专利
uranium, radium, copper, brass, bronze		chronological 按时间顺序的
electrode 电极		robot 机器人
distill 蒸馏 distilled water		artificial 人造的, 做作的 artificial
quartz 石英		satellite
phosphorus 磷, 磷光物质		cone 圆锥体, 锥形物
inflammable 易燃的		Jupiter 木星 Mercury, Venus, Mars,
combustion 燃烧		Saturn
spontaneous combustion		exorbitant 过度的, 过分的, 过高的
ceramic 陶瓷的 瓷器		centripetal 向心(力)的 centrifugal
insulate 隔离, 绝缘		high-rise 高楼 skyscraper
insulator vs. conductor		cathedral 大教堂
fiber 纤维 (BE: fibre) fiber optics 纤维		dome 圆顶
光学		infrastructure 基础设施 superstructure
optics 光学		sewage 污水, 下水道
retina 视网膜		hydraulic 水力的, 水压的
iris 虹膜		landfill 垃圾掩埋(地)
opaque 不透明的 v.s. transparent,		ventilation 通风
translucent		thermostat 温控器 thermos, thermometer,
microprocessor 微处理器		thermonuclear
binary 二进制的		prefabricate 预先制造
buffer 缓冲区 buffer storage		polytechnic 各种工艺的 理工学校 Hong
browser 浏览器		Kong Polytechnic
hypertext 超文本		geometric 几何(学)的 geometry
envisage 想象, 看作		asymmetry 不对称 symmetry
momentous (极为) 重要的		concave 凹的 convex
reticular 网状的		bilateral 双边的, 两方面的 unilateral
Ethernet 以太网		paradoxical “似非而是”的 paradox 悖
domain 域 domain names		论
cyberlaw 网络法律 “cyber-” : Internet		empirical 经验的 empirical law/formula
related cyberlove, cybercafe, ...		clockwise 顺时针的 anticlockwise

