

## Exam practice: Vocabulary, Reading Comprehension and Writing

### 1 Vocabulary

#### Formal / informal style

##### Task 1

Circle the more **formal** of the two expressions in the text below.

Good morning ladies and gentlemen.

You may remember: last time we discussed some key aspects of natural resource use. We said that we would study the element of scarcity. We **looked at / considered** time and dynamics and the effect that those factors have on resource use. We also examined technology. We spent a few minutes talking about property rights and then we **summarized / recapped** the various sources of uncertainty surrounding our decisions **concerning / about** the use of natural resources over time. We returned to the issue of scarcity and we began by **saying / stating** that the fundamental resource concern is a rapidly rising global population. **Increasing / Growing** economic activity by that population has resulted in a declining resource base and an increased production of waste.

##### Task 2

Circle the more **informal** of the two expressions in the sentences below.

- 1 It would be a great breakthrough if scientists could figure out a method to **eliminate / get rid of** hangovers.
- 2 The Amazon Machine Learning platform provides companies with the ability to **guess / predict** and find patterns using data.
- 3 A vision system **is made up of / comprises** a camera and microprocessor or computer, with associated software.
- 4 **To return / To get back** to the problem of water pollution,
- 5 I'd like to look at a study **conducted / done** in Australia in 2002.

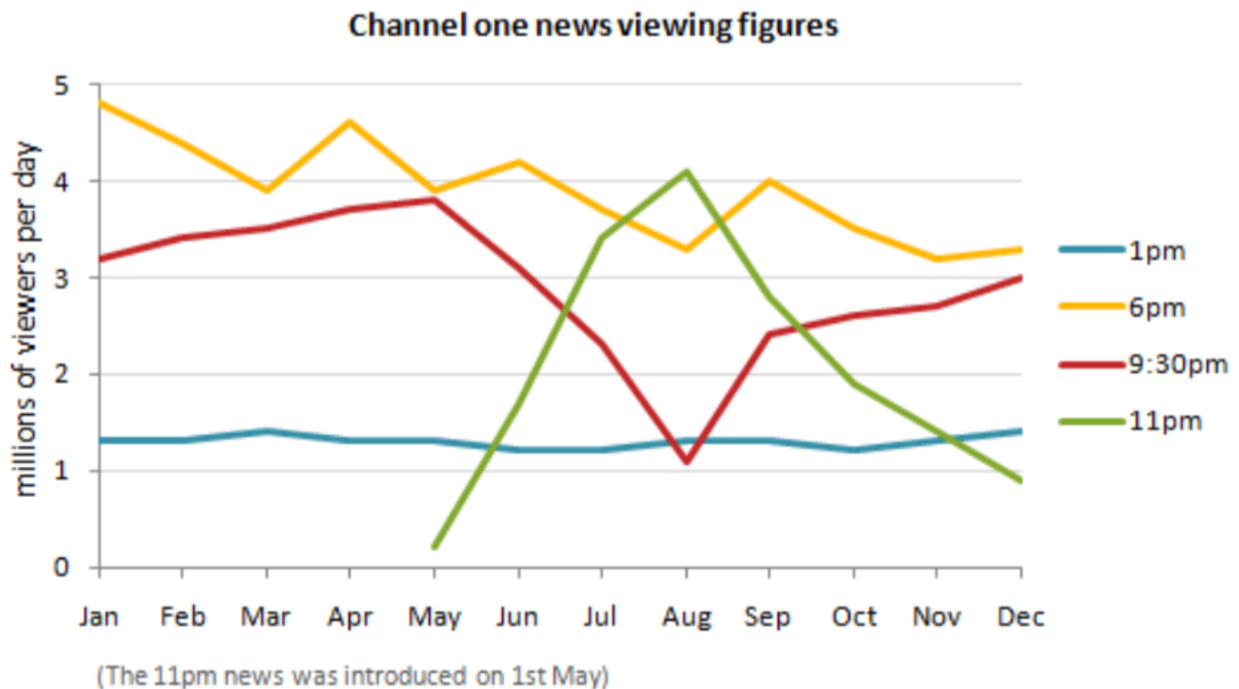
**Word formation**

Fill in the gaps with the correct form of the **word in bold/CAPITALS** at the end of each sentence.

