## Министерство науки и высшего образования Российской Федерации

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Кафедра иностранных языков

# ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ)

НЕФТЕГАЗОВОЕ ДЕЛО

Методические указания к самостоятельным работам для студентов магистратуры направления 21.04.01

САНКТ-ПЕТЕРБУРГ 2023

## УДК 811.111(073)

**ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ):** Методические указания к самостоятельным работам / Санкт-Петербургский горный университет. Сост.: *О.Ю. Гагарина, И.Г. Герасимова*. СПб, 2023. 32 с.

Основной целью методических указаний является развитие иноязычной коммуникативной профессиональной компетенции. Особое внимание уделяется формированию активного словарного запаса, который включает наиболее употребительные термины по нефтегазовому делу. Предлагаются разнообразные виды упражнений, позволяющие активизировать познавательную деятельность студентов и развивать коммуникативные умения на английском языке.

Методические указания предназначены для студентов направления 21.04.01 «Нефтегазовое дело» направленность (профиль) программы «Разработка нефтяных месторождений» и «Эксплуатация скважин в осложненных условиях» и согласованы с программой по иностранному языку для студентов неязыковых вузов.

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# ОГЛАВЛЕНИЕ

Введение	4
Part I Leading companies in oil and gas industry	5
Text 1	5
Text 2	6
Text 3 Public speaking	10
Part II Digital oilfield	13
Text 1	13
Text 2	15
Part III Yamal LNG	20
Test your general english	23
Test your technical vocabulary	29
References	32

# **ВВЕДЕНИЕ**

Методические указания предназначены для самостоятельной работы студентов направления подготовки 21.04.01 Нефтегазовое дело, изучающих английский язык. Основной целью настоящих указаний является формирование иноязычной коммуникативной профессиональной компетенции.

Тематика текстового материала пособия широка и охватывает такие разделы как «Ведущие компании нефтегазовой промышленности», «Цифровое месторождение» и «Ямал СПГ».

Текстовый материалом взят главным образом с сайтов ведущих мировых нефтегазовых компаний (Total, Schlumberger, BP). Авторами разработан целый ряд заданий коммуникативного характера, которые призваны подготовить будущих специалистов к реальному общению в профессиональной среде.

Методические указания составлены на основе программных требований по иностранным языкам для студентов неязыковых вузов и в соответствии с рабочей программой, разработанной кафедрой иностранных языков для направления подготовки 21.04.01.

## PART I LEADING COMPANIES IN OIL AND GAS INDUSTRY

Text 1 BP Task 1.

Work in pairs. Discuss what you know about BP.

#### Task 2

Translate the words and word combinations into Russian: low carbon, energy generating capacity, charging points, to be well on track with, emission, changing energy needs, to accelerate, to leverage, to amplify, to pivot from...to..., solution

### Task 3.

Visit the official site of BP and watch the video you'll find there <a href="https://www.bp.com/en/global/corporate/what-we-do/our-strategy.html">https://www.bp.com/en/global/corporate/what-we-do/our-strategy.html</a> While watching make notes on:

- three areas of BP focus;
- three sources of differentiation to amplify value;
- re-invention of BP

#### Task 4.

After watching the video collate your notes with your partner's and make up 10 sentences about BP together.

#### Task 5.

Read the text about BP company. Translate it in writing.

## Our values

We are an integrated energy business with operations in Europe, North and South America, Australasia, Asia and Africa.

Everyone who works for BP is guided day in and day out by our values: safety, respect, excellence, courage and one team. In a fast-changing world, these values provide continuity and a shared point of reference for every action we take and every decision we make

Starting in 1908 with the discovery of oil in Persia, our story has always been about transitions – from coal to oil, from oil to gas, from onshore to deep water, and now onwards towards a new mix of energy sources as the world moves into a lower carbon future.

## Net Zero by 2050

Our ambition is to be a net zero company by 2050 or sooner. And to help the world get to net zero. This will mean tackling around 415 million tonnes of emissions – 55 million from our operations and 360 million tonnes from the carbon content of our upstream oil and gas production. Importantly these are absolute reductions, to net zero, which is what the world needs most of all. We are also aiming to cut the carbon intensity of the products we sell by 50% by 2050 or sooner.

"The world's carbon budget is finite and running out fast; we need a rapid transition to net zero," Bernard Looney, chief executive officer says.

Source: https://www.bp.com/en/global/corporate/who-we-are/our-ambition/our-aims.html

## Text 2 Careers Task 1.

Work with a partner and discuss the questions:

- Do you have any work experience?
  - Where do you see yourself in five years' time?
- What company would you like to work for and why?
- Would you like to work as a drilling engineer? Why (not)?

