I. Read the text. Concentrate on idiomatic English:

Humanities degrees may set you up for life

Today, a degree is all but a necessity for the job market. Learning for the sake of learning is a beautiful thing. But **given those costs**, it's no wonder that most of us need our degrees to **pay off** in a more concrete way. Broadly, they already do: in the US, for example, a bachelor's degree holder gets $461 more each week than someone who never attended a university. The ability to communicate and **get along with people,** and understand what's on other people's minds, and do full-strength **critical thinking** – all of these things were valued and appreciated by everyone as important job skills, except the media.
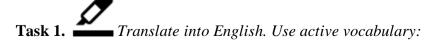
Take a look at the skills employers say **they're after**. The three most-wanted "**soft skills**" were **creativity, persuasion and collaboration,** while one of the five top "**hard skills**" was people management. As computers behave more like humans, the social sciences and humanities will **become even more important**. **Languages**, art, history, economics, ethics, philosophy, psychology and human development courses can teach critical, philosophical and ethics-based skills that will be **instrumental in** the development and management. The benefit of a humanities degree **is the emphasis it puts on** teaching students to think, **critique** and persuade – often in **the grey areas** where there isn't much data available or you need to work out what to believe. And while there's often **an assumption** that the careers humanities graduates **pursue** just aren't as good as the jobs **snapped up** by, say, engineers or medics, that isn't the case.

Pursuing a more **vocational degree** can come with its own risks too. Not every teenager knows exactly what they want to do with their lives, and our career aspirations often change over time. Focusing on broadly applicable skills like **critical thinking** no longer seems like such **a moon shot**. Whatever a student pursues in university, it must be something that they aren't just good at, but they really enjoy**.** " That's why I think doing something that really interests you is essential – because that's when you're going to do well," she says. No matter what, making a degree or career path decision based on average salaries isn't a good move. "Financial success is not a good reason. It tends to be a very poor reason," Mangan says. "**Be successful at something and money will follow**, as opposed to the other way around.

(Amanda Ruggeri. BBC)

Glossary:

To pay off; to get along with; given the costs; to be after; soft skills; hard skills; to be instrumental; to be heavy on something; the grey areas; data; an assumption; to snap up; bumpy; to play out; tend to work; liberal arts; a vocational degree; a moon shot; aptitude.

Task 1. Translate into English. Use active vocabulary:

З огляду на витрати, студенти бажають, щоб їхні дипломи **окупилися**. Вміння спілкуватися з людьми, **ладити** з ними, розуміти, що у інших на думці, наявність критичного мислення – ці речі завжди роботодавці вважають важливими навичками. З плином часу

комп'ютери будуть виявляти все більше ознак людської поведінки, соціальні науки стануть ще більш потрібними. Перевага диплома з гуманітарних наук полягає у тому, що він припускає наявність уміння мислити, надавати критичну оцінку та переконувати. Ці навички особливо цінні у новітніх областях, де **бракує доступної інформації**, або де вам потрібно вирішувати, у що вірити. І хоча часто висловлюють припущення, що кар'єра випускників гуманітарних спеціальностей не така вже й перспективна, на гуманітаріїв є **значний попит**.

Task 2. *Translate into Ukrainian:*

Any degree will give you very important generic skills like being able to write, being able to present an argument, research, problem-solving, teamwork, becoming familiar with technology. But few courses of study are quite as heavy on reading, writing, speaking and critical thinking as the liberal arts, in particular the humanities – whether that's by debating other students in a seminar, writing a thesis paper or analysing poetry. Pursuing a more vocational degree can come with its own risks too. Not every teenager knows exactly what they want to do with their lives, and our career aspirations often change over time. Focusing on broadly applicable skills like critical thinking no longer seems like such a moon shot. Whatever students pursue in a university, it must be something that they aren't just good at, but they really enjoy**.**

II. *Read the text. Concentrate on the words and word-combinations highlighting the technicalities of machine translation:*

