2023 年 3 月 25 日雅思 ☐纸笔考试 ☐机考

一、 考试概述：

本场考试三篇，一旧两新，难度高。第一篇科学研究，难度中规中矩；第二篇澳大利亚原住民，关于澳大利亚的话题属于雅思的常考话题，之前考过考拉和灭绝的动物，考生可以平时有意识地多读相关的材料，积累背景知识；第三篇老题，从 2022 年开始已经考过三次（2022/8/6，2022/12/17，2023/2/25），这次是第四次考，如果之前看过烤鸭回忆的同学有福了。

二、具体题目分析：

Passage One：

■ 文章题材：说明文（科学）

文章题目：科学研究

■ 文章难度：★★★

■ 题型及数量：判断+填空

■ 题目及答案：

*本文非原文，但是题材很接近，建议考生以本文练手，掌握此话题的相关知识点和词汇~

The scientific method

A - Karl Popper's claim that the scientific method is hypothetico-deductive

'Hypotheses,' said Medawar in 1964, 'are imaginative and inspirational in character'; they are 'adventures of the mind'. He was arguing in favour of the position taken by Karl Popper in The Logic of Scientific Discovery (1972, 3rd edition) that the nature of scientific method is hypothetico-deductive and not, as is generally believed, inductive.

B

It is essential that you, as an intending researcher, understand the difference between these two interpretations of the research process so that you do not become discouraged or begin to suffer from a feeling of ‘cheating’ or not going about it the right way.

C – Explaining the inductive method

The myth of scientific method is that it is inductive: that the formulation of scientific theory starts with the basic, raw evidence of the senses – simple, unbiased, unprejudiced observation. Out of these sensory data – commonly referred to as ‘facts’ — generalisations will form. The myth is that from a disorderly array of factual information an orderly, relevant theory will somehow emerge. However, the starting point of induction is an impossible one.

D – The role of hypotheses in scientific research

There is no such thing as an unbiased observation. Every act of observation we make is a function of what we have seen or otherwise experienced in the past. All scientific work of an experimental or exploratory nature starts with some expectation about the outcome. This expectation is a hypothesis. Hypotheses provide the initiative and incentive for the inquiry and influence the method. It is in the light of an expectation that some observations are held to be relevant and some irrelevant, that one methodology is chosen and others discarded, that some experiments are conducted and others are not. Where is, your naive, pure and objective researcher now?

E – The testing of hypotheses

Hypotheses arise by guesswork, or by inspiration, but having been formulated they can and must be tested rigorously, using the appropriate methodology. If the predictions you make as a result of deducing certain consequences from your hypothesis are not shown to be correct then you discard or modify your hypothesis. If the predictions turn out to be correct then your hypothesis has been supported and may be retained until such time as some further test shows it not to be correct. Once you have arrived at your hypothesis, which is a product of your imagination, you then proceed to a strictly logical and rigorous process, based upon deductive argument — hence the term ‘hypothetico-deductive’.

F - Anticipating results before data is collected

So don’t worry if you have some idea of what your results will tell you before you even begin to collect data; there are no scientists in existence who really wait until they have all the evidence in front of them before they try to work out what it might possibly mean. The closest we ever get to this situation is when something happens by accident; but even then the researcher has to formulate a hypothesis to be tested before being sure that, for example, a mould might prove to be a successful antidote to bacterial infection.

G - How research is done and how it is reported

The myth of scientific method is not only that it is inductive (which we have seen is incorrect) but also that the hypothetico-deductive method proceeds in a step-by-step, inevitable fashion. The hypothetico-deductive method describes the logical approach to much research work, but it does not describe the psychological behaviour that brings it about. This is much more holistic — involving guesses, reworkings, corrections, blind alleys and above all inspiration, in the deductive as well as the hypothetic component -than is immediately

apparent from reading the final thesis or published papers. These have been, quite properly, organised into a more serial, logical order so that the worth of the output may be evaluated independently of the behavioural processes by which it was obtained. It is the difference, for example between the academic papers with which Crick and Watson demonstrated the structure of the DNA molecule and the fascinating book The Double Helix in which Watson (1968) described how they did it.From this point of view,‘scientific method’ may more usefully be thought of as a way of writing up research rather than as a way of carrying it out.

Questions 1-5

Reading Passage has seven paragraphs A-G.

Choose the most suitable headings for paragraphs C-G from the list of headings below.

Write the appropriate numbers i-x in boxes 1-5 on your answer sheet.

List of Headings

i The Crick and Watson approach to research

ii Antidotes to bacterial infection

iii The testing of hypotheses

iv Explaining the inductive method

v Anticipating results before data is collected

vi How research is done and how it is reported

vii The role of hypotheses in scientific research

viii Deducing the consequences of hypotheses

ix Karl Popper’s claim that the scientific method is hypothetico-deductive

x The unbiased researcher

Example Answer

Paragraph A ix

1. Paragraph C
2. Paragraph D
3. Paragraph E
4. Paragraph F
5. Paragraph G

Questions 6-7

In which TWO paragraphs in Reading Passage does the writer give advice directly to the reader?