### Task 2.

Read the overview describing the job of a drilling engineer at BP. Does it sound appealing to you?

## Overview

Drilling engineers are a part of the wells discipline and BP's Global Wells Organization (GWO). GWO is an Upstream operating function whose goal is to deliver safe, compliant, and reliable wells. In GWO, drilling engineers take part in engineering activity covering the planning,

programme preparation, and execution of drilling operations within the wells team.

As a drilling engineer, you are involved in designing, planning and programming of drilling activities. During construction of the well, you are responsible for supporting rig operations and ensuring the well is built safely and within budget. Drilling engineers support rig operations to get to the target zone and design the well to withstand conditions that may be experienced when the well is put on production or injection. There are many types of well programmes including exploration wells, appraising existing prospects and production wells in established acreage.

#### Task 3.

Read about your role and responsibilities as a drilling engineer. Translate the words and word combinations in **bold**.

## Your role and responsibilities

As part of this role you are required to work in a diverse, multidisciplined team that involves geologists, **reservoir engineers**, **completions engineers**, equipment service company representatives, and production operations teams to ensure that the well plan satisfies all **company objectives**.

As a drilling engineer, you could:

- Participate in the preparation of drilling programmes.
- **Prepare cost and time estimates** for drilling operations.
- Ensure equipment is available for **prompt delivery** to the rig.
- Prepare drilling engineering modelling as required to support planning and **ongoing drilling operations**.
- Collect and analyze data to assist in optimizing rig-site drilling activities and future well programmes, such as torque and drag, and hole cleaning.
- **Perform calculations** such as hydraulics, **leak off tests**, casing/tubing tallies, cement volumes, etc.
- **Promote teamwork attitude** between BP and third parties engaged in well delivery.

- Ensure the construction of the well to BP and **regulatory requirements**.
- Participate in all safety and environmental related activity within the team.
- Visit service company yards to observe equipment tests, make up equipment, and learn.

Source: https://www.bp.com/en/global/corporate/careers/students-and-graduates/careerareas-for-graduates/engineering.html#accordion\_Drilling%20engineer%20-%20Wells

## Task 4.

Watch a short job profile of a drilling engineer https://www.youtube.com/watch?v=0NZFokQsj8E. Answer the questions below.

- 1) What does Kristen like about engineering?
- 2) Does she work in an office or on the rig?
- 3) Has she ever worked on the rig?
- 4) What was her on/off rotation period?
- 5) What is 'pre-spud meeting' she mentioned?
- 6) Does she sound motivating and inspiring? Do you think she loves her job?

# Task 5.

Translate into English.

Translate into English.	
промысловый инженер, специалист по	
разработке нефтяных и газовых месторождений	
производить расчеты, выполнять вычисления	
составлять сметные расчеты	
испытание на герметичность (приемистость)	
требования нормативных документов	
цели (задачи) компании	
инженер по освоению (заканчиванию) скважин	
работы на буровой площадке	
способствовать слаженной работе команды	
текущие (проводящиеся) буровые работы	

#### Task 6.

Read the overview describing the job of a petroleum and reservoir engineer at BP. Can these jobs be called interdisciplinary? Why (not)?

### Overview

From exploration to production, our petroleum and reservoir engineers play a crucial role in bp's field operation success. As a petroleum or reservoir engineer, you'll be essential to ensuring we extract hydrocarbons efficiently from our global discoveries.

You'll be a vital member of our team and support the entire lifecycle of an oil or gas field. This covers everything from evaluating prospects to determine potential productivity and profitability, to developing which areas to optimize hydrocarbon production in.

### Task 7.

Read about responsibilities of petroleum and reservoir engineers. Translate the text in writing.

## Your role and responsibilities

Petroleum engineers are a key link between planning and operations. You'll be creating value through performance optimization and developing well intervention requirements to maintain or enhance the production of hydrocarbons throughout the life of the field. Depending on your BP location and role, you will gain broad capability, primarily through job experiences, in:

- Reservoir performance for example, in production forecasting or water and gas injection.
- System optimization for example, in sand management or artificial lift.
- Well management for example, in well performance tracking or well operations.

As a reservoir engineer, you'll focus on integrating geoscience, facilities and well engineering data to understand hydrocarbon reservoir performance and optimize the economic recovery of hydrocarbons. Depending on your bp location and role, you will gain broad capability, primarily through job experiences in:

• Reservoir performance - for example, in well planning and delivery, or flood management.

- Reservoir management for example, in depletion strategy or reserves estimation.
- Reservoir simulation for example, in history matching or model building.