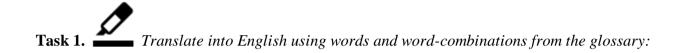**The translator that sits in your ear**

As globalisation and **ever-cheaper** transport and **accommodation options** have emerged, the ability to travel internationally has become **increasingly accessible** at an **incredibly rapid rate**. While many of us would love to become **proficient in languages** other than our native tongue, it would be **nigh on impossible** to learn the languages of all of the countries **listed on our bucket lists**. While the challenge of **navigating a language barrier** may form part of the romance of travelling for leisure, it remains problematic in many situations. Communicating with people who don't speak our native language **remains a challenge.** It is estimated that more than 95 per cent of the British population are **monolingual** English speakers. You might be **negotiating a business deal**, **handling an emergency** or in a rush to get somewhere. There's no doubt that sometimes it would be helpful for us all to be speaking the same language. Advances in technology mean this could soon be a problem of the past. Waverly Labs (created) a new language-translating **earpiece**, called the Pilot, and its accompanying **smartphone app**. It's a major contemporary **engineering accomplishment**. It uses **a sophisticated microphone array** along with **noise-cancelling algorithms** to listen to spoken words from and around the user. Those words are passed to the **cloud** where it is processed through **speech recognition, machine translation, and speech synthesis**, before it is sent back to the user and anyone else whose Pilot earpiece **is synced into** the conversation. This happens within **minimal delay**, usually in milliseconds. There are a number of competitors **hot on the heels** of the Pilot, including Clik, Skype, and Google, which last month launched its Pixel Buds, complete with the ability to **translate in real time** between 40 languages. The Pilor earpiece currently works with 15 languages, but can be upgraded to translate more. But with its **head start**, and now its prestigious nomination, the Pilot may be a step ahead. It's the **dual effort of the translation app and the earpieces** which make the Pilot system so unique. Removing the need for people to learn more than one language is **a contentious issue**. According to psychologist Judith Kroll, learning a foreign language comes with a number of **benefits**, ranging from **improved memory and mental flexibility to better cognitive creativity, and improved prioritisation skills.** Earlier in the year, the Pilot project launched **a crowdfunding campaign** allowing people who wanted to be the first to try the technology to do so at a discounted price and

pre-order the final product. It proved to be a highly popular product. The Pilot can solve both professional and personal experiences with language barriers.

<div align="right">(BBC)</div>

Glossary:

Proficient; monolingual; a language-translating earpiece; an accomplishment; speech recognition models; machine translation processes; speech synthesis; Pixel Buds; a head start; a step ahead; a contentious issue; a cognitive creativity; prioritisation skills; to remain a challenge; crowdfunding.

Task 1. *Translate into English using words and word-combinations from the glossary:*

Здійснити прагнення вивчити усі іноземні мови **неможливо**. Проте, **подолання мовного бар'єру** за допомогою сучасних **цифрових пристроїв** може стати романтичною частиною ваших подорожей. Ви будете здатні **вести перемовини та бізнес зустрічі**, достойно **вийти із скрутної ситуації**. Одним із таких гаджетів є **навушники «Пайлот»**, котрі працюють за допомогою **гарнітури** та поєднання **складної конструкції** мікрофона і алгоритмів, які **блокують сторонні шуми**, здійснюють **розпізнавання мови** того, хто говорить. У виробників «Пайлот» є низка **конкурентів**, які **наступають їм на п'яти**.

Task 2. *Translate into Ukrainian. Mind special terminology:*

The Pilot and its accompanying smartphone application is a major contemporary engineering accomplishment. It uses a sophisticated microphone array along with noise-cancelling algorithms to listen to spoken words from and around the user. Those words are passed to the cloud where it is processed through speech recognition, machine translation, and speech synthesis, before it is sent back to the user and anyone else whose Pilot earpiece is synced into the conversation. This happens within minimal delay, usually in milliseconds. It's the dual effort of the translation app and the earpieces which make the Pilot system so unique. Learning a foreign language comes with a number of benefits, ranging from improved memory and mental flexibility to better cognitive creativity, and improved prioritisation skills.

III. *Read the text. Concentrate on special terminology:*
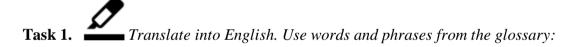
<div align="center">

Translatotron

</div>

Google's Translate can now listen to a language and make it into an audio translation in the original speaker's voice. The tool is able to convert language without the need for **a text-based process**. It also **preserves the person's original voice** in the audio clip of the new language. **Now it can directly translate speech from one language into speech in another language, without relying on a text representation in either language.** The tech giant's new system works without

the need **to convert it to text** before. A first-of-its-kind, the tool is able to do this while **retaining** the voice of the original speaker and making it sound 'more realistic', the tech giant said. Google **claims** the system, **dubbed** 'Translatotron', will be able to retain the voice of the original speaker after translation while also understanding words better. 'Translatotron' is the first model that can directly translate speech from one language into speech in another language'. Currently, Google Translate's system uses three stages. **Automatic speech recognition**, which **transcribes speech as text;** machine translation, which translates this text into another language; and **text-to-speech synthesis**, which uses this text to **generate speech**. The tech giant now says it will use **a single model** without the need for text. The system retains the speaker's voice by using **spectrograms**, a **visual representation of the soundwaves, as its input**. Translatotron takes **source spectrograms as input** and **generates spectrograms** of the translated content in **the target language**. It also makes use of two other separately trained components: **a neural vocoder** that **converts output spectrograms** to **waveforms**. Google admitted that the system **needs refining** through further **training of the algorithm**. **Sound clips** published in the post were more 'realistic' than a machine voice, but still **unmistakably computer-generated**.

