

# HOMEWORK TEST PREP 2

## Reading module (1 hour)

### READING PASSAGE 1

You should spend about 20 minutes on *Questions 1–13* which are based on Reading Passage 1 below.

#### *Questions 1–8*

*Reading Passage 1 has seven paragraphs A–H.*

*From the list of headings below choose the most suitable heading for each paragraph. Write the appropriate numbers (i–xi) in boxes 1–8 on your answer sheet.*

#### List of headings

- i Obesity in animals
- ii Hidden dangers
- iii Proof of the truth
- iv New perspective on the horizon
- v No known treatment
- vi Rodent research leads the way
- vii Expert explains energy requirements of obese people
- viii A very uncommon complaint
- ix Nature or nurture
- x Shifting the blame
- xi Lifestyle change required despite new findings

- 1 Paragraph A
- 2 Paragraph B
- 3 Paragraph C
- 4 Paragraph D
- 5 Paragraph E
- 6 Paragraph F
- 7 Paragraph G
- 8 Paragraph H

# Tackling Obesity in the Western World

**A** Obesity is a huge problem in many Western countries and one which now attracts considerable medical interest as researchers take up the challenge to find a 'cure' for the common condition of being seriously overweight. However, rather than take responsibility for their weight, obese people have often sought solace in the excuse that they have a slow metabolism, a genetic hiccup which sentences more than half the Australian population (63% of men and 47% of women) to a life of battling with their weight. The argument goes like this: it doesn't matter how little they eat, they gain weight because their bodies break down food and turn it into energy more slowly than those with a so-called normal metabolic rate.

**B** 'This is nonsense,' says Dr Susan Jebb from the Dunn Nutrition Unit at Cambridge in England. Despite the persistence of this metabolism myth, science has known for several years that the exact opposite is in fact true. Fat people have faster metabolisms than thin people. 'What is very clear,' says Dr Jebb, 'is that overweight people actually burn off more energy. They have more cells, bigger hearts, bigger lungs and they all need more energy just to keep going.'

**C** It took only one night, spent in a sealed room at the Dunn Unit to disabuse one of their patients of the beliefs of a lifetime: her metabolism was fast, not slow. By sealing the room and measuring the exact amount of oxygen she used, researchers were able to show her that her metabolism was not the culprit. It wasn't the answer she expected and probably not the one she wanted but she took the news philosophically.

**D** Although the metabolism myth has been completely disproved, science has far from discounted our genes as responsible for making us whatever weight we are, fat or thin. One of the world's leading obesity researchers, geneticist Professor Stephen O'Rahilly, goes so far as to say we are on the threshold of a complete change in the way we view not only morbid obesity, but also everyday overweight. Prof. O'Rahilly's groundbreaking work in Cambridge has proven that obesity can be caused by our genes. 'These people are not weak-willed, slothful or lazy,' says Prof. O'Rahilly, 'They have a medical condition due to a genetic defect and that causes them to be obese.'

**E** In Australia, the University of Sydney's Professor Ian Caterson says while major genetic defects may be rare, many people probably have minor genetic variations that combine to dictate weight and are responsible for things such as how much we eat, the amount of exercise we do and the amount of energy we need. When you add up all these little variations, the result is that some people are genetically predisposed to putting on weight. He says while the fast/slow metabolism debate may have been settled, that doesn't mean some other subtle change in the metabolism gene won't be found in overweight people. He is confident that science will, eventually, be able to 'cure' some forms of obesity but the only effective way for the vast majority of overweight and obese people to lose weight is a change of diet and an increase in exercise.

**F** Despite the \$500 million a year Australians spend trying to lose weight and the \$830 million it costs the community in health care, obesity is at epidemic proportions here, as it is in all Western nations. Until recently, research and treatment for obesity had concentrated on behaviour modification, drugs to decrease appetite and surgery. How the drugs worked was often not understood and many caused severe side effects and even death in some patients. Surgery for obesity has also claimed many lives.