Write the TWO appropriate letters (A—G) in boxes 6-7 on your answer sheet.

6.

7.

Questions 8-11

Do the following statements reflect the opinions of the writer in Reading Passage?

In boxes 8-11 on your answer sheet write

YES if the statement reflects the opinion of the writer

NO if the statement contradicts the opinion of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

8. Popper says that the scientific method is hypothetico-deductive.
9. If a prediction based on a hypothesis is fulfilled, then the hypothesis is confirmed as true.

10. Many people carry out research in a mistaken way.

11. The ‘scientific method’ is more a way of describing research than a way of doing it.

Questions 12

Choose the appropriate letter A-D and write it in box 12 on your answer sheet.

12. Which of the following statements best describes the writer’s main purpose in Reading Passage?

A to advise Ph.D students not to cheat while carrying out research

B to encourage Ph.D students to work by guesswork and inspiration

C to explain to Ph.D students the logic which the scientific research paper follows

D to help Ph.D students by explaining different conceptions of the research process

参考答案

1. iv
2. vii
3. iii
4. v
5. vi
6. B/F
7. B/F
8. YES
9. NO
10. NOT GIVEN
11. YES

12. D

可参考真题：剑桥 14——TEST4 Passage1 *The Secret of Staying Young*

Passage Two：

- 文章题材：说明文（人类文明）
- 文章题目：澳大利亚原住民
- 文章难度：★★★★
- 题型及数量：待补充
- 题目及答案：待补充

可参考真题：剑桥 12—TEST6 Passage2 *The Lost City*

- Passage Three：
- 文章题材：议论文（心理学）
- 文章题目：关于多重任务的争论
- 文章难度：★★★★
- 题型及数量：段落信息配对+判断+单选
- 题目及答案：

Multitasking Debate

Can you do them at the same time?

A

Talking on the phone while driving isn’t the only situation where we’re worse at multitasking than we might like to think we are. New studies have identified a bottleneck in our brains that some say means we are fundamentally incapable of true multitasking. If experimental

findings reflect real-world performance, people who think they are multitasking are probably just underperforming in all – or at best, all but one – of their parallel pursuits. Practice might improve your performance, but you will never be as good as when focusing on one task at a time.

B

The problem, according to René Marois, a psychologist at Vanderbilt University in Nashville, Tennessee, is that there's a sticking point in the brain. To demonstrate this, Marois devised an experiment to locate it. Volunteers watch a screen and when a particular image appears, a red circle, say, they have to press a key with their index finger. Different coloured circles require presses from different fingers. Typical response time is about half a second, and the volunteers quickly reach their peak performance. Then they learn to listen to different recordings and respond by making a specific sound. For instance, when they hear a bird chirp, they have to say "ba"; an electronic sound should elicit a "ko", and so on. Again, no problem. A normal person can do that in about half a second, with almost no effort.

C

The trouble comes when Marois shows the volunteers an image, and then almost immediately plays them a sound. Now they're flummoxed. "If you show an image and play a sound at the same time, one task is postponed," he says. In fact, if the second task is introduced within the half-second or so it takes to process and react to the first, it will simply be delayed until the first one is done. The largest dual-task delays occur when the two tasks are presented simultaneously; delays progressively shorten as the interval between presenting the tasks lengthens.

D

There are at least three points where we seem to get stuck, says Marois. The first is in simply identifying what we're looking at. This can take a few tenths of a second, during which time we are not able to see and recognise a second item. This limitation is known as the "attentional blink": experiments have shown that if you're watching out for a particular event and a second one shows up unexpectedly any time within this crucial window of concentration, it may register in your visual cortex but you will be unable to act upon it. Interestingly, if you don't expect the first event, you have no trouble to respond to the second. What exactly causes the attentional blink is still a matter for debate.

E

A second limitation is in our short-term visual memory. It's estimated that we can keep track of about four items at a time, fewer if they are complex. This capacity shortage is thought to explain, in part, our astonishing inability to detect even huge changes in scenes that are otherwise identical, so-called "change blindness". Show people pairs of near-identical photos – say, aircraft engines in one picture have disappeared in the other – and they will fail to spot the differences. Here again, though, there is disagreement about what the essential limiting factor really is. Does it come down to a dearth of storage capacity, or is it about how much attention a viewer is paying?

F

A third limitation is that choosing a response to a stimulus – braking when you see a child in the road, for instance, or replying when your mother tells you over the phone that she's

thinking of leaving your dad – also takes brainpower. Selecting a response to one of these things will delay by some tenths of a second your ability to respond to the other. This is called the "response selection bottleneck" theory, first proposed in 1952.