 $Source: \ https://www.bp.com/en/global/corporate/careers/students-and-graduates/career-areas-for-areas-f$ 

graduates/science.html#accordion\_Petroleum%20and%20Reservoir%20engineering

# Text 3 PUBLIC SPEAKING

#### Task 1.

Work in a small group. Discuss the questions below.

- 1) Have you ever had to speak in front of the audience? What event do you remember best?
- 2) How did you feel when you were making a speech?
- 3) Did you succeed in delivering your presentation? Could you have done it better?

### Task 2.

Watch the video "How to start your presentation: 4 step formula for a killer intro" <a href="https://www.youtube.com/watch?v=aGEFtRwPhE4">https://www.youtube.com/watch?v=aGEFtRwPhE4</a> and take notes of the steps.

## **Task 3.** Discuss the questions below with your partner.

- 1) What is more important in a presentation a speech or good slides? Why?
- 2) What are the rules of creating effective slides?

## Task 4.

Watch the video "Create slides people will remember" <a href="https://www.youtube.com/watch?v=OeV2fHEM4RI">https://www.youtube.com/watch?v=OeV2fHEM4RI</a> to check your ideas about effective slides. Take notes of the guidelines.

## Task 5.

Read the text. Did you find the tips helpful? Discuss your ideas with a partner.

Giving presentations at university is a great way to practice and gain confidence before you have to do one in an interview for a job. You'll almost certainly be asked to give a presentation at least once during your time at university. Depending on your subject, you might be expected to summarise your reading in a seminar, deliver the results of a scientific experiment, or provide feedback from a group task.

Whatever the topic, you'll usually be presenting to your tutor and fellow students. Some people may not find that too daunting, but others will be understandably apprehensive - getting up and making your case in front of an audience isn't easy, especially when you're not used to it.

# Prepare carefully

Give yourself plenty of time to prepare thoroughly, as a last-minute rush will leave you flustered when it comes to delivering your presentation. Gather the information you need and set it out in a logical order, with a clear introduction and conclusion.

You can make detailed notes as part of your planning, but you shouldn't rely on these on the day, as reading from a prepared text sounds unnatural.

If you want to take a memory aid with you, you should use small index cards, as referring to A4 sheets of paper during your presentation can be distracting and highlight your nerves if your hands shake.

## Use visuals wisely

Visuals should complement your oral presentation, not repeat it. You are the main focus - your slides should offer a brief summary of points, or an illustration supporting the concept that you're discussing. Don't fall into the trap of merely reading aloud what is written on the slides.

Make sure you use a clear and suitably sized font. You should use short phrases or sentences so you don't overcrowd your slides. Images can be a great way to grab the audience's attention, but the substance is over the fancy fonts and animations.

## Consider your audience

There are many different elements you can include in a presentation - sound, video, hand-outs and questions at the end, for example - so you'll need to think about which ones are suitable.

For example, whether your tone is serious or light-hearted might depend on factors such as the subject you're studying, or whether the presentation is an assessed piece of work. Show that you have thought about the audience. Consider how much background information they will need. Do they already have some knowledge of the topic you're presenting?

Spending the first half of your presentation telling an audience what they already know will be frustrating for them. Equally, if you go straight into the detail they may get lost. It's vital you get the balance right, which means knowing your audience is the key.

### Practice with a friend

You should run through your presentation in full more than once, ideally in front of an audience. This will enable you to work out whether your presentation is the right length when spoken aloud, and give you the chance to get used to expressing yourself in front of others.

## Be positive

It is important to develop a positive attitude over the days leading up to the presentation. This may seem obvious and easier said than done if you're shy, but pull it off and it will make a huge difference to how you perform. Acknowledge your nervousness (if any), but don't give in to negative thinking. Counteract it by telling yourself, "Yes I'm nervous, but I can do this".

It might feel like the room is against you, but this isn't the case. Don't assume your audience wants you to fail. Some students have absolute dread when approaching presentations, yet their friends in the class are there to support them and really want them to succeed.

## Don't rely on technology

We've all witnessed the agony of a presenter struggling with a faulty USB stick or failing to get a projector to work. However, with a little bit of planning, you can minimise the risk of technology tripping you up.

If possible, test your presentation beforehand with the same equipment that you'll be using for the real thing. Otherwise, try to arrive early on the day and have a run through.

However, you shouldn't rely too heavily on your slides. Always be ready to give your presentation without them if necessary, using your notes or index cards as memory aids.

And if a piece of technology does fail, don't panic. It will happen to everyone in the room at some point. Get through it without being fazed, and it might even impress your tutor more than if everything went perfectly.

 ${\bf Based\ on: \underline{https://www.prospects.ac.uk/applying-for-university/university-life/6-steps-to-a-successful-presentation}$ 

## Task 6.

Revise the materials on public speaking and prepare a 5-minute presentation about your research work.