**G** It has long been known that a part of the brain called the hypothalamus is responsible for regulating hunger, among other things. But it wasn't until 1994 that Professor Jeffery Friedman from Rockefeller University in the US sent science in a new direction by studying an obese mouse. Prof. Friedman found that unlike its thin brothers, the fat mouse did not produce a hitherto unknown hormone called leptin. Manufactured by the fat cells, leptin acts as a messenger, sending signals to the hypothalamus to turn off the appetite. Previously, the fat cells were thought to be responsible simply for storing fat. Prof. Friedman gave the fat mouse leptin and it lost 30% of its body weight in two weeks.

**H** On the other side of the Atlantic, Prof. O'Rahilly read about this research with great excitement. For many months two blood samples had lain in the bottom of his freezer, taken from two extremely obese young cousins. He hired a doctor to develop a test for leptin in human blood, which eventually resulted in the discovery that neither of the children's blood contained the hormone. When one cousin was given leptin, she lost a stone in weight and Prof. O'Rahilly made medical history. Here was the first proof that a genetic defect could cause obesity in humans. But leptin deficiency turned out to be an extremely rare condition and there is a lot more research to be done before the 'magic' cure for obesity is ever found.

### Questions 9–13

Complete the summary of Reading Passage 1 (Questions 9–13) using words from the box at the bottom of the page.

Write your answers in boxes 9–13 on your answer sheet.

## OBESITY

### Tip Strip

- Read through the summary so that you have a fair idea of what it is about.
- Check the instructions: you must choose ONE word for each gap from the box below the summary. If you use words that are not in the box, the answer will be marked wrong.
- Skim the passage and find out where the section that has been summarised begins.
- Read the text around each gap carefully. See if you can predict the answer or the kind of word that you are looking for.
- Re-read the summary, with the words you have selected for each gap, to make sure that it makes sense both grammatically and in terms of meaning.

#### Example

weight

People with a ... (0) ... problem often try to deny responsibility.

They do this by seeking to blame their ... (9) ... for the fact that they are overweight and erroneously believe that they use ... (10) ... energy than thin people to stay alive. However, recent research has shown that a ... (11) ... problem can be responsible for obesity as some people seem programmed to ... (12) ... more than others. The new research points to a shift from trying to change people's ... (13) ... to seeking an answer to the problem in the laboratory.

#### List of words

weight	exercise	sleep
mind	bodies	exercise
metabolism	more	genetic
less	physical	consume
behaviour	use	mental

# Wheel of Fortune

**Emma Duncan**  
discusses the  
potential effects on  
the entertainment  
industry of the  
digital revolution

A Since moving pictures were invented a century ago, a new way of distributing entertainment to consumers has emerged about once every generation. Each such innovation has changed the industry irreversibly; each has been accompanied by a period of fear mixed with exhilaration. The arrival of digital technology, which translates music, pictures and text into the zeros and ones of computer language, marks one of those periods.

B This may sound familiar, because the digital revolution, and the explosion of choice that would go with it, has been heralded for some time. In 1992, John Malone, chief executive of TCI, an American cable giant, welcomed the '500-channel universe'. Digital television was about to deliver everything except pizzas to people's living rooms. When the entertainment companies tried out the technology, it worked fine – but not at a price that people were prepared to pay.

C Those 500 channels eventually arrived but via the Internet and the PC rather than through television. The digital revolution was starting to affect the entertainment business in unexpected ways. Eventually it will change every aspect of it, from the way cartoons are made to the way films are screened to the way people buy music. That much is clear. What nobody is sure of is how it will affect the economics of the business.

D New technologies always contain within them both threats and opportunities. They have the potential both to make the companies in the business a great deal richer, and to sweep them away. Old companies always fear new technology. Hollywood was hostile to television, television terrified by the VCR. Go back far enough, points out Hal Varian, an economist at the University of California at Berkeley, and you find publishers complaining that 'circulating libraries' would cannibalise their sales. Yet whenever a new technology has come in, it has made more money for existing entertainment companies. The proliferation of the means of distribution results, gratifyingly, in the proliferation of dollars, pounds, pesetas and the rest to pay for it.