- 1 He urged the school \_\_\_\_\_ to come up with a plan to reduce the budget deficit. **ADMINISTER**
  
- 2 It was the president's second public \_\_\_\_\_ to date. He is rarely seen in the media. **APPEAR**
  
- 3 Schools seeking racial and ethnic \_\_\_\_\_ have a long, difficult path ahead of them. **INTEGRATE**
  
- 4 His contribution to the scientific community did not receive full \_\_\_\_\_ until after his death. **RECOGNIZE**
  
- 5 Concerns around energy and \_\_\_\_\_ are going to be with us for many years to come. **SUSTAINABLE**

**The language of describing trends and visual organizers**

Study the graph below and complete the description with information from it and the words provided in the box. Use each word only once.



<b>increased</b>	<b>stable</b>	<b>rocketed</b>	<b>plummeted</b>
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**decreased      fluctuated      period      moderately      declined**

The chart shows the average daily viewing figures for Channel One News over a 12-month \_\_\_\_\_. The figure for the 1pm News remained fairly \_\_\_\_\_ throughout the year, at around 1.3 million.

The figure for the 6pm News started off the year with 4.8 million and \_\_\_\_\_ to 3.4 million by the end of the year. Although it \_\_\_\_\_ quite a bit, the general trend was downwards.

The figure for the 9:30 News \_\_\_\_\_ gradually from 3.2 million viewers per day in January to a total of 3.8 million in May. However, this month saw the introduction of the 11pm News, and the figure for the 9:30 News \_\_\_\_\_, hitting a low-point of 1.1 million in August. In the same period, the figure for the 11pm news \_\_\_\_\_ from 0.2 million to 4.1 million. At this point, the trend reversed. From August onwards, the figure for the 9:30 news grew \_\_\_\_\_, reaching 3 million by the end of the year. Meanwhile, the figure for the 11pm News \_\_\_\_\_ sharply, and fell below the 1 million mark in December.

## 2 Reading Comprehension

### Task 1a

*Read the text below and decide what subheading A-G best summarizes each paragraph.*

<b>Subheading</b>	<b>Paragraph</b>
<b>A</b> Late fame	_____
<b>B</b> Intellect vs. social duties	_____
<b>C</b> Technological forecast	_____
<b>D</b> Parental influence	_____
<b>E</b> Grudging <sup>1</sup> admiration	_____

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<sup>1</sup> grudging = unwilling

- F** Going beyond the call of duty \_\_\_\_\_
- G** Our debt to Ada Byron \_\_\_\_\_
- H** Not a conventional life \_\_\_\_\_
- I** Social expectations \_\_\_\_\_

**Task 1b**

*Read the text on pp. 10 and 11 again and answer the comprehension questions below.*

- 1** *Which option is correct?* Ada Byron
- a** lived a very balanced life.
  - b** was torn between extremes.
  - c** couldn't decide whether to dedicate her life to poetry or science.
- 2** *According to the text, are these statements true or false (T / F)?*
- a** \_\_\_\_ Wealthy women of the 19th century often pursued things like botany, geology, or astronomy as a kind of intellectual hobby.
  - b** \_\_\_\_ The parliamentary sponsors were sympathetic towards the idea of a new analytical machine.
  - c** \_\_\_\_ Ada Byron contributed substantially to Babbage's article as she extended his ideas by two thirds.
  - d** \_\_\_\_ In her Notes, Ada Byron put down prescient comments on the potential for machines that would be used in science.
- 3** The comment in the London Examiner on Ada Byron was probably intended as
- a** condescending.
  - b** surprising.
  - c** complimentary.
- 4** *What does the quotation in italics say? Paraphrase it into your own words.*

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## Reading Comprehension Text:

### Ada Byron, Countess of Lovelace (1815–1852)

#### Analyst, Metaphysician, and Founder of Scientific Computing

**1** Ada Byron was the daughter of a brief marriage between the Romantic poet Lord Byron and Anne Isabelle Milbanke, who separated from Byron just a month after Ada was born. Four months later, Byron left England forever. Ada never met her father (who died in Greece in 1823) and was raised by her mother, Lady Byron. Her life was a constant struggle between emotion and reason, subjectivism and objectivism, poetics and mathematics, ill health and bursts of energy.