### 火山爆发

abundant adj. 丰富的，富余的

accretion n. 增长

accumulation n. 积聚，堆积物

active volcano 活火山

Alaska Volcano Observatory 阿拉斯加州火山观察站

Aleutian Islands 阿留申群岛（环布于阿拉斯加半岛尖端的弧形岛屿）

alternating layers of lava flows 熔岩流的交互叠层

aluminum n. [化] 铝

Archean adj. [地质] 太古代的

Archeology n. 考古学

ascending adj. 上升的，向上的

ash particle 灰烬微粒

avalanche n.&v. 雪崩

awesome adj. 引起敬畏的，可怕的

basaltic lava 玄武岩火山石

basin-shaped adj. 盆状的

beat out 敲平

belated adj. 误期的，迟来的

blacksmith n. 铁匠

blanket n. 毯子，覆盖

blast n. 一股（气流），爆炸，冲击波

blob n. 一滴，水滴

blocky adj. 短而结实的，斑驳的

bombs n. 火山口喷出的大堆球状熔岩

basin-shaped crater 碗型的火山口

bubble n. 泡沫

bulbous adj. 球根的

buoyancy n. 浮性，浮力

calcium n. [化] 钙（元素符号 ca）

caldera n. [地质] 喷火山口，凹陷处

carbon dioxide [化] 二氧化碳

carbonated soft drink 碳酸饮料

Caribbean n. 加勒比海

catastrophic adj. 悲惨的，灾难的

chimney n. 烟囱，灯罩

cinder cone 火山渣形成的圆锥体

circular depression 圆形的凹陷

circular adj. 圆形的，循环的

composite volcano 复式火山

conduit n. 导管，沟渠

conduit system 沟渠系统

cone n. 锥形物，圆锥体

congeal v. （使）冻结，（使）凝结

conical hill 圆锥型的小山

Cotopaxi n. 科多帕希火山（在厄瓜多尔北部）

coulee n. 深谷，[地质] 熔岩流

craggy adj. 陡峭的

crater n. 坑

crumple v. 弄皱，压皱

crystal adj. 结晶状的；n. 晶体

crystalline adj. 水晶的

crystallization n. 结晶化

cubic kilometer 立方公里

debris n. 碎片，残骸

demolish vt. 毁坏，破坏

dense clouds of lava fragments 浓密的火

山岩碎片

descend on 袭击

destructive power 破坏力

devastate vt. 毁坏

diameter n. 直径

dike n. 堤防

dissolved gases 稀释的气体

dome n. 圆屋顶

domical shape 圆顶型

dormancy n. 睡眠, 冬眠

dormant adj. 睡眠状态的, 静止的

downslope adj. 下坡的; adv. 向着坡下

Earth's crust 地壳

ejected material 喷射出来的物质

elongate v. 拉长, (使) 伸长

embedded adj. 植入的, 内含的

emission n. (光、热等的) 散发, 发射, 喷射

Enceladus n. 土卫 [希神] 恩克拉多斯  
(反叛众神的巨人)

eon n. 永世, 无数的年代

erosion n. 腐蚀, 侵蚀

formation of cone 火山口的形成

lava flow 熔岩流

eruption n. 爆发, 火山灰

evacuate v. 撤退

evolve v. (使) 发展, (使) 进展

exhume vt. 掘出, 发射

fanning n. 铺开, 展开

fertile adj. 肥沃的, 富饶的

fissure n. 裂缝, 裂沟

flank n. 侧面

flooding n. 泛滥, 水灾

fluid lava flow 流动的熔岩流

folding adj. 可折叠的

force of gravity 重力, 地心引力

forge v. 铸造

fracture n. 破裂

fragment n. 碎片, 断片

froth n. 泡沫, 废物

Fuji n. 富士山 (在日本本州岛上的死火山)

funnel-shaped crater 漏斗型的火山口

gas pressure 气压

gaseous adj. 气体的, 气态的

geologic adj. 地质 (学) 的, 地质 (学) 上的

geologist n. 地质学者

geophysicist n. 地球物理学者

glassy adj. 像玻璃的

granitic adj. 花岗石的, 由花岗岩形成的

hemisphere n. 半球

high-velocity adj. 高速的

igneous adj. 火的, 似火的 [地] 火成的

imaging n. [计] 成像

imperceptible adj. 觉察不到的, 感觉不到的, 极细微的

incandescent adj. 遇热发光的, 白炽的

inferno n. 阴间, 地狱

ingredient n. 成分, 因素

interfere with 妨碍

intermittently adv. 间歇地

island chain 列岛

Jupiter n. 木星

Kamchatka n. 勘察加半岛(苏联东北部)

landscape n. 风景, 地形

landslide n. [山崩], 崩塌的泥石

lava dome 圆顶火山

lava plateau 火山岩高地

lava n. 熔岩, 火山岩

linear chain 线形链

live in harmony with 与 ..... 和睦相处

magma n. 岩浆

magnesium n. [化] 镁

magnitude n. 量级

majestic adj. 宏伟的, 庄严的

manganese n. 锰(元素符号为 Mn)

mantle composition 覆盖物的成分

Mercury n. 水星

molten v. 溶化; adj. 熔铸的

monitor n. 监视器, 监控

mudflow n. [地] 泥流

Neptune n. [天] 海王星

non-explosive lava flows 非爆炸性的火山岩流

oval adj. 卵形的, 椭圆的

oxygen n. [化] 氧

particle n. 粒子, 微粒

pasty adj. 浆状的

Pele, Goddess of Volcanoes 火山女神

pent adj. 被关闭的, 郁积的

periodic violent unleashing 周期性的猛

烈释放

plain n. 平原, 草原

planetary probe 行星探测器

planetary scientist 行星科学家

Pompeii n. 庞培(意大利古都, 公元 79 年火山爆发, 全城淹没)