## Part II DIGITAL OILFIELD

Text 1

## Task 1.

Work in small groups and discuss what you know about digital oilfields. Can you give any examples?

### Task 2.

Skim the text below. What is the main idea of the text?

## Task 3.

Read the text and answer the questions.

- What is the main purpose of Performance Live?
- What are the main advantages of Performance Live for Schlumberger and its customers?

# Schlumberger Launches Digital Service For Remote Wellsite Operations Control Optimisation

Oilfield Technology, 30 June 2020

Schlumberger has introduced its Performance Live digitally connected service that optimises remote wellsite operations control while improving safety, efficiency and footprint. The service includes technology and domain expertise within a digital ecosystem, leveraging cloud-based applications and automated data workflows through a secure and robust data network.

The Performance Live service provides customers with instant access to data and collaboration with domain experts, enabling faster, more informed decision making for directional drilling, well logging, formation testing and other oil and gas operations. Automated end-to-end workflows simplify tasks that eliminate redundancy and deliver consistent service. In addition, the service increases operational safety and reduces carbon footprint with less travel and fewer personnel needed on location.

"Performance Live service transforms the customer experience, enabling higher levels of operational control," said Hinda Gharbi, executive vice president, Services and Equipment, Schlumberger. "Downhole technology is ready to run with data instantly available to the decision maker—without that person having to be on location."

The Performance Live service is used by more than 60% of Schlumberger well drilling jobs worldwide and covering more than 18,000 runs in 2019. In wireline operations, the Performance Live service covered more than 12,000 runs worldwide including more than 230 reservoir and well integrity evaluations offshore Norway in 2019.

 $Source: \ \underline{https://www.oilfieldtechnology.com/digital-oilfield/30062020/schlumberger-launches-digital-service-for-remote-wellsite-operations-control-optimisation/$ 

## Task 4.

Find the English equivalents of the following words and phrases in the text above.

1	экспертные знания	
2	(эффективно) используя	
3	прочный, надежный	
4	(наклонно-) направленное бурение	
5	геофизические исследования скважины, каротаж	
6	испытания пласта	
7	непрерывный производственный процесс	
8	исключить избыточность (неопределенность)	
9	безопасность в эксплуатации	
10	уменьшить воздействие на экологию (в	
	пересчете на углекислый газ)	
11	тотчас доступные данные	
12	(внутри)скважинный	
13	операция, действие	
14	канатные работы в скважине	
15	оценка целостности скважины	

**Task 5.**Speak about Performance Live using the words and phrases from the table.

Text 2 Smarter Ways To Manage A Giant Gas Plant



**Task 1.** Skim the text. What new technologies is it about?

### Task 2.

Read the text. Translate the **bold** words and word combinations into Russian and learn them. Mind the context.

The Nyhamna gas processing plant on Norway's north-west coast is the size of 100 football fields and undergoing upgrades to receive more gas. Meet the expert helping hundreds of people on site work more safely and efficiently with a tablet app, and the **labour-saving** robot **tank** inspector.

Geir Fillip Haseth is a brave man. Every day, come sun, high winds or driving rain, he sails his small boat from Fræna to work at the Nyhamna gas processing plant on the far side of the fjord.

The plant receives natural gas from the Ormen Lange deep-water field 120 kilometres (75 miles) offshore, **removes impurities** from it, then **pipes it to** the UK, where it **meets around 20% of the country's gas needs**. Haseth's choice of transport might be traditional, but his job developing new technologies is anything but.

"We combine our knowledge of operations and technology with a natural curiosity to constantly explore more efficient ways of doing things," he says.

The scale of the operation, which sends up to 70 million cubic metres of gas a day to the UK, demands in-depth planning to safely and efficiently manage hundreds of people working across the site. When the gas plant was being expanded to receive gas from more fields, Haseth came up with the idea of connecting teams around the site using iPads and a new app to manage the task better.

"The app provides an overview of everything happening on site and highlights any potential conflicts," says Haseth. "Staff on site **update progress** in real time using their iPads, **improving accuracy, efficiency and safety**."

Each of the 256 tanks and vessels at Nyhamna **must be checked periodically for flaws** including corrosion. In the past this meant sealing off and emptying tanks before engineers could safely go inside – a **time-consuming process** that affected productivity. But in 2010 Shell started to work with designers at Linjebygg Offshore in Norway and German firm Wälischmiller Engineering on a new method of checking tanks.