**2** Lady Byron wished her daughter to be unlike her poetical father, and she saw to it that Ada received tutoring in mathematics and music, as disciplines to counter dangerous poetic tendencies. But Ada's complex inheritance became apparent as early as 1828, when she produced the design for a flying machine. It was mathematics that gave her life its wings.

**3** Lady Byron and Ada moved in an elite London society, one in which gentlemen not members of the clergy or occupied with politics or the affairs of a regiment were quite likely to spend their time and fortunes pursuing botany, geology, or astronomy. In the early nineteenth century, there were no "professional" scientists (indeed, the word "scientist" was only coined by William Whewell in 1836) – but the participation of noblewomen in intellectual pursuits was not widely encouraged.

**4** One of the gentlemanly scientists of the era was to become Ada's lifelong friend. Charles Babbage, Lucasian professor of mathematics at Cambridge, was known as the inventor of the Difference Engine, an elaborate calculating machine that operated by the method of finite differences. Ada met Babbage in 1833, when she was just 17, and they began a voluminous correspondence on the topics of mathematics, logic, and ultimately all subjects. In 1835, Ada married William King, ten years her senior, and when King inherited a noble title in 1838, they became the Earl and Countess of Lovelace. Ada had three children. The family and its fortunes were very much directed by Lady Byron, whose domineering nature was rarely opposed by King.

**5** Babbage had made plans in 1834 for a new kind of calculating machine (although the Difference Engine was not finished), an Analytical Engine. His parliamentary sponsors refused to support a second machine with the first unfinished, but Babbage found sympathy for his new project abroad. In 1842, an Italian mathematician, Louis Menabrea, published a memoir in French on the subject of the Analytical Engine. Babbage enlisted Ada as translator for the memoir, and during a nine-month period in 1842-43 she worked feverishly on the article and a set of Notes, three times the length of the article itself, that she appended to it. These are the source of her enduring fame.

**6** Ada called herself "an Analyst (& Metaphysician)," and the combination was put to use in the Notes. She understood the plans for the device as well as Babbage but was better at articulating its promise. She rightly saw it as what we would call a general-purpose

computer. It was suited for "developing [sic] and tabulating any function whatever... the engine [is] the material expression of any indefinite function of any degree of generality and complexity." Her Notes anticipate future developments, including computer-generated music and the production of graphics. Another passage reads: *'The Analytical Engine has no pretensions whatever to originate anything. It can do whatever we know how to order it to perform. It can follow analysis, but it has no power of anticipating any analytical revelations or truths. Its province is to assist us in making available what we are already acquainted with.'*

**7** Ada died of cancer in 1852, at the age of 37, and was buried beside the father she never knew. Her contributions to science were resurrected only recently, but many new biographies attest to the fascination of Babbage's 'Enchantress of Numbers.'

**8** The mid-1800s wasn't the time to be both an intellectual and a female. Ada Byron, supported by her social position, family names, and brilliant mind, managed to be somewhat accepted – in spite of her 'fragile' sex. In an obituary that walks a fine line between being insulting and amusing, the *London Examiner* admitted that, even though she had "an understanding thoroughly masculine in solidity, grasp and firmness, Lady Lovelace had all the delicacies of the most refined female character." The publication conceded: "Her manners, her tastes, her accomplishments, were feminine in the nicest sense of the word; and the superficial observer would never have divined the strength and knowledge that lay hidden under the womanly graces." High praise for the times. Ada remains one of the few female pioneers of the 'computer age' and, as yet, the only woman to be honored with a programming language bearing her name - ADA, a Pascal-based language developed in a project sponsored by the US Department of Defense in the 1970s.

**9** Augusta Ada Byron, Countess of Lovelace, is best remembered today as the first computer-programmer, her development of a set of commands to repeat instructions in a 'loop' or 'sub-routine' becoming the basis for programming of computers that would have fulfilled even her wildest dreams.

## Writing

- Watch again the video "The jobs we'll lose to machines – and the ones we won't" by Anthony Goldbloom: <https://tube.switch.ch/videos/6xWydr5jMk>
- Write your own text, in a formal/academic style, summarizing the information provided in the video
- Your summary should be between 180 and 240 words
- Use words from the academic wordlists where appropriate
- Submit your text on [Moodle](#), see the assignment submission student-folder under week 12
- See the attached file for the evaluation criteria/grid for the assignment