population density 人口密度

potassium n. [化] 钾

precipitate n. 沉淀物; v. 使沉淀

precursory adj. 预示的, 先驱的

probe n. 探测器

profile n. 剖面, 侧面, 外形

project v. 凸出

prominent adj. 显著的, 突出的

property damage 财务损坏

pumice n. 轻石, 浮石

pyroclastic flow [地质] 火成碎屑流, 火山灰流

quench v. 熄灭, 平息

reawaken v. 再度觉醒

reemergence n. 再度出现

reminder n. 提醒的人, 暗示

reservoir n. 水库, 蓄水池

resurgent adj. 复活的

rift zone 断裂区

Saturn n. [天] 土星

sculpt v. 雕刻, 造型

seismograph n. 地震仪, 测震仪

shatter n. 粉碎, 碎片; vt. 粉碎, 破坏

shield volcano 盾状火山

Sierra Nevada 内华达山脉



silicate n. [ 化 ] 硅酸盐

silicon n. [ 化 ] 硅

sloping cone 有坡度的圆锥体

sodium n. [ 化 ] 钠

solar system [ 天 ] 太阳系

solidification n. 凝固

solidify v. ( 使 ) 凝固, 巩固

spine n. 脊骨, 地面隆起地带

spiteful adj. 怀恨的, 恶意的

steep-sided, symmetrical cone 陡峭和对称的圆锥体

steep-walled adj. 峭壁的

stratospheric winds 同温层风

stratovolcanoes n. 层云火山

succession n. 连续, 连续性

sulfur dioxide n. [ 化 ] 二氧化碳

summit n. 顶点

supernatural adj. 超自然的, 神奇的

sustain vt. 支撑, 撑住, 维持

swarm n. 一大群

swelling n. 河水猛涨, 涨水

telltale remnant 证据性的残余物

terrane n. 岩石

Titan n. [ 希腊 ] 提坦, 太阳神

titanium n. [ 化 ] 钛

trace n. 微量

Triton n. 海卫, [ 希神 ] 人身鱼尾的海神

tsunami n. 海啸

uplift v.& n. 升起

vegetation n. [ 植 ] 植被, ( 总称 ) 植物

ventilated adj. 通风的

vent n. 通风孔, 出烟孔, 出口

Venus n. [ 罗神 ] 维纳斯, [ 天 ] 金星

Vesuvius n. 维苏威火山 ( 位于意大利西南部, 欧洲大陆惟一的活火山 )

viscous adj. 粘性的, 粘滞的

volcanic activity 火山活动

volcanic ash and dust 火山灰尘

volcanic ash 火山灰

volcanic cinders 火山灰

volcanic dust 火山尘土

volcanic eruption 火山爆发

volcanic feature 火山特征

volcanic landform 火山地形

volcanic lava dome 火山岩圆顶

volcanic terrain 火山地形

volcanic vent 火山口

volcanism n. 火山作用

volcano n. 火山

volcanologist n. 火山学家

weathering n. 侵蚀, 风化

whopping adj. 巨大的, 庞大的

wrathful adj. 愤怒的, 激怒的

Yosemite National Park ( 美国加利福尼亚州中部 ) 约塞米蒂国家公园

zircon n. 锆石

## 答案

### Asian Space Satellite Technology 亚洲卫星技术

28. iv
29. vii
30. iii
31. ii
32. ix
33. F
34. B
35. D
36. A
37. FALSE
38. NOT GIVEN
39. TRUE
40. FALSE

### British Architecture 英国建筑 2

28. wood
29. status and wealth
30. expensive commodity
31. classical
32. furniture and textiles
33. Edwin Lutyens
34. local authorities
35. B useful=fitness for purpose
36. A security=safety
37. D restoration=come back
38. A tough=authority
39. C

40. C desperateneed=shortage

### Build a Medieval Castle 建造城堡

Questions 1-4

1. NOT GIVEN
2. TRUE B 段第一行
3. FALSE F 段倒数第 4 行
4. TRUE G 段第一行

Questions 5-10

全部在 E 段，有局部替换，请仔细阅读此段

5. Mason
6. holes
7. metal wedge
8. split
9. bricks
10. heating

Questions 11-13

3 个原因分别在 C 段和 D 段

11. C C 段
12. E D 段
13. F C 段

### Eco-Resort Management Practices 澳洲旅游岛

1. B 段 21 页 倒数第七行, because it contained dynamite, cause...Eventually the ocean broke through the weakened land form
2. B C 段第 8 行
3. D 在 C 段第五行, obtain its water supply by tapping into this aquifer and extracting it via a bore system;B 段 7 至 9 行说明了 South Stradbroke 就是 Couran cove island 度假村的岛所在地 ;B 选项原文 ((C 段 1-4 行) 讲的内容是 rainfall 下雨填充了岛上的蓄土层, 然后打井取水, 不是直接接雨水啊。
4. D C 段倒数第 8 行 hot water; A 选项 LPG 是发电的