**E** All the same, there is something in the old companies' fears. New technologies may not threaten their lives, but they usually change their role. Once television became widespread, film and radio stopped being the staple form of entertainment. Cable television has undermined the power of the broadcasters. And as power has shifted the movie studios, the radio companies and the television broadcasters have been swallowed up. These days, the grand old names of entertainment have more resonance than power. Paramount is part of Viacom, a cable company; Universal, part of Seagram, a drinks-and-entertainment company; MGM, once the roaring lion of Hollywood, has been reduced to a whisper because it is not part of one of the giants. And RCA, once the most important broadcasting company in the world, is now a recording label belonging to Bertelsmann, a large German entertainment company.

**F** Part of the reason why incumbents got pushed aside was that they did not see what was coming. But they also faced a tighter regulatory environment than the present one. In America, laws preventing television broadcasters from owning programme companies were repealed earlier this decade, allowing the creation of vertically integrated businesses. Greater freedom, combined with a sense of history, prompted the smarter companies in the entertainment business to re-invent themselves. They saw what happened to those of their predecessors who were stuck with one form of distribution. So, these days, the powers in the entertainment business are no longer movie studios, or television broadcasters, or publishers; all those businesses have become part of bigger businesses still, companies that can both create content and distribute it in a range of different ways.

**G** Out of all this, seven huge entertainment companies have emerged – Time Warner, Walt Disney, Bertelsmann, Viacom, News Corp, Seagram and Sony. They cover pretty well every bit of the entertainment business except pornography. Three are American, one is Australian, one Canadian, one German and one Japanese. 'What you are seeing', says Christopher Dixon, managing director of media research at PaineWebber, a stockbroker, 'is the creation of a global oligopoly. It happened to the oil and automotive businesses earlier this century; now it is happening to the entertainment business.' It remains to be seen whether the latest technology will weaken those great companies, or make them stronger than ever.

## Tip Strip

- Read the rubric carefully. Each question here is a paraphrase of detailed information within paragraphs. You will need to match the information in each question to the correct paragraph.
- The questions do not follow the order of information in the passage.
- Read the passage once through quickly, noting any key words or main ideas within the paragraphs.
- Read through the questions and underline the key words, e.g. Question 14: 'the contrasting effects that new ...' You may be able to do some of the questions from your first reading of the passage.
- Now begin with the first question. Skim the passage for an equivalent idea, using your understanding of the themes in each paragraph to help you read more quickly.  
**Question 14:** Which paragraph describes the potential effects of new technology?
- You may want to select the questions that have key words that are easy to scan for and do these first, leaving the more difficult questions to later.

## Questions 14–21

Reading Passage 2 has seven paragraphs A–G.

Which paragraph mentions the following (Questions 14–21)?

Write the appropriate letters (A–G) in boxes 14–21 on your answer sheet.

**NB** Some of the paragraphs will be used more than once.

- 14 the contrasting effects that new technology can have on existing business
- 15 the fact that a total transformation is going to take place in the future in the delivery of all forms of entertainment
- 16 the confused feelings that people are known to have experienced in response to technological innovation
- 17 the fact that some companies have learnt from the mistakes of others
- 18 the high cost to the consumer of new ways of distributing entertainment
- 19 uncertainty regarding the financial impact of wider media access
- 20 the fact that some companies were the victims of strict government policy
- 21 the fact that the digital revolution could undermine the giant entertainment companies

### Questions 22–25

The writer refers to various individuals and companies in the reading passage. Match the people or companies (A–E) with the points made in Questions 22–25 about the introduction of new technology.

Write the appropriate letter (A–E) in boxes 22–25 on your answer sheet.

22 Historically, new forms of distributing entertainment have alarmed those well-established in the business.

23 The merger of entertainment companies follows a pattern evident in other industries.

24 Major entertainment bodies that have remained independent have lost their influence.

25 News of the most recent technological development was published some years ago.

A John Malone
B Hal Valarian
C MGM
D Walt Disney
E Christopher Dixon

### Questions 26–27

Choose the appropriate letters A–D and write them in boxes 26–27 on your answer sheet.