(Daily Mail)

Glossary:

A text-based process; to convert to text; to retain the voice of the original speaker;

speech recognition; to transcribe speech as text; text-to-speech synthesis;

to generate speech; a spectrogram; visual representation of the soundwaves; input;

to generate spectrograms; a neural vocoder; waveforms (осцилограми); refining;

unmistakably computer-generated.

Task 1. *Translate into English. Use words and phrases from the glossary:*

Нова система, яку назвали «Транслейтотрон», навіть **не потребує текстуальної репрезентації** повідомлення для перекладу спілкування. Виробник стверджує, що ця програма здатна **зберігати голос мовця** і робити його звучання більш реалістичним. До цього процесу залучено: а) **автоматичне розпізнавання мовлення**, яке **фіксує звук** (транскрибує) у вигляді тексту; б) **машинний переклад**, який перекладає тексти з однієї мови на іншу за допомогою комп'ютера; в) синтез тексту для відтворення мовлення. Програма використовує так званий «**нейронний вокодер**» як аналог **нейронної мережі мозку**. Уніфікована модель зберігає голос мовця, використовуючи **спектрограми**, тобто, візуалізацію звукових хвиль в якості вхідних даних. Ця програма потребує **доопрацювання** (удосконалення): хоча **голос, генерований цією програмою**, звучить більш реалістично, ми **безпомилково впізнаємо його штучний характер**.

Task 2. *Translate into Ukrainian. Mind special terminology:*

"Translatotron" preserves the person's original voice in the audio clip of the new language. Now it can directly translate speech from one language into speech in another language, without relying on a text representation in either language. The tech giant's new system works without the need to convert it to text before. A first-of-its-kind, the tool is able to do this while retaining the

voice of the original speaker and making it sound 'more realistic', the tech giant said. Google claims the system, dubbed 'Translatotron', will be able to retain the voice of the original speaker after translation while also understanding words better.

IV. Read the text. Concentrate on special terminology of machine translation:

How translation apps iron out embarrassing gaffes

Translation apps are getting better, but they're still not perfect. Can artificial intelligence and deep **neural networks help iron out the glitches**? These days the traditional phrasebook is **on the way out.** A recent survey from the British Council found that nearly two-thirds of 16 to 34-year-olds now rely on translation apps to help **navigate the local lingo.** But while such apps are undoubtedly getting better, they're still not totally reliable - a fifth of those surveyed said they experienced misunderstandings while on holiday because of **mistranslations** on their phone.The issue is particularly acute for speakers of **non-mainstream** languages. So why are translations glitches still happening in the age of supercomputers and machine learning? One big problem is that words often have more than one meaning. These homographs, as they're called, can lead to embarrassment not just for holidaymakers but for governments as well. To deal with mistakes like this, translation apps are continuously **refining the ways** in which machine learning is applied. They **make use of previously translated texts** to provide their answers, **checking the context** in which the word has been used before and **selecting the most likely meaning.** Earlier this year a set of Chinese news articles were machine translated into English and a team of independent experts found that they **were on a par** with translations provided by two professional translators.The key to this **breakthrough** was the use of **deep neural networks** as well as **statistical machine translation**. Simply put, this involved **refining the first "rough" translation** by going back over the results several times in each direction, **comparing and contrasting and learning each time**, in a similar way to a human. A translation system already has a fair idea of what a grammatical sentence in each language looks like based on all the documents it's learned from in the past. "Modern translation systems approach translation as **a problem of learning the transformation of text** between languages from existing human translations and **leveraging recent advances in applied statistics and machine learning**," Reaching **human parity** sounds like a pretty impressive achievement. But even Microsoft admits that translating historic news articles is not the same as translating **live human conversation**, where **the nuances of idiom, accent and dialect present a much bigger challenge**. Last year, Google launched **wireless in-ear headphones** - although how **accurately** it can do this is **up for debate**. And New York-based start-up Waverly Labs has developed its own smartphone app that can translate 15 languages **in near real-time**. "If you train your model with parallel sentences coming from a manuscript, and try to translate a conversation between people talking nowadays, the model will be very confused because both **the content and the style of today's conversations** will be very different from what you will find in the manuscript."