5. B: D 段第 7 行和本段最后两行 it has been argued that. ....

6. ferry (6-10 全部 P22 页中间段落)

7. bicycle

8. fan/ceiling fan

9. air conditioner

10. mosquitos/mosquito 原文 mosquito 做形容词 repellent

Questions 11-13

A C E 在最后一段按照出题顺序

### Flight from reality 飞行干扰

14. navigation and communications

15. radiation

16. antennae

17. smoke

18. C

19. D

20. B

21. A

22. E

23. FALSE

24. TRUE

25. TRUE

26. NOT GIVEN

### London Swaying Footbridge 伦敦晃桥

14-17. A D E G 定位第二段

18. winds 定位第三段

19. pedestrians 定位第三段第三句, also = and 并列关系匹配

20. horizontal forces

21. (excessive dynamic) vibration

22. motion

**Museums & Theme Park 博物馆公园**

- 27. i 本段各种观点体现 “mixed”
- 28. vii few differences 表示很少不同。第一句话可以表示这点
- 29. iv factual 表示事实的 =evidence
- 30. ii
- 31. B A 段第 7 行开始到第 10 行。
- 32. C B 段第三行
- 33. D C 段第一行
- 34. C D 倒数第三行开始
- 35. C E 段第 6 行
- 36. A F 段第一行
- 37. FALSE D 段第一行
- 38. NOT GIVEN
- 39. TRUE F 段第 6 行
- 40. TRUE F 段最后一行

**SETI (Search for E.T. Intelligence)**

- 14. viii
- 15. v
- 16. i
- 17. iii
- 18. several billions (years)
- 19. radio (waves)
- 20. 1,000 / a thousand
- 21. TRUE
- 22. TRUE
- 23. NOT GIVEN
- 24. FALSE
- 25. NOT GIVEN
- 26. FALSE

### The exploration of Mars 火星探索

27. B
28. H
29. A
30. G
31. E
32. F
33. C
34. B
35. B
36. A
37. NOT GIVEN
38. FALSE
39. TRUE
40. NOT GIVEN

### Jupiter with The Shoemaker-Levy9's collision 彗星撞击木星

14. B: 原文见 B 段第 1 句 a mystical problem 和随后的各项推测
15. D: 原文见 B 段第 6 行一最后的整个行星形成过程, 时间就是 solar system being formed, the second generation ..……: 木星是行星
16. A: 原文见 C 段第 7 行; 原文说核是岩石 rocky core 的, 星球主体是 ice 和 gas (C 错误); B 原文是 retained 保留挥发物质; D 只有冥王星 glut。才是
17. B: 原文见 E 段第 9 行
18. E 20 years D 段第 6 行
19. K gravity D 段第 9 行
20. B smaller D 段第 10 行
21. G 100 years. 原文 E 段第 4 行
22. J released 原文见 F 段第 9 行, 根据语法选一个动词,
23. H Gathered 原文 F 段倒数第 2 行
24. metal/ iron/ metal of iron
25. hydrogen: A 段第 8 行最末 :...hydrogen is in its normal molecule form...
26. 140000: 原文见 A 段第 1 句, 结合图, 行星外直径和大气层直径差不多。原

来考题答案就是 1400000 直径 diameter, 半径是 radius 很少考

### Tidal power! In Britain 英国潮汐能

- 14. C
- 15. E
- 16. A
- 17. C
- 18. A
- 19. C
- 20. D
- 21. F
- 22. H
- 23. maintenance
- 24. slow (turning)
- 25. low pressure
- 26. cavitation

### Travel Accounts 游记

- 28. Persian wars 定位 B 段
- 29. allies 定位 B 段
- 30. geographical knowledge 定位 B 段
- 31. pilgrimage 定位 C 段
- 32. Buddhist teachers 定位 C 段
- 33. colonies 定位 F 段
- 34. principles 定位 F 段
- 35. wealthy 定位 G 段
- 36. C 定位 A 段
- 37. D 定位 A 段
- 38. B 定位 D 段
- 39. A 定位 E 段
- 40. D 定位 G 段

### Visions of Mars 火星探秘

Questions 1-5

1. E

2. B

3. G

4. E

5. A

Questions 6-10

C E A D B

Questions 11-13

11. FALSE

12. NOT GIVEN

13. TRUE