26 How does the writer put across his views on the digital revolution?

- A by examining the forms of media that will be affected by it
- B by analysing the way entertainment companies have reacted to it
- C by giving a personal definition of technological innovation
- D by drawing comparisons with other periods of technological innovation

27 Which of the following best summarises the writer's views in Reading Passage 2?

- A The public should cease resisting the introduction of new technology.
- B Digital technology will increase profits in the entertainment business.
- C Entertainment companies should adapt to technological innovation.
- D Technological change only benefits big entertainment companies.

What do we mean by being 'talented' or 'gifted'? The most obvious way is to look at the work someone does and if they are capable of significant success, label them as talented. The purely quantitative route – 'percentage definition' – looks not at individuals, but at simple percentages, such as the top five per cent of the population, and labels them – by definition – as gifted. This definition has fallen from favour, eclipsed by the advent of IQ tests, favoured by luminaries such as Professor Hans Eysenck, where a series of written or verbal tests of general intelligence leads to a score of intelligence.

The IQ test has been eclipsed in turn. Most people studying intelligence and creativity in the new millennium now prefer a broader definition, using a multifaceted approach where talents in many areas are recognised rather than purely concentrating on academic achievement. If we are therefore assuming that talented, creative or gifted individuals may need to be assessed across a range of abilities, does this mean intelligence can run in families as a genetic or inherited tendency? Mental dysfunction – such as schizophrenia – can, so is an efficient mental capacity passed on from parent to child?

Animal experiments throw some light on this question, and on the whole area of whether it is genetics, the environment or a combination of the two that allows for intelligence and creative ability. Different strains of rats show great differences in intelligence or 'rat reasoning'. If these are brought up in normal conditions and then run through a maze to reach a food goal, the 'bright' strain make far fewer wrong turns than the 'dull' ones. But if the environment is made dull and boring the number of errors becomes equal. Return the rats to an exciting maze and the discrepancy returns as before – but is much smaller. In other words, a dull rat in a stimulating environment will almost do as well as a bright rat who is bored in a normal one. This principle applies to humans too – someone may be born with innate intelligence, but their environment probably has the final say over whether they become creative or even a genius.

Evidence now exists that most young children, if given enough opportunities and encouragement, are able to achieve significant and sustainable levels of academic or sporting prowess. Bright or creative children are often physically very active

at the same time, and so may receive more parental attention as a result – almost by default – in order to ensure their safety. They may also talk earlier, and this, in turn, breeds parental interest. This can sometimes cause problems with other siblings who may feel jealous even though they themselves may be bright. Their creative talents may be undervalued and so never come to fruition. Two themes seem to run through famously creative families as a result. The first is that the parents were able to identify the talents of each child, and nurture and encourage these accordingly but in an even-handed manner. Individual differences were encouraged, and friendly sibling rivalry was not seen as a particular problem. If the father is, say, a famous actor, there is no undue pressure for his children to follow him onto the boards, but instead their chosen interests are encouraged. There need not even be any obvious talent in such a family since there always needs to be someone who sets the family career in motion, as in the case of the Sheen acting dynasty.

Martin Sheen was the seventh of ten children born to a Spanish immigrant father and an Irish mother. Despite intense parental disapproval he turned his back on entrance exams to university and borrowed cash from a local priest to start a fledgling acting career. His acting successes in films such as *Badlands* and *Apocalypse Now* made him one of the most highly-regarded actors of the 1970s. Three sons – Emilio Estevez, Ramon Estevez and Charlie Sheen – have followed him into the profession as a consequence of being inspired by his motivation and enthusiasm.

A stream seems to run through creative families. Such children are not necessarily smothered with love by their parents. They feel loved and wanted, and are secure in their home, but are often more surrounded by an atmosphere of work and where following a calling appears to be important. They may see from their parents that it takes time and dedication to be master of a craft, and so are in less of a hurry to achieve for themselves once they start to work.