Together, they adapted a robot to perform tank inspections. The Telbot TB 100 has a mechanical arm which holds a high-definition camera and a detailed 3D model of the tank in its memory. A long, flexible arm allows the camera to take close-ups anywhere inside the tank. Video footage is relayed back to a control centre where a human inspector looks for flaws and decides how to act. Similar robots cleared away radioactive debris after the Chernobyl nuclear disaster in 1986. The Nyhamna inspection robot was later developed to also include cleaning of tanks and vessels.

Source: https://www.shell.com/about-us/major-projects/ormen-lange/smarter-ways-to-manage-a-giant-gas-plant.html

### Task 3.

Watch the video about the robot inspector. How does it operate and what are its main advantages?

https://www.youtube.com/watch?v=aqfSbaJJCa8&feature=emb\_logo

**Task 4.**Do you remember vocabulary from the text? Translate the words and word combinations from the table below into English.

трудосберегающий, рационализаторский	
удалять примеси	
выполнять обновление	
резервуар (для хранения нефти и	
нефтепродуктов)	
придумать, сообразить	
передавать (данные)	
транспортировать по трубопроводу	
повысить точность	
длительная (затратная по времени)	
процедура	
удовлетворять потребность (спрос)	
проверять (оборудование) на наличие	
дефектов	

### Text 3

### Task 1.

Work in small groups. Discuss the questions below.

- Do you know any ways to optimize oil production? What are they?
- Have you ever heard of digital twins? What are they used for?

#### Task 2.

Read the text. Answer the questions.

- 1) What is the main purpose of digital twins technology?
- 2) What companies are using digital twins? Why?
- 3) Why has the technology of digital twins advanced recently?
- 4) What technologies have contributed to further developing digital twins?
- 5) What is APEX? Why did BP invest in it?
- 6) What are the functions of APEX?

# Digital Twins Are Propelling The Oil And Gas Industry Into The Future Of Asset Optimisation

Digital twins are equipping oil and gas operators with tools to upgrade planning and operational standards - using big data to deliver new oilfield insights.

Industry is steadily mapping the real world into the virtual realm, with advanced systems mirrored by digital twins. Used by NASA in the design of space exploration vehicles, and in Formula One racing to model and test advanced engines and body designs, the concept of digital twins is rooted in the development of advanced systems, which is why it has found a firm footing in the oil and gas industry.

The technology creates a virtual model of production assets that can be constantly updated in real time, thanks to a network of sensors feeding data on operational conditions into the digital twin.

Though it has a long history in the industry already, the sophistication of the dynamic software models, and the detail and

sensitivity of the virtual representation of an asset to real-time conditions, have advanced rapidly. This means new opportunities for asset optimisation, training and predictive analytics are constantly opening up.

This commitment to digital twins is evident in the modelling of existing facilities and the design of new assets. The ability to not only monitor existing conditions but also simulate operating parameters has a profound impact on decision-making procedures. The rise of the internet of things (IoT), artificial intelligence (AI), machine learning and cloud computing has fuelled the adoption of the digital twin model by industry-leading companies.

BP is among those invested in the technology, and has developed a highly-sophisticated simulation and surveillance system called APEX, which it has implemented to create virtual models of all its production systems.

Its petroleum engineers are able to use real-time data to optimise the performance of high-capacity assets – not least in the North Sea, where huge quantities of oil travel through well bores, risers, pipelines and processing infrastructure each day – by assessing the impact of their operational decisions with a digital recreation of real-world assets.

Using APEX, simulations that once took several hours can now be performed in just a few minutes, and the effect of potentially-hazardous operations can be assessed in the safe environment of the virtual world. The system, which was first tested in some of BP's most complex assets in the North Sea, very quickly delivered tangible operational efficiencies.

Source: https://www.nsenergybusiness.com/features/digital-twins-oil-gas/

# **Task 3.** Watch the video about APEX using the link below:

https://youtu.be/q\_gcioB0ao8

While watching write down the key words. Prepare a one-minute speech about APEX. Use the keywords as a plan.

# Part III YAMAL LNG

## Task 1.

Have you ever heard of Yamal LNG project? If yes, what do you know about it? If not, can you guess the aim of the project?

### Task 2.

Watch a promo about the project. Take notes of the key facts and figures. https://www.youtube.com/watch?v=JiFFDJglSxE

# Task 3.

Make a brief report on the project using the information from the video. Below are some words and word combinations to help you.



YAMAL LNG is an integrated project for natural gas production, liquefaction and marketing (Source: https://www.novatek.ru/en/business/yamal-lng/)

LNG train — технологическая линия СПГ, холодильная установка total capacity — общая мощность, суммарная производительность

fabrication yard — цех по сборке (металло) конструкций SPP (Small Power Producer) — малая электростация Sabetta (Russian: Сабетта) is the location of a port and LNG plant—Yamal LNG—on the Yamal Peninsula, in the north of Russia along the Northern Sea Route pile — 3д. свая

#### Task 4.

Work in a group of 4 students. Read one of the 4 parts of the text. Then share the information you read with the partners.