(Emma Woollacott. BBC)

Glossary:

Translation apps; to iron out; embarrassing gaffes; glitches; mistranslations; to botch; neural networks; to be on the way out; to navigate the local lingo; non-mainstream languages; reliable; the most likely meaning; to be on a par with; statistical machine translation; to refine the first "rough" translation; human parity; the nuances of idiom; to be up for debate.

Task 1. *Translate into English:*

Певні **перекладацькі додатки** здатні **виправляти похибки** («ляпи») у перекладі. Навіть у текстах дипломатичних домовленостей можна знайти неякісний переклад, за котрий може бути соромно. Відтак, перекладацькі додатки потрібно **удосконалювати**. Машинний переклад ґрунтується на статистичному методі і на **глибинних нейронних мережах**, котрі враховують минулий досвід і перекладацькі недоліки у минулому, зіставляючи «чорновий» варіант і удосконалюючи його. Щодо **точності** машинного перекладу, то тут **можна сперечатися**. Комп'ютер ще не здатний забезпечити переклад **на якісному рівні професійного перекладача**. Залишається проблемою переклад стильових характеристик повсякденного мовлення, **тонкощів ідіоматичних зворотів**, особливостей вимови.

Task 2. *Translate into Ukrainian. Mind special terminology:*

Modern translation systems approach translation as a problem of learning the transformation of text between languages from existing human translations and leveraging recent advances in applied statistics and machine learning. Reaching human parity sounds like a pretty impressive achievement. But even Microsoft admits that translating historic news articles is not the same as translating live human conversation. One big problem is that words often have more than one meaning. These homographs, as they're called, can lead to embarrassment not just for holidaymakers but for governments as well. To deal with mistakes like this, translation apps are continuously refining the ways in which machine learning is applied. They make use of previously translated texts to provide their answers, checking the context in which the word has been used before and selecting the most likely meaning. Earlier this year a set of Chinese news articles were machine translated into English and a team of independent experts found that they were on a par with translations provided by two professional translators.

V. *Read the text. Pay particular attention to special terminology of artificial intelligence and ChatGPT functioning:*

ChatGPT: what can the extraordinary artificial intelligence chatbot do?

End of the essay?

Since its launch in November last year, **ChatGPT** has become an **extraordinary hit**. Essentially **a souped-up chatbot**, the AI program can **churn out** answers to the biggest and smallest questions in life, and **draw up** college essays, fictional stories, haikus, and even **job application letters**. It does this by **drawing on** what it has **gleaned** from a staggering amount of text on the internet, with careful guidance from human experts. Ask ChatGPT a question and it will do its best to respond. The answers are confident and **fluently written**, even if they are sometimes **spectacularly** wrong. The AI **is fed hundreds of billions of words** in the form of books, conversations and web articles, from which **it builds a model**, based on **statistical probability**, of the words and sentences that **tend to** follow whatever text came before. It is a bit like predictive text on a mobile phone, but scaled up massively, allowing it to produce entire responses instead of single words. The significant step forward with ChatGPT lies in the extra training it received. The initial language model was **fine-tuned** by feeding it a vast number of questions and answers provided by human AI trainers.

These were then **incorporated into its dataset.** This **human-guided fine-tuning** means ChatGPT is often highly impressive at working out what information a question **is really after**, gathering the right information, and **framing a response in a natural manner**. The result, according to Elon Musk, is **"scary good",** as many early users – including college students who see it as **a saviour for late assignments** – will **attest**. Unlike older chatbots, ChatGPT has been designed **to refuse inappropriate questions** and to avoid **making stuff up** by **churning out** responses on issues it has not been trained on. It has other, more fundamental limitations, too. ChatGPT has **no handle on the truth**, so even when answers are fluent and **plausible**, there is no guarantee they are correct. Prof Michael Wooldridge, director of foundational AI research at the Alan Turing Institute in London, says: "If I write a text message to my wife that starts: 'I'm going to be ...' it might suggest the next words 'in the pub' or 'late', because it's looked at all the messages I've sent to my wife and learned that these are the most likely ways I'll complete that sentence. ChatGPT does exactly the same thing on a massively large scale. It would take **1,000 human lifetimes** to read the amount of text the system was trained on and hidden away in all of that text is an awful lot of knowledge about the world. ChatGPT sometimes writes **plausible-sounding** but incorrect or **nonsensical** answers. It doesn't know what's true or false. It doesn't know about the world. You should absolutely not trust it. You need to check what it says.