The generation of creativity is complex: it is a mixture of genetics, the environment, parental teaching and luck that determines how successful or talented family members are. This last point – luck – is often not mentioned where talent is

concerned but plays an undoubted part. Mozart, considered by many to be the finest composer of all time, was lucky to be living in an age that encouraged the writing of music. He was brought up surrounded by it, his father was a musician who encouraged him to the point of giving up his job to promote his child genius, and he learnt musical composition with frightening speed – the speed of a genius. Mozart himself simply wanted to create the finest music ever written but did not necessarily view himself as a genius – he could write sublime music at will, and so often preferred to lead a hedonistic lifestyle that he found more exciting than writing music to order.

Albert Einstein and Bill Gates are two more examples of people whose talents have blossomed by virtue of the times they were living in. Einstein was a solitary, somewhat slow child who had affection at home but whose phenomenal intelligence emerged without any obvious parental input. This may have been partly due to the fact that at the start of the 20th Century a lot of the Newtonian laws of physics were being questioned, leaving a fertile ground for ideas such as his to be developed. Bill Gates may have had the creative vision to develop Microsoft, but without the new computer age dawning at the same time he may never have achieved the position on the world stage he now occupies.

### Tip Strip

- The arrows in this diagram help you understand that you are making notes on stages or changes over time.
- Underline the key words in the instructions e.g. defining talent.
- Note-completion tasks are usually based on a section of the passage.
- You will locate this section by scanning the passage for the key words. Which two paragraphs discuss the definition of talent? Read this section carefully and answer Questions 28 & 29.
- Note that you can use a maximum of two words for each answer and that these words must be taken from the reading passage. If you use more than two words or words that are not in the passage, the answer will be marked wrong.

### Questions 28–29

Complete the notes, which show how the approaches to defining 'talent' have changed. Choose **ONE** or **TWO WORDS** from the passage for each answer.

Write your answers in boxes 28–29 on your answer sheet.

'percentage definition'



### Tip Strip

- Underline the key words in the question.
- Skim through the passage until you find the relevant part or parts.
- Make sure the options that you choose are paraphrases of what is stated in the passage. Do not just match words.
- Some of the options are wrong but may be linked to ideas that are given in the passage.

### Questions 30–32

Which **THREE** of the following does the writer regard as a feature of creative families?

Write the appropriate letters **A–F** in boxes 30–32 on your answer sheet.

- A** a higher than average level of parental affection
- B** competition between brothers and sisters
- C** parents who demonstrate vocational commitment
- D** strong motivation to take exams and attend university
- E** a patient approach to achieving success
- F** the identification of the most talented child in the family

### Questions 33–34

Choose the appropriate letters **A–D** and write them in boxes 33–34 on your answer sheet.

- 33** The rat experiment was conducted to show that
  - A** certain species of rat are more intelligent than others.
  - B** intelligent rats are more motivated than 'dull' rats.
  - C** a rat's surroundings can influence its behaviour.
  - D** a boring environment has little impact on a 'bright' rat.
- 34** The writer cites the story of Martin Sheen to show that
  - A** he was the first in a creative line.
  - B** his parents did not have his creative flair.
  - C** he became an actor without proper training.
  - D** his sons were able to benefit from his talents.

### Questions 35–39

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 35–39 on your answer sheet write

**YES** if the statement agrees with the writer's claims

**NO** if the statement contradicts the writer's claims

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

- 35** Intelligence tests have now been proved to be unreliable.
- 36** The brother or sister of a gifted older child may fail to fulfil their own potential.
- 37** The importance of luck in the genius equation tends to be ignored.
- 38** Mozart was acutely aware of his own remarkable talent.
- 39** Einstein and Gates would have achieved success in any era.

### Tip Strip

Question 40 tests your global reading skills.

- Although some of the ideas in A–D may be discussed in the passage, you must decide what the **WHOLE** passage is about. Then choose the option that best states this.

### Question 40

From the list below choose the most suitable title for the whole of Reading Passage 3.

Write the appropriate letter **A–D** in box 40 on your answer sheet.

- A** Geniuses in their time
- B** Education for the gifted
- C** Revising the definition of intelligence
- D** Nurturing talent within the family