

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ  
РОССИЙСКОЙ ФЕДЕРАЦИИ  
Федеральное государственное автономное образовательное учреждение  
высшего образования  
«СЕВЕРО-КАВКАЗСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»  
Институт сервиса, туризма и дизайна (филиал) СКФУ в г. Пятигорске

**УТВЕРЖДАЮ:**  
И.о.зав. кафедрой ЛиМК  
\_\_\_\_\_ Н.Ю. Климова  
«\_\_\_» \_\_\_\_\_ 2020 г.

**ФОНД ОЦЕНОЧНЫХ СРЕДСТВ**  
**для проведения текущего контроля успеваемости и промежуточной аттестации**

По дисциплине	Иностранный язык в профессиональной сфере
Направление подготовки	08.03.01 Строительство
Направленность (профиль)	Строительство зданий и сооружений
Квалификация выпускника	бакалавр
Форма обучения	очная
Год начала обучения	2020
Изучается в	4,5 семестрах
	Астр. часов
Объем занятий: Итого	162 ч.,
В том числе аудиторных	84 ч.
Из них:	
Лекций	- ч.
Лабораторных работ	- ч.
Практических занятий	84 ч.
Самостоятельной работы	78 ч.
Зачет - 4 семестр	
Зачет с оценкой -5 семестр	

Дата разработки: «\_\_\_» \_\_\_\_\_ 2020 г.

## Предисловие

1. Назначение: Фонд оценочных средств текущего контроля успеваемости и промежуточной аттестации предназначен для проверки знаний студентов.

2. Фонд оценочных средств текущего контроля успеваемости и промежуточной аттестации разработан на основе рабочей программы дисциплины «Иностранный язык в профессиональной сфере» и в соответствии с образовательной программой высшего образования по направлению подготовки 08.03.01 Строительство, утвержденной на заседании Учебно-методического совета СКФУ, протокол № \_\_\_\_ от «\_\_» \_\_\_\_\_ 2020 г.

3. Разработчик – Мухортова Т.В., доцент кафедры лингвистики и межкультурной коммуникации

4. ФОС рассмотрен и утвержден на заседании кафедры лингвистики и межкультурной коммуникации, протокол № \_\_\_\_ от «\_\_» \_\_\_\_\_ 20\_\_ г.

5. ФОС согласован с выпускающей кафедрой строительства, протокол № \_\_\_\_ от «\_\_» \_\_\_\_\_ 20\_\_ г.

6. Проведена экспертиза ФОС. Члены экспертной группы, проводившие внутреннюю экспертизу:

Председатель: \_\_\_\_\_ Н.Ю. Климова, и.о. зав. кафедрой ЛиМК  
\_\_\_\_\_ Е.М. Шевченко, доцент кафедры ЛиМК  
\_\_\_\_\_ Д.В. Щитов, зав. кафедрой строительства

Экспертное заключение: Фонд оценочных средств текущего контроля успеваемости и промежуточной аттестации соответствует требованиям ФГОС ВО и может быть использован в образовательном процессе.

«\_\_» \_\_\_\_\_ 2020 г. \_\_\_\_\_ Н.Ю.Климова

7. Срок действия ФОС: 1 год

«\_\_» \_\_\_\_\_ 2020 г.

Паспорт фонда оценочных средств  
для проведения текущего контроля и промежуточной аттестации

По дисциплине Иностранный язык в профессиональной сфере  
 Направление подготовки 08.03.01 Строительство  
 Направленность (профиль) Строительство зданий и сооружений  
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 Форма обучения очная  
 Год начала обучения 2020  
 Изучается в 3,4,5 семестрах

Код оцениваемой компетенции (или её части)	Этап формирования компетенции (№ темы)	Средства и технологии оценки	Вид контроля, аттестация (текущий/ промежуточный)	Тип контроля (устный, письменный или с использованием технических средств)	Наименование оценочного средства	Количество заданий для каждого уровня, шт.	
						Базовый	Повышенный
УК-4	№1-56	Собеседование	текущий	устный	Вопросы для собеседования	224	280
УК-4	№2-56	Индивидуальные творческие задания	текущий	устный	Темы индивидуальных заданий	16	

Составитель \_\_\_\_\_ Т.В. Мухортова

« \_\_\_\_ » \_\_\_\_\_ 2020 г.