(The Guardian)

Glossary:

AI; a souped-up chatbot; nonsensical; plausible-sounding; to churn out; to make stuff up; to have no handle on the truth; a saviour for late assignments; "scary good"; fine-tuned; to build a model; to frame a response in a natural manner; human-guided fine-tuning; to incorporate into its dataset; statistical probability; the AI is fed hundreds of billions of words; human-guided fine-tuning; fluently written; to glean; to draw on; to draw up; to attest; inappropriate.
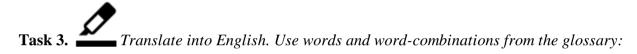
Task 1. *Find equivalents in the text to the following words and word-combinations:*

- Отримати інформацію із приголомшливої кількості текстів;

- вдосконалений чат-бот;

- писати твори для школи та есе для університету;

 - спиратись на отримані знання;

- будувати модель на основі статистичної ймовірності;

- додатково налаштована програма;

- хвацько написаний текст;

- вводити в базу даних доцільні запитання;

- ступінь довершеності генерованого тексту лякає;

- якщо команда недоречна, чат-бот мусить її відхилити.

Task 2. *Translate into Ukrainian. Mind metaphorical expressions:*

A **souped-up** chatbot, the AI program, can **churn out** answers to the biggest and smallest questions in life, and draw up college essays, fictional stories, and even job application letters. It does this by drawing on what **it has gleaned from** a staggering amount of texts on the internet, with careful guidance from human experts. Ask ChatGPT a question and it will do its best to respond. The answers are confident and **fluently written**, even if they are sometimes spectacularly wrong. It is "**scary good**", as many early users – including college students who see it as **a saviour for late assignments** – will **attest**. Unlike older chatbots, ChatGPT has been designed to refuse inappropriate questions and to avoid **making stuff up** by churning out responses on issues it has not been trained on. It has other, more fundamental limitations, too. ChatGPT has no **handle on the truth**, so even when answers are fluent and plausible, there is no guarantee they are correct.

Task 3. *Translate into English. Use words and word-combinations from the glossary:*

Можливості чат-бота вражають. Він може не просто **змістовно відповідати** на запитання користувачів, але й виконувати певні завдання. Нейромережа здатна **генерувати тексти** різного стилю, наприклад: скласти корпоративний лист, написати есе чи підготувати змістовний пост для соціальних сторінок. Чат-боту можна ставити будь-які запитання. Відповідає він максимально розгорнуто та зрозуміло.

Для генерації тексту користувачу необхідно вказати тему повідомлення і його параметри. Далі ChatGPT генерує текст з дотриманням структурних вимог та відмінною граматикою. Інша людина, яка прочитає такий текст, не здатна точно сказати, хто його написав. Саме цей аспект **викликав занепокоєння** серед представників освітньої сфери. Тепер школярі й студенти можуть генерувати домашні завдання за допомогою чат-боту і не боятися провалу під час перевірки тексту на **плагіат**. У школах штату Нью-Йорк **заборонили** ChatGPT через побоювання, що учні можуть використовувати його для **шахрайства**. Хоча інструмент може надавати **швидкі та прості відповіді** на запитання, він не формує навичок критичного мислення, які є важливими для успіху в навчанні. Через це управління освіти штату Нью-Йорк вирішило **обмежити доступ** до ChatGPT для студентів та вчителів на **пристроях** закладів освіти.

(Економічна правда)

V. SCIENTIFIC RESEARCH MUST BE ROBUST

1. *Read the text. Pay special attention to scientific terminology:*

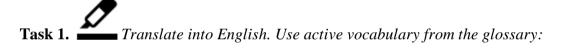### Replication is important in science. Scientific research must be robust

EXCITING results from a scientific study are in effect meaningless if they cannot be **replicated**. All too often, at least in psychology experiments, that seems to be the case. A new report by a scientist who looks at this area, Brian Nosek of the University of Virginia, has once again showed that a high proportion of psychology studies **failed to replicate**. And this time, Dr Nosek and his

colleagues may have found a **shortcut** to identify which **fall into this category**. In most circumstances, a study is considered to be significant if **the odds are 5%,** or lower, that the result would have occurred by chance. So for every 20 studies that get published, it is reasonable to expect that one will have results that are not correct. Dr Nosek, working with a different team, found something alarming: that a whopping 64% of 97 psychology experiments that he re-ran failed to replicate. Those experiments had appeared **in specialist publications**. <...> He expected replications of work in these **top-tier** journals to be more successful. He also re-ran them using samples that were five times larger than those of the originals to reduce the possibility of getting a different result due to chance. Although the results were better <...>, eight of the 21 experiments failed to replicate. As a psychologist himself, Dr Nosek was curious whether the research community had a sense of which sorts of experiments were likely to replicate. <...> All this suggests that experts had a decent **inkling ahead of time** of which of the studies would not replicate, despite the **peer-review process** used by scientific **journals to weed out** experiments that might not be **robust**.
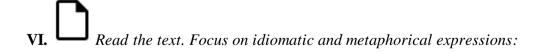
(The Economist)

Glossary:

To fail to replicate; a shortcut; to fall into this category; the odds are; whopping; the re-ran experiments failed to replicate; top-tier journals; to be likely to replicate; tokens; to trade on the outcome; to buy into the "shares"; to be on the money; stakes in the non-replicants; to be worth nothing; an inkling; the peer-review process; to weed out; robust experiments.