G

But David Meyer, a psychologist at the University of Michigan, Ann Arbor, doesn't buy the bottleneck idea. He thinks dual-task interference is just evidence of a strategy used by the brain to prioritise multiple activities. Meyer is known as something of an optimist by his peers. He has written papers with titles like "Virtually perfect time-sharing in dual-task performance: Uncorking the central cognitive bottleneck". His experiments have shown that with enough practice – at least 2000 tries – some people can execute two tasks simultaneously as competently as if they were doing them one after the other. He suggests that there is a central cognitive processor that coordinates all this and, what's more, he thinks it used discretion: sometimes it chooses to delay one task while completing another.

H

Marois agrees that practice can sometimes erase interference effects. He has found that with just 1 hour of practice each day for two weeks, volunteers show a huge improvement at managing both his tasks at once. Where he disagrees with Meyer is in what the brain is doing to achieve this. Marois speculates that practice might give us the chance to find less congested circuits to execute a task – rather like finding trusty back streets to avoid heavy traffic on main roads – effectively making our response to the task subconscious. After all, there are plenty of examples of subconscious multitasking that most of us routinely manage: walking and talking, eating and reading, watching TV and folding the laundry.

I

It probably comes as no surprise that, generally speaking, we get worse at multitasking as we age. According to Art Kramer at the University of Illinois at Urbana- Champaign, who studies how ageing affects our cognitive abilities, we peak in our 20s. Though the decline is slow through our 30s and on into our 50s, it is there; and after 55, it becomes more precipitous. In one study, he and his colleagues had both young and old participants do a simulated driving task while carrying on a conversation. He found that while young drivers tended to miss background changes, older drivers failed to notice things that were highly relevant. Likewise, older subjects had more trouble paying attention to the more important parts of a scene than young drivers.

J

It's not all bad news for over-55s, though. Kramer also found that older people can benefit from the practice. Not only did they learn to perform better, but brain scans also showed that underlying that improvement was a change in the way their brains become active. While it's clear that practice can often make a difference, especially as we age, the basic facts remain sobering. "We have this impression of an almighty complex brain," says Marois, "and yet we have very humbling and crippling limits." For most of our history, we probably never needed to do more than one thing at a time, he says, and so we haven't evolved to be able to. Perhaps we will in future, though. We might yet look back one day on people like Debbie and Alun as ancestors of a new breed of true multitaskers.

Questions 28-32

The Reading Passage has ten paragraphs A-J.

Which paragraph contains the following information?

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

28. A theory explained delay happens when selecting one reaction

29. Different age group responds to important things differently

30. Conflicts happened when visual and audio element emerge simultaneously

31. An experiment designed to demonstrates the critical part of the brain for multitasking

32. A viewpoint favors the optimistic side of multitasking performance

Questions 33-35

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

Write your answers in boxes 6-8 on your answer sheet.

33. Which one is correct about the experiment conducted by René Marois?

A participants performed poorly on the listening task solely

B volunteers press a different key on different color

C participants need to use different fingers on the different colored object

D they did a better fob on Mixed image and sound information

34. Which statement is correct about the first limitation of Marois’s experiment?

A “attentional blink” takes about ten seconds

B lag occurs if we concentrate on one object while the second one appears

C we always have trouble in reaching the second one

D first limitation can be avoided by certain measures

35. Which one is NOT correct about Meyer’s experiments and statements?

A just after failure in several attempts can people execute dual-task

B Practice can overcome dual-task interference

C Meyer holds a different opinion on Marois’s theory

D an existing processor decides whether to delay another task or not

Questions 36-40

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

In boxes 36-40 on your answer sheet, write

YES if the statement is true

NO if the statement is false

NOT GIVEN if the information is not given in the passage

36. The longer gap between two presenting tasks means shorter delay toward the second one.

37. Incapable of human memory cause people to sometimes miss the differences when presented two similar images.

38. Marois has a different opinion on the claim that training removes the bottleneck effect.

39. Art Kramer proved there is a correlation between multitasking performance and genders

40. The author doesn’t believe that the effect of practice could bring any variation.

参考答案

28. F

29. I

30. C

31. B

32. G

33. C

34. B

35. A

36. YES

37. YES

38. NO

39. NOT GIVEN

40. NO

可参考真题：剑桥 16—TEST2 Passage3 *How to make wise decisions*

话题词：

每期 10 个提分词汇

1．agriculture 农业

2．aquaculture 水产业

3．poultry 家禽

4．greenhouse 温室

5．reclamation 开垦，改造

6．windmill 风车

7．plantation 种植园

8．prolific 丰富的，多产的

9．graze 吃草

10．cultivate 耕种，培养

同义替换词：

每期 10 组经典雅思阅读经典同义替换积累

1．authentic - genuine 真正的

2．authoritative - official 官方的

3．curtail - shorten 减少，限制

4．dynamic - vigorous 充满活力的

5．extensive - wide - broad 款的

6．exterior - outside - external 外部的

7．hurdle - obstacle 难关，障碍

8．invisible - elusive 看不见的，难以捕捉的

9．invoice - bill 发票

10．overdue - unpaid 未付的