## Adapting to extreme conditions

Constructing, achieving mechanical completion, commissioning and starting up a massive LNG (liquefied natural gas) plant is a sizable and detailed undertaking, regardless of the circumstances. But to do it at one of the most isolated sites in the world, facing bitter cold and the extremes of polar nights and days, is a real challenge.

Sabetta is 600 kilometers inside the Arctic Circle. It is dark and sunless for four months of the year (polar night). In winter, the temperature can drop to -50 C, and the wind chill often makes it feel like -67 C. Without special clothing and equipment, a human can freeze to death in less than 30 seconds.

Normal operations cannot be performed in the open air, as they are at lower latitudes. Therefore, from the beginning, the plant was designed and built in winterized modules—primarily at construction yards in China. These modules were transported by sea freight during the summer months to a newly built port in Sabetta.

## **Ensuring security for people and installations**

Every process unit is enclosed in buildings, modules and shelters that are heated by means of special utilities—in particular, a network of heating fluid. Electric heat tracing is required to keep the process flowing and the safety equipment operable. The enclosure of process units in buildings calls for additional, and sizable, fire- and gas- detection systems to keep everyone and everything safe. When it is necessary to work outdoors,

workers are protected by shelters and/or special Arctic outerwear and face masks.

## A whopping project

500,000 tons of modules were needed to build the plant with its capacity of 16.5 million tons per year, four 160,000-cubic-meter storage tanks and an export terminal with two loading jetties. It is a huge industrial facility with large-scale equipment. Producing LNG requires high-volumes of large bore and cryogenic piping—much larger than those of "normal" upstream plants. The pipes are as large as 1.2 meters in diameter. The same is true of oversized rotating equipment, such as gas turbine driven compressors, electric motors and gas turbine and diesel driven electrical power generators.

Acknowledging the complexity of the project, our team divided its commissioning scope into four main areas. Each was executed by a separate contractor dedicated to the task but obviously interfacing with the others: inlet facilities and condensate storage, LNG trains, utilities and offsites, LNG tanks and main power-generation units.

#### **Milestones**

2011: Construction of infrastructure starts in Sabetta

December 2013: Project launch – Final investment decision (FID)

December 2014: First flight takes off from the international airport in Sabetta, built for the project

July 2016: 58 wells drilled for Phase 1

July 2017: Naming ceremony for the first Yamal ice-class LNG carrier, the Christophe de Margerie (CdM),

August 2017: CdM first voyage via the Northern Sea Route

September 2017: Train 1 inlet facilities gas-in September 2017: 93 wells drilled for Train 2

October 2017: First condensate production

December 2017: First Train 1 LNG cargo exported January 2018: First condensate cargo exported

January 2018: Train 1 reached designed production capacity

Source: <a href="https://ep-recit.total.com/en/yamal\_lng">https://ep-recit.total.com/en/yamal\_lng</a>

## Task 5.

Watch the video where Senior Vice Presidents of Total give more details about the project. What did you get to know? https://www.youtube.com/watch?v=SJdvcINRlJM

## Task 6.

Speak about YAMAL LNG project using the word cloud below.



Task 7.

Find information about a major project in the oil and gas industry. Prepare a 7-minute presentation about it.

# TEST YOUR GENERAL ENGLISH

- 1) Which sentence uses the present continuous correctly?
- a "I'm not checking my email. I'm studying!"
- b "Please explain that to me again. I'm not understanding you."
- c "I think you're telling me lies. I'm not believing you!"
- d "The children is doing their homework now."

- 2) Which sentence uses the present perfect tense correctly?
- a I have been to Japan last year.
- b We have got married in 2016.
- c I have lost my car keys!
- d Christopher has hurt his hand, but it's OK now.
- 3) "In 2017, I started studying Spanish. In 2019, I visited Spain for the first time." Which sentence correctly describes these events?
- a I have been studying Spanish for two years before I first visited Spain.
- b Before I first visited Spain, I have been studying Spanish for two years.
- c I had been studying Spanish for two years before I first visited Spain.
- d Before I had first visited Spain, I was studying Spanish for two years.
- 4) Which sentence uses the articles 'a/an/the' correctly?
- a You're a best dad ever!
- b I saw a fox last night. The fox was looking in the rubbish for food.
- c The sugar is bad for your teeth.
- d Space capsule came down in the Pacific.
- 5) Which third conditional sentence is correct?
- a If you would have asked me to marry you, I'd have said 'yes'.
- b I'd have said 'yes' if you would have asked me to marry you.
- c Had you asked me to marry you, I'd have saying 'yes'.
- d If you had asked me to marry you, I'd have said 'yes'.
- 6) Which sentence uses 'neither' correctly?
- a Neither wallet are mine.
- b Neither of these wallets is mine.
- c Neither of these wallets are mine.
- d Neither of these wallets aren't mine.

