# ПРИДНЕСТРОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ им. Т.Г. ШЕВЧЕНКО

## БЕНДЕРСКИЙ ПОЛИТЕХНИЧЕСКИЙ ФИЛИАЛ

Кафедра «Общеобразовательные и гуманитарные науки»

УТВЕРЖДЕН
— на заседании кафедры ОиГН
— а 19 № 09 2 2022 г., протокол № 2

И.о. зав кафедрой
— С.С.Иванова

## ФОНД ОЦЕНОЧНЫХ СРЕДСТВ

## по учебной дисциплине

ФТД.03

«Факультатив по профессиональному иностранному языку» (наименование дисциплины)

направление подготовки:

Направление подготовки:

2.08.03.01 «Строительство»

(наименование профиля подготовки)

Профиль подготовки

«Промышленное и гражданское строительство»

(наименование профиля подготовки)

бакалавр

Квалификация (степень) выпускника

Форма обучения:

04429

; <u>очно-заочная 3,6; 5 лет</u> набор 2021

Разработал:

старший преподаватель И.А. Лунгу

Паспорт фонда оценочных средств по учебной дисциплине В результате освоения дисциплины «Факультатив по профессиональному иностранно-

му языку» у студентов должны быть формированы следующие компетенции:

Категория (группа) компетенций	Код и наименование	Код и наименование индикатора достижения универсальной компетенции				
Универсальные компетенции и индикаторы их достижения						
Коммуникация	УК - 4 Способен осуществлять деловую коммуникацию в устной и письменной формах на государственном языке Российской Федерации и иностранном(ых) языке(ах), в том числе на официальных языках ПМР	ИДук.4.4. Чтение и понимание со словарем информации на иностранном языке на темы повседневного и делового общения ИДук.4.5. Ведение на иностранном языке диалога общего и делового характера ИДук.4.6. Выполнение сообщений или докладов на иностранном языке после предварительной подготовки				

2. Программа оценивания контролируемой компетенции:

Теку- щая атте- стация	Контролируемые модули, разделы (темы) дисциплины и их наименование	Код контролируемой компетенции (или ее части)	Наименование оценочно- го средства		
1	Construction's processes, basic building materials and construction's methods. Latest achievements, inventions and discoveries.  Competitiveness of a specialist in our days. Psychological portrait of a successful specialist. Outstanding representatives of the profession.	ИД <sub>УК-4.4</sub> . ИД <sub>УК-4.6</sub> . ИД <sub>УК-4.5</sub> .	Выполнение практических работ по текстам		
Промежуточная аттестация					
1	зачет	ИД <sub>УК-4.4.</sub>	защита предоставленных практических работ		

### Практические задания

Практическая работа №1 Read and translate the text:

#### • TEXT 5A

### Materials used in Building



Concrete and metal rebar used to build a floor

Building material is any material which is used for a construction purpose. Many naturally occurring substances, such as clay, sand, wood and rocks have been used to construct buildings. Apart from naturally occurring materials, many manmade products are in use, some more and some less synthetic. The use of building materials is

typically segmented into specific trades, such as carpentry, plumbing, roofing and insulation work.

Building materials can be categorized into two sources, natural and synthetic. Natural building materials are those that are unprocessed or minimally processed by industry (lumber or glass). Synthetic materials are made in industrial settings after human manipulations (plastics and paints).

Rock is the longest lasting building material available. It is a very dense material so it gives a lot of protection too. Dry-stone walls have been built for as long as humans have put one stone on top of another. Eventually different forms of mortar were used to hold the stones together, cement being the most commonplace now.

Wood is a product of trees and sometimes other fibrous plants used for construction purposes when cut or pressed into lumber and timber, such as boards or planks. Wood can be very flexible under loads, keeping strength while bending, and is incredibly strong when compressed vertically.

A brick is a block made of kiln-fired material, usually clay or shale. Clay bricks are formed in a mould, or in commercial manufacture more frequently by extruding clay through a die and then wire-cutting them to the proper size. Bricks have been used as a building material since the 1700s. This was probably due to the fact that it was much more flame retardant than wood, and cheap to produce. Cinder blocks replaced clay bricks in the late 20th century. They are made mostly with concrete.

Concrete is a composite building material made from the combination of aggregate and a binder. After mixing, the cement hydrates and eventually hardens into a stone-like material. This is the material referred to by the term *concrete*. For a concrete construction of any size, as concrete has a low tensile strength, it is strengthened using steel rods or bars. This strengthened concrete is called reinforced concrete. Concrete has been the predominant building material in this modern age due to its longevity, formability, and ease of transport.

Metal is used as structural framework for larger buildings such as skyscrapers, or as an external surface covering. There are many types of metals used for building. Steel is a metal alloy whose major component is iron, and is the usual choice for metal structural building materials. It is strong, flexible, and if treated well lasts a long time.

Clear windows have been used since the invention of glass to cover small openings in a building. They provided humans with the ability to both let light into rooms while at the same time keeping inclement weather outside. Glass which is very brittle is generally made from mixtures of sand and silicates in a very hot fire stove called a kiln. Additives are very often added to the mixture when making to produce glass with different colours or characteristics.

The term plastics covers a range of synthetic or semi-synthetic organic polymerization products. Plastics vary immensely in heat tolerance, hardness, and resiliency. Combined with this adaptability, the general uniformity of composition and lightness of plastics ensures their use in almost all industrial applications today.

More recently synthetic polystyrene or polyurethane foam has been used on a limited scale. It is light weight, easily shaped and

### Answer the questions

- a) What naturally occurring and man-made building materials do you know?
- b) What areas is the use of building materials usually segmented into?
- c) What is the longest lasting building material?
- d) What is specific of wood used in construction?
- e) What types of bricks do you know? What are the advantages of bricks?
- f) What materials are bricks made from?
- g) Why is concrete the predominant building material in this modern age?
- h) What materials is concrete made from?
- i) What type of buildings is metal used for?
- j) What did glass as a building material provide people with?
- k) What do you know about the use of plastics for construction purposes?
- 1) What insulation materials are used in buildings?
- m) Are there any environmental problems of using and producing building materials?

Практическая работа №2 Read and translate the text:

## NANOTECHNOLODY'S FOR REAL IN THE BUILDING INDUSTRY

Nanotechnology is sometimes seen as all hype, with little real-world application. But nanomaterials are already all around us Take the buildings that we live and work in, for instance. You will find nanotechnology used to create stronger steel, self-cleaning glass, solar-collecting fabrics, and even smog-eating concrete. And not only are these nanomaterials present in our buildings, they are making them better places to live and work.

Self-cleaning glass has a nanoparticle coating dirt can't stick to, eliminating the need for expensive and dangerous manual window washing on tall buildings. Solar-collecting fabric is the first of a new wave of building components that convert solar radiation into electricity That means no more applying unattractive solar panels to the roof, but instead integrating energy production into building facades. Nanocomposite steel is more corrosion resistant than conventional steel, and can reduce installation costs by up to 50%. And the quantity required to make a building may be up to 40% less than conventional steel. Smog-eating concrete is produced by applying a nanolayer of titanium dioxide to concrete, which triggers a catalytic reaction that destroys many pollutants in contact with the surface. At the very least, these materials reduce building maintenance costs, leaving more money for other improvements, and they can help clean up the environment. They can reduce energy costs as well. And for every nanomaterial available today, there are approximately seventy more in research and development, meaning that building construction and architecture are in for some big changes thanks to small technology.

### Практическая №4

#### Read and translate the text:

• TEXT 2C

#### John Smeaton — the First Civil Engineer



John Smeaton

John Smeaton first described himself as a civil engineer in 1768. In doing so, he identified a new profession that was distinct from that of the military engineers who, since ancient times, had undertaken the construction of all public infrastructure. Thus, at the time, civil engineering encompassed all non-military engineering. Although in 1847, after a frenzy of railway construction, mechanical engineering bifurcated from civil engineering as an independent discipline.

An innovative and intelligent man, Smeaton remains one of the most revered professionals of engineering and is regarded as the father of the civil engineering profession.

The son of a Yorkshire lawyer, John Smeaton was born in 1724, in Austhorpe, Leeds, UK. Before his 16th birthday, while still at school, his talent for engineering and use of mechanical tools possessed him to assemble a turning-lathe. Smeaton proceeded to become an instrument-maker. His research into windmills, watermills and other sources of power resulted, in 1754, in a systematic set of scientific experiments that made it clear that an overshot waterwheel is more efficient than an undershot wheel.

In 1756 the President of the Royal Society famously charged Smeaton

In 1756 the President of the Royal Society famously charged Smeaton with the construction of the Eddystone Lighthouse, a structure required to warn ships away from the Eddystone rocks, 14 miles southwest of Plymouth. Smeaton's design, which remains a symbol of the profession, was completed in 1759 and lasted until 1881.

Smeaton's industry resulted in two developments that made an important contribution to the success of the Eddystone Lighthouse. First, he used a new kind of interlocking stone construction, and second, he developed a water-resistant (hydraulic) mortar to bind the blocks together by mixing blue lime and pozzolanic material

from Italy. Smeaton's observation that the best hydraulic cements were those made from limestone containing certain proportions of clayey material are regarded as the starting point of the modern engineering use of cement and concrete.

Today Smeaton remains one of civil engineering heavyweights — the breadth and depth of his influence are phenomenal. In his career, Smeaton designed the first successful Eddystone Lighthouse, greatly involved on Newcomen's steam engine, and designed windmills, watermills, carels and bridges

designed windmills, watermills, canals and bridges.

John Smeaton died on the 28 October, 1792.

His enduring legacy is more than the engineering works, some of which remain as monuments to the great man himself. Not only is he widely regarded as the founder of the civil engineering profession, but his methods of construction site management and supervision are still in use today. John Smeaton clearly understood that managing people correctly was as important as design and construction.

It was Smeaton's desire that practising professional engineers should dine together — so that they might get to know one another better and thereby avoid potential hostility that might arise in their public dealings — that spawned the formation of the Society of Civil Engineers in 1771.

While the Society remains as a social society today, it is true

While the Society remains as a social society today, it is true that the concept of co-operation in competition between engineers led to the founding of the Institution of Civil Engineers in 1818.



## SECTION 4 LISTENING AND SPEAKING

23. Listen to the Text "The Father of the American Skyscraper" about the American civil engineer and architect William Le Baron Jenney.

Study the following commentary.

the Leiter Building — здание магазина фирмы "Лейтер"

### Answer the questions

- a) Why is John Smeaton regarded as the father of the civil engineering profession?
  - b) What was John Smeaton's research into power sources?
- c) What was John Smeaton charged with by the President of the Royal Society?
- d) What were John Smeaton's developments in the field of the engineering use of cement and concrete?
- e) Why is the depth of John Smeaton's influence on civil engineering phenomenal?
- f) Why did John Smeaton want practising professional engineers to dine together?
  - g) What led to the founding of the Intuition of Civil Engineers?

Критерии выполнения практических задании по дисциплине.

У,	довлетво	рительный ре	зультат	Выполнение более 40% заданий
Н	еудовлет	ворительный	результат	Выполнение менее 40% заданий

## Критерии оценивания по дисциплине «Факультатив про профессиональному иностранному (английский) языку».

- правильность ответа по содержанию задания (учитывается количество и характер ошибок при ответе);
- полнота и глубина ответа (учитывается количество усвоенных фактов, понятий и т.п.);
- сознательность ответа (учитывается понимание излагаемого материала);
- логика изложения материала (учитывается умение строить целостный, последовательный рассказ, грамотно пользоваться специальной терминологией);
- рациональность использованных приемов и способов решения поставленной учебной задачи (учитывается умение использовать наиболее прогрессивные и эффективные способы достижения цели);
- своевременность и эффективность использования наглядных пособий и технических средств при ответе (учитывается грамотно и с пользой применять наглядность и демонстрационный опыт при устном ответе);
- использование дополнительного материала (обязательное условие);
- рациональность использования времени, отведенного на задание (не одобряется затянутость выполнения задания, устного ответа во времени, с учетом индивидуальных особенностей студентов).

Для определения уровня знаний по дисциплине «Факультатив про профессиональному иностранному (английский) языку» учитываются следующие критерии оценивания:

- полнота и правильность это правильный, точный ответ;
- правильный, но неполный или неточный ответ;
- неправильный ответ;
- нет ответа.

При выставлении отметок учитывается классификация ошибок и их качество:

- грубые ошибки;
- однотипные ошибки;
- негрубые ошибки
- недочеты.

Успешность освоения учебных программ оценивается:

• на недифференцированном зачете: зачет/незачет зачет ставится студенту:

если его устный ответ, письменная работа, практическая деятельность в полном объеме соответствует учебной программе, допускается один недочет, Студент обосновывает свои суждения, применяет знания на практике, приводит собственные примеры). незачет ставится студенту:

если его устный ответ, письменная работа, практическая деятельность и ее результаты частично соответствуют требованиям программы, имеются существенные недостатки и грубые ошибки,