Task 1. *Translate into English. Use active vocabulary from the glossary:*

Результати дослідження **нічого не варті**, якщо їх неможливо **верифікувати** (повторити). Значний відсоток (до 5%) проведених експериментів не витримують тест на верифікацію. Навіть у відомих журналах публікують результати експериментів, котрі неможливо повторити. Експерти знайшли зручний спосіб перевірки результатів дослідження на **достовірність**. Вони видали спеціалістам жетони вартістю 50 центів і провели «торги» експериментів, котрі виявляли здатність бути повтореними. Спеціалісти «викупляли» акції, робили ставки. Деякі спеціалісти «збагатилися», дякуючи тонкому відчуттю стосовно експериментів, котрі не мали шансів пройти верифікацію. Їхні акції були нічого не варті. **Експертна оцінка** має «**відсіювати**» потенційно **непрохідні матеріали** і залишати лише дослідження, котрі мають **достовірні результати**.

VI. *Read the text. Focus on idiomatic and metaphorical expressions:*

Scientific publishing

European countries demand that publicly funded research be free

Many scientists have **championed** the idea that **publicly funded research** should be available to all and not locked away in pricey journals. Although this **"open access" ethos** has become more popular in recent years, most researchers' work remains **fenced off by an online paywall**. That

may change with a radical European initiative unveiled earlier this month. Eleven European countries, including Britain, France and the Netherlands, have **signed up to** what is called "Plan S". This requires scientists who **benefit** from those countries' national-research funding organisations to publish their work only in open-access journals **on freely accessible websites**. Plan S was **forged under the aegis** of Science Europe, an **umbrella** group of European research funders. Marc Schiltz, its president, **takes a muscular stance**. "**Monetising the access** to new and existing research results is profoundly **at odds with the ethos of science,**" he has written. Not surprisingly, publishers have given Plan S **a frosty reception.** The American Association for the Advancement of Science (AAAS), which publishes *Science*, said it would **"disrupt** scholarly communications**, be a disservice** to researchers, **and impinge** academic freedom". Another **point of contention** is that the publication fees which scientist pay to open-access journals would be **capped** across Europe. A figure **has yet to be set**, but the International Association of Scientific, Technical, and Medical Publishers believes this could reduce the level of **peer review** that journals could afford, and thus **undermine quality**. Plan S is not yet **a done deal**. One possibility is that universities will be able **to post peer-reviewed papers online** as soon as they are accepted for publication, while libraries would continue to pay for the final **typeset versions.**

(The Economist)

Glossary:

Ethos; accessible; muscular; aegis; to unveil; to monetise; to be at odds with; to disrupt; a disservice; to impinge; to inflate; contention; to cap; peer-reviewed; to undermine; to forge; to impinge; to benefit; to champion.

Task 1. *Translate into Ukrainian. Mind idiomatic and metaphorical expressions. Beware of literalisms:*

- Publicly funded research;

- scientists have championed the idea;

- to champion something;

- pricey journals;

- "open access" ethos;

- to be fenced off by an online paywall;

- a radical initiative is unveiled;

- to sign up to;

- freely accessible websites;

- the most esteemed periodicals;

- the plan was forged under the aegis of;

- to take a muscular stance;

- to monetise the access;

- to be at odds with the ethos of science;

- to give a frosty reception;

- to undermine the system;

- the advancement of science;

- to disrupt scholarly communications;

- academic freedom;

- to pay a fee;

- a stepping stone to full open access;

- to inflate publishers' profits;

- a point of contention;

- to cap the publication fees;

- a peer review;

- to undermine quality;

- a figure has yet to be set;

- is not yet a done deal;

- to post peer-reviewed papers online.

Task 2. *Translate into English. Use active vocabulary:*

Результати досліджень за кошти суспільства мають бути у **вільному доступі**. Ця ідея обговорюється, оскільки дорогі наукові журнали створили у мережі своєрідний **ціновий паркан** на шляху до наукових досягнень. Деякі країни схвалили досить **радикальну ініціативу** щодо забезпечення вільного доступу до наукових сайтів. Відповідно, був створений план **під егідою** наукового товариства. Позиція науковців є **твердою**: монетизація послуг щодо доступу до результатів наукових досліджень **суперечить філософії науки**. Проте, ця ідея була сприйнята досить холодно науковими видавництвами. Вони стверджували, що це може **підірвати** взагалі систему наукових публікацій, **перешкоджати** розвитку науки, стояти на шляху обміну науковими ідеями, що це **погана послуга** науковцям, котра **обмежить** академічну свободу. Але більшість вважає, що це буде важливий крок до вільного доступу до науки. Видавці ж говорять, що обмеження плати за публікації знизить якість **експертної оцінки** наукових статей, **підірве** їхню фінансову спроможність. Треба визнати, що ця справа ще **не є завершеною**.

VII. *Read the text. Concentrate on special terminology:*

Programming languages: Python for research

In December 1989 Guido van Rossum, a Dutch computer scientist, set himself a Christmas project. **Irked by shortcomings** in other programming languages, he wanted to build his own. His principles were simple. First, it should be easy to read. <...> Second, it should let users create their own **packages of special-purpose coding modules**, which could then be made available to others to form the basis of new programs. Third, he wanted a "short, unique and slightly mysterious" name. He therefore called it after Monty Python, a British comedy group. The package **repository** became known as the Cheese Shop. <...> "I certainly didn't set out to create a language that was intended for mass consumption," he explains. But in the past 12 months Google users in America have searched for Python more often than for Kim Kardashian, a reality-TV star. The rate of **queries** has trebled since 2010, while **inquiries after** other programming languages have been flat or declining. The language's popularity has grown not merely among professional developers. Codecademy, a website that has taught 45m **novices** how to use various languages, says that by far the biggest increase in demand is from those wishing to learn Python. It is thus **bringing coding to the fingertips** of those once baffled by the subject. <...> Python is not perfect. Other languages have more **processing efficiency** and **specialised capabilities**. <...> JavaScript is the language of choice for **applications** accessed **via a web browser**. Countless others have evolved for various purposes. But Python's **killer features**—simple syntax that makes its code easy to learn and share, and its huge **array** of third-party packages—make it a good **general-purpose language**. Its **versatility** is shown by its range of users and uses. <...> Some of the most **alluring** packages that Pythonistas can find in the Cheese Shop **harness artificial intelligence** (AI). Users can create **neural networks,** which **mimic** the connections in a brain**, to pick out patterns** in large **quantities of data.** <...> Marketers, for instance, can use the language to build statistical models that measure the effectiveness of campaigns. College lecturers can check whether they **are distributing grades** properly **scraping** the web for data <...>. For professions that have long relied on **trawling through spreadsheets**, Python is especially valuable.
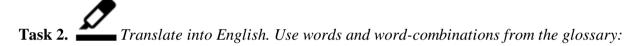
(The Economist)

Glossary:

Programming; to be irked; to set out; mass consumption; to be flat; to decline; a novice; versatility; alluring; neural networks; to mimic; to harness; array; applications; a repository.

Task 1. *Translate into Ukrainian. Pay particular attention to the terminology of programming languages:*

- Computer packages of special-purpose coding modules;

- the basis of new programmes;

- a package repository;

- the rate of queries;

- to bring coding to the fingertips;

- to be baffled by the subject;

- processing efficiency;

- specialised capabilities;

- the language of choice;

- applications accessed via a web browser;

- killer features;

- a general-purpose language;

- the range of users and uses;

- to harness artificial intelligence;

- to mimic the connections in a brain;

- to pick out patterns in large quantities of data;

- to distribute grades;

- to scrape the web for data;

- to trawl through spreadsheets.

Task 2. *Translate into English. Use words and word-combinations from the glossary:*

Основи програмування стали **доступними** для загалу. Автора проекту **дратувала недолугість** мов програмування. Він створив простішу мову – без чудернацьких формул. На додаток, його проект як **репозитарій ресурсних пакетів** надавав можливість користувачам самим утворювати **пакети модулів кодування** для спеціальних цілей. У розробника не було прагнення створити продукт для масового споживання. Проте, кількість **запитів** на його програму потроїлася за останні роки, в той час як кількість запитів на інші програми або **залишилась без змін**, або зменшилась.