/) Which ph	rasal verb best fits the space in this dialogue: A: When did
you	up with your boyfriend? B: Oh, I told him last night. I didn't
	ald down in tears when I told him.
a keep	
b hurry	

- c break
- d give
- 8) 'Let' and 'allow' have similar meanings, but which sentence is correct?
- a Her school does not allow her to wear trousers.
- b Her school does not allow her wear trousers.
- c Her school does not let her wearing trousers.
- d Her school does not let her to wear trousers.
- 9) Which sentence is correct?
- a My brother said me that he was enjoying his new job.
- b My brother said that he was enjoying his new job.
- c My brother told to me that he was enjoying my new job.
- d My brother told that he was enjoying his new job.
- 10) Which sentence using 'unless' is correct?
- a What will you do unless you passed your exams?
- b You wouldn't have crashed your car unless you were driving carefully.
- c Students are allowed to handle these chemicals unless they are under the supervision of a teacher.
- d Come to the pub after work, unless you're too tired.
- 11) Which sentence is correct?
- a The kitchen needs being cleaned.
- b This kitchen needs cleaned.
- c This kitchen needs cleaning.
- d This kitchen needs to cleaned.
- 12) The following questions were asked at a tourist information office.

Which question is correct?

- a Please could you give me an advice?
- b Can you give me informations about hotels?
- c Where I can book a sightseeing tour of the city?
- d Where can I find some accommodation?

13) In this spoken sentence, what does I'dI'd represent? "If I'd seen the thief, I'd have called the police." a I had + I had b I would + I had c I would + I would d I had + I would
14) ALL these sentences contain the abstract uncountable noun 'happiness', but only ONE is correct. Which? a Money can't buy you the happiness. b I've always believed that a happiness counts more money. c What is your idea of a perfect happiness? c It was only later in life that she found happiness and peace of mind.
15) Jim's car is broken. Choose the correct adjective to complete this sentence: Jim's old car is atired. b knackered. cexhausted. d drained.
16) Which verb can fill ALL the gaps to make THREE correct sentences?  1. Let's away these old clothes to charity. 2. I'm trying to up smoking. It's such a bad habit! 3. You have to way to oncoming traffic at this junction.  a make b take c give d throw
17) Which sentence using 'wish' is correct? a I wish I have studied for my exam. b I wish I have had studied for my exam. c I wish I had studied for my exam. d I wish I had been studied for my exam.

18) Choose the correct expression to complete this sentence: Reports of hurricane winds and heavy rain are increasing. Many cities have issued

- a a red alert
- b a red danger
- c a red notice
- d a red safety
- 19) Look at the infinitive past simple past participle forms of the verb 'break': break broke broken. Which of the following verbs has the same rhyming pattern as 'break'?
- a mean
- b read
- c speak
- d hear
- 20) Which sentence is correct?
- a Lionel Messi is a world famous football player.
- b Lionel Messi is a world-famous football-player.
- c Lionel Messi is a world famous football-player.
- d Lionel Messi is a world-famous football player.
- 21) Your work colleague is talking on the phone, explaining why he was late this morning. Which phrase would you expect to hear?
- a My train was cancelled. That's why I'm late.
- b My train was cancelled. Thus, I'm late.
- c My train was cancelled. Therefore, I'm late.
- d My train was cancelled. Consequently, I'm late.
- 22) In which sentence is the adverb placed correctly?
- a I was happy always at school.
- b I was happy at school always.
- c I was always happy at school.
- d I always was happy at school.

- 23) Which reporting verb best fits the space? John\_\_\_\_\_ breaking the expensive porcelain vase.
- a insisted on
- b apologised for
- c suggested
- d accused of
- 24) Which sentence about a timetabled event is correct?
- a The train departs at 07.30 every weekday.
- b The train will depart at 07.30 every weekday.
- c The train is going to depart at 07.30 every weekday.
- d The train is departing at 07.30 every weekday.
- 25) Which sentence is correct in natural spoken English?
- a "It's the first time I've been to America."
- b "It's first time I've been to America."
- c "It's my first time I've been to America."
- d "It's a first time I've been to the America."
- 26) Which sentence is correct?
- a "I'm used to cycle everywhere before I passed my driving test."
- b "I got used to cycle everywhere before I passed my driving test."
- c "I used to cycle everywhere before I passed my driving test."
- d "I used to cycling everywhere before I passed my driving test."
- 27) Which expression can be used instead of 'let's go', when you're suggesting to leave somewhere together with others?
- a I'm off.
- b Time for me to hit the road.
- c I'd better go now.
- d Time to make a move.
- 28) Which sentence best uses narrative tenses to tell this story in the past? a I was relaxing on the beach when suddenly I was seeing storm clouds coming.
- b I was relaxing on the beach when suddenly I saw storm clouds coming.