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ  
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«\_\_\_\_» \_\_\_\_\_ 2020 г.

**Вопросы для собеседования  
по дисциплине «Иностранный язык в профессиональной сфере»**

**Базовый уровень**

**Тема 1. From the History of Building / История строительства.**

1. Who were great bridge, harbor and road builders?
2. Who developed concrete to the position of main structural material in 800-900?
3. Who erected huge constructions to commemorate their kings?
4. Where did kilns for lime production appear first?
5. Who first discovered how to cut stone for building purposes?
6. Who first used sun-dried mud bricks for building?

**Тема 2. From the history of building. Tower of Babel.**

1. Why did the King of Babylonia decide to build a great tall tower?
2. What did God do to keep the invaders out ?

**Тема 3. Engineering and Its Present Status / Инженерное дело и его положение в настоящее время.**

1. What is industrial engineering?
2. What do industrial buildings vary in?

**Тема 4. Civil Engineering / Гражданское строительство.**

1. What does the word "engineering" mean?
2. Is engineering a science?
3. Into what branches is civil engineering divided?
4. How old is the profession of a civil engineer?
5. What distinct meanings has the term "civil engineering"?

**Тема 5. Geotechnical engineering. Transportation engineering / Инженерная геология. Транспортное проектирование.**

1. Is geotechnical engineering concerned with maintaining transportation infrastructure?
2. What kinds of soil properties concern geotechnical engineering?
3. What is transportation engineering concerned with?
4. What does moving people and goods involve?

**Тема 6. Environmental engineering / Инженерное обеспечение охраны окружающей среды**

What is the relation between environmental engineering and civil engineering?

1. Is wastewater treatment a very important activity in environmental engineering?

2. What does environmental engineering deal with?
3. How do many sites become contaminated?
4. What topics are covered by environmental engineering?
5. What can environmental engineers be involved with?

#### **Тема 7. Construction engineering / Строительная промышленность**

1. Construction of what structures concerns the planning and management in construction engineering?
2. What knowledge does construction of highways, bridges, airports, buildings and things like that require?
3. What do construction engineers deal with?
4. Does Construction Engineering differ from Construction Management?
5. Why are construction engineers very popular among people?

#### **Тема 8. Construction industry in the United States / Строительная индустрия в США.**

1. Whom does construction industry provide jobs to?
2. Construction engineers follow the plans of architects, don't they?
3. How do construction engineers make sure the structure has been built correctly?
4. What is a main part of construction engineers' job description?
5. What do construction engineers have to use computer software for?

#### **Тема 9. Industrial construction / Промышленное строительство.**

1. Industrial construction is a relatively small part of the entire construction, isn't it?
2. Who are the owners of industrial construction projects?
3. Where can these corporations be found?
4. What kind of expertise do processes in these industries require?

#### **Тема 10. Building construction / Строительство зданий.**

1. What does building construction deal with?
2. What does a small renovation usually include?
3. How does the owner of the property usually act?
4. What do all building construction projects include?
5. What do many projects of varying sizes sometimes reach?
6. Why should careful oversight be maintained during the project?
7. What will the owner likely establish a team of workers and advisors for?

#### **Тема 11. Residential construction / Жилищное строительство**

1. What are more and more families looking into?
2. When must a home owners warranty be obtained?
3. What does heavy/highway construction deal with?
4. Who is the owner of heavy/highway construction projects?
5. Are heavy/highway construction projects undertaken for profit?
6. What do heavy/highway construction projects include?

#### **Тема 12. New project: the architect-engineer-contractor team / Новый проект: Команда архитектор-инженер-подрядчик.**

1. What do all building construction projects include?
2. What are the advantages and disadvantages of project?

#### **Тема 13. Construction engineers / Инженеры-строители**

1. Execution of what designs does construction engineering deal with?

2. What kind of risk do construction firms tend to have?

**Тема 14. Construction engineers(2) / Инженеры-строители**

1. What science does civil engineering also include?
2. What construction materials with broad applications in civil engineering do you know?
3. What do current research of construction materials focus around?

**15. Education and Licensure of civil engineers / Образование и лицензирование инженера-строителя**

1. What do civil engineers complete to become a practicing engineer?
2. Who regulates civil engineering practice?
3. Who can do any civil engineering work in the USA?
4. What do licensure requirements entail?
5. Who supervises the work of a practicing engineer during several years of his practical experience?

**Тема 16. Careers / Карьера**

1. Is there only one typical career path for civil engineers in the United States?
2. How do most engineering graduates start their career path?
3. What do entry-level engineers have to do in some engineering firms?

**17. Design team/ Проектная группа.**

1. What may a formal design team be assembled for?
2. Who usually prepares drawings and specifications?
3. Whom does a design team include?
4. Who commonly employs the design team?
5. When may a number of construction companies or construction

**Тема 18. Authority having jurisdiction / Официальные контролирующие органы**

1. When must drawings be accepted?
2. Who represents the authority having jurisdiction during the construction of a building?
3. What does municipal building inspector do?
4. When may an occupancy permit be issued?
5. What must an operating building comply with?
6. Where does the fire prevention officer work?
7. What changes made to a building require acceptance by the authority having jurisdiction?

**РАЗДЕЛ 3. INDUSTRIAL AND CIVIL ENGINEERING.ПРОМЫШЛЕННОЕ И ГРАЖДАНСКОЕ СТРОИТЕЛЬСТВО**

**Тема 19. Town Planning / Градостроительство**

1. What are the main points that should be included in a survey?
2. What is the purpose of a town plan?
3. What is necessary to do before a town plan is designed?
4. Why is it necessary to make a survey of the existing environment?

**Тема 20. Design of the Complete Town./Город под ключ.**

1. Why should the whole town, and even its details, be beautiful?
2. Should a town be a nice place to live, to work and to rest in? Explain your statement.
3. What should the town designer remember about the role of raw materials in the future?
4. Why are all the objects in the town called the raw materials of town design?

**Тема 21. Housing and Industrial Construction / Жилищное и промышленное строительство.**

1. What are the functions of industrial buildings?
2. What are the new methods of housing?
3. Talk about present-day design for residential construction.

**Тема 22. Types of Buildings / Типы зданий.**

1. What do types of buildings depend upon?
2. How may the types of buildings be classified?
3. What are the types of buildings according to the role in the community?

**Тема 23. Sanitary engineering in the modern town. Panelheating/ Сантехника в современном городе. Панельное отопление.**

1. What are heating and ventilation concerned with?
2. Why do industrial buildings maintain a lower air temperature?
3. What is the basic advantage of panel heating?

**Тема 24. Sanitary engineering in the modern town. All-year Air Conditioning, Ventilation, Gas Supply/ Сантехника в современном городе.Круглогодичный кондиционер, вентиляция, газоснабжение.**

1. What are heating and ventilation concerned with?
2. Why do industrial buildings maintain a lower air temperature?
3. What is the basic advantage of panel heating?
4. What makes panel heating so very comfortable?

**Тема 25. Sanitary engineering in the modern town. Water Supply./ Сантехника в современном городе. Водоснабжение.**

1. Why is an adequate supply of water one of the main requirements for maintaining high standards of health?
2. The rivers and lakes contain a great amount of chemical and biological pollution. Why?
3. Why has the problem of water treatment become very urgent nowadays?
4. Name the main sources of water on the earth.

**РАЗДЕЛ 4. ARCHITECTURE OF A HOUSE./АРХИТЕКТУРА ДОМА**

**Тема 26. Orientation and Surveying the Building/ Планировка и обследование здания**

1. Is excavation for a basement a very important problem in the building?
2. Has an exterior appearance any practical considerations?
3. Is it necessary to have a plan of landscape before erecting any structure?
4. Is it necessary to fulfill building sufficiently to have erecting ways, sewerage line etc.?

**Тема 27. Styling of a House. Designing Elevations./ Стиль дома. Проектирование высоты дома.**

1. What points must be kept in mind before building any structure?
2. What factors does the choice of elevation style depend upon?

### **Тема 28. Architecture of a house. Архитектура дома.**

1. What kind of things should be given careful thought before the plans for the building are drawn? Why?
2. What means an elevation?
3. What kind of dimensions can be shown on the elevation?
4. What is the purpose of elevation?
5. What for the floor plans are prepared?
6. What do the plans and elevations give taken together?
7. What factors does the choice of style of elevation depend upon?
8