«Пайтон» є популярним не лише серед програмістів та прихильників (фанатів) проекту, але і серед новачків, котрих лякали складнощі програмування. «Ява» є складним додатком, це винятково якісна доступна програма ресурсів, котрі шукають в інтернеті. Хоча інші мови програмування виявляли більшу **ефективність** під час обробки матеріалу і вони демонстрували переваги стосовно **спеціальних можливостей**, у «Пайтона» були непереборні принадні риси: простий синтаксис, велика кількість ресурсів і наявність численних можливостей для користувачів-партнерів, що робило його **мовою програмування для загального користування**. Зникла потреба у нудному перегортанні веб-сторінок, у **перечитуванні списків для отримання потрібних даних** і аналізу закономірностей їх організації. Це вкрай потрібна мова програмування для викладачів для вірної оцінки знань студентів.

Популярність цієї мови підтверджена частотністю згадок у мережі. **Найпривабливішою рисою** «Пайтона» є надання можливостей користувачам приборкувати штучний інтелект – утворювати **нейронні мережі як аналоги зв'язків у людському мозку** і **виявляти закономірності організації великих масивів даних**.

VIII. ⬜ *Read the text. Focus on academic terms:*

Lecturers urged to review assessments amid concerns over new AI tool

Lecturers at universities have been urged to review the way in which their courses are **assessed** amid concerns that students are already using a **potent** new AI tool capable of producing high-quality essays with minimal human input. ChatGPT, the latest chatbot from OpenAI, has already **triggered concerns** about the potential for hard-to-detect **plagiarism** and questions about the **validity of the essay** as a future form of assessment. It has been described as "a **gamechanger**" that will prove a **challenge** in universities and schools. Though courses are assessed through traditional end-of-course examinations, experts are concerned pupils who use the technology to do their homework will become dependent on **AI-generated** answers without acquiring the knowledge and skills they need. Working groups have been set up in university departments to assess the challenge of this latest **iteration** of AI **text-generating** technology, with the expectation that methods of assessment in certain courses will have to be updated. Experts admit to feeling both excited and alarmed.   In one case, staff in the computer science department at University College London recently decided to change an assessment. Previously students were offered a choice between an **essay-based** or **skills-based** assessment as part of **final coursework**, but the essay option has been removed. Dr Thomas Lancaster, a computer scientist working at Imperial College London, best known for his research into **academic integrity**, contract cheating and plagiarism, said it was in many ways **a game changer**. He said: "It's certainly a major **turning point** in education where universities have to make big changes". It would be more difficult **to spot** and prove plagiarism, though work is already under way to improve **detection software**. Universities have already signalled a return to greater use of **in-person exams** to try to protect **the integrity of assessment**. Lancaster said, however, **a wholesale** return to exams was not the answer, suggesting instead the use of **oral presentations** and **vivas** to enable students to demonstrate their **grasp of a subject**. Universities could try to ban it, as they ban other forms of cheating like essay mills, which students pay to produce an original piece of work that they then **submit**. The other alternative is that you allow students to use it. lf we're preparing students for the outside world of work and if in the workplace this sort of technology is given to us, then I think we need **to embrace** it rather than ban it. We don't need **to revert** to **in-person exams**: this is a great opportunity for the sector to explore new assessment techniques that **measure learners on critical thinking, problem-solving and reasoning skills** rather than essay-writing abilities.

(The Guardian)

Glossary:

AI text-generating technology; in-person exams; essay-based; skills-based; the validity of the essay; to revert; problem-solving; reasoning skills; to embrace; to ban; a final coursework; to submit; the grasp of a subject; vivas; a wholesale return to exams; the integrity of assessment; academic integrity; plagiarism detection software; to spot; a game changer; potent; iteration; to get to grips with; to soup-up; a licence to cheat; to upgrade.

Task 1. ✎ *Find equivalents in the text to the following words and phrases:*

- Форма контролю у вигляді есе;

- форма контролю у вигляді усного екзамену;

- цілковито повернутися до екзаменаційного контролю;

- засвоєння матеріалу;

- вирішення творчих завдань;

- оцінка навичок логічного мислення;

- ефективна вдосконалена програма;

- об'єктивність оцінювання;

- академічна доброчесність;

- дозвіл на шахрайство;

- вирішувати проблему;

- заборонити або прийняти чат-бот в університетах.

Task 2. *Translate into Ukrainian. Mind stylistic characteristics of the text:*

Experts admit to feeling both excited and alarmed. Staff in the computer science department at University College London recently decided to change an assessment. Previously students were offered a choice between an essay-based or skills-based assessment as part of final coursework, but the essay option has been removed. Geoff Barton, the general secretary of the Association of School and College Leaders, acknowledged that schools would have to get to grips with how to utilise ChatGPT's benefits while guarding against negative implications. "As with all technology, there are caveats around making sure that it is used responsibly and not as a licence to cheat, but none of that is insurmountable," he said. In contrast, New York City schools have already banned the use of ChatGPT on all devices and networks because of concerns it will encourage plagiarism.