- c I relaxed on the beach when suddenly I've seen storm clouds coming.
- d I relaxed on the beach when suddenly I'd seen storm clouds coming.
- 29) According to the rules of reported speech, which sentence correctly reports this question? "When is your birthday?"
- a He asked me when my birthday is.
- b He asked me when your birthday was.
- b He asked me when was your birthday.
- c He asked me when my birthday was.
- 30) Only one sentence is correct. Which one?
- a I've got a report to be written.
- b I got cut my hair yesterday.
- c This man is supposed to be the tallest person in the world.
- d Those nice glasses got break.

Based on "Test your level" (BBC)

### TEST YOUR TECHNICAL VOCABULARY

**Task 1.** Revise the vocabulary from Part I. Translate into Russian.

<u> </u>	
to leverage	
low carbon	
to find solutions	
execution of drilling operations	
to withstand unfavourable conditions	
to prepare cost estimates	
leak off tests	
regulatory requirements	

#### **Task 2.** Translate the sentences into Russian.

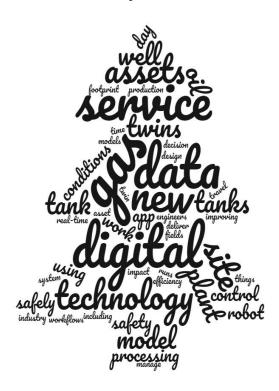
- 1) We can gain a market advantage be leveraging our network of partners.
- 2) A low-carbon economy is an economy based on low-carbon power sources that therefore has a minimal output of greenhouse gas emissions into the atmosphere, specifically carbon dioxide.
- 3) There's no easy solution to this problem.

- 4) All drilling and well operations shall be properly planned and executed to achieve the objectives of the activity, with strong focus on areas relating to safety, environment, and cost effectiveness.
- 5) The building has to be strong enough to withstand severe winds and storms.
- 6) Cost estimating is one of the most important steps in project management. A cost estimate establishes the base line of the project cost at different stages of development of the project.
- 7) Leakoff test is a test to determine the strength or fracture pressure of the open formation, usually conducted immediately after drilling below a new casing shoe. During the test, the well is shut in and fluid is pumped into the wellbore to gradually increase the pressure that the formation experiences. At some pressure, fluid will enter the formation, or leak off, either moving through permeable paths in the rock or by creating a space by fracturing the rock. The results of the leakoff test dictate the maximum pressure or mud weight that may be applied to the well during drilling operations. To maintain a small safety factor to permit safe well control operations, the maximum operating pressure is usually slightly below the leakoff test result. (Source: https://www.glossary.oilfield.slb.com/en/Terms/l/leakoff test.aspx)
- 8) Any regulatory agency can shut down a project if it does not meet health and safety standards.

Task 3. Revise the vocabulary from Part I. Translate into English.

Tubil eville tile to the unity in the	
от разведки до добычи	
добывать (извлекать) углеводороды	
незаменимый, существенный, крайне	
важный	
производительность и прибыльность	
увеличить добычу	(not increase)
прогноз добычи, прогнозирование	
дебита скважины	
работа скважины, технологические	
показатели скважины	
пластовое моделирование,	
моделирование коллектора	

**Task 4.** Look at the word cloud below. Revise the vocabulary from Part II "Digital oilfield". Talk on the topic for at least one minute.



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# ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ) НЕФТЕГАЗОВОЕ ДЕЛО

Методические указания к самостоятельным работам для студентов магистратуры направления 21.04.01

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Печатается с оригинал-макета, подготовленного кафедрой иностранных языков

Ответственный за выпуск *О.Ю. Гагарина* Лицензия ИД № 06517 от 09.01.2002

Подписано к печати 07.02.2023. Формат  $60\times84/16$ . Усл. печ. л. 1,9. Усл.кр.-отт. 1,9. Уч.-изд.л. 1,7. Тираж 50 экз. Заказ 84.

Санкт-Петербургский горный университет РИЦ Санкт-Петербургского горного университета Адрес университета и РИЦ: 199106 Санкт-Петербург, 21-я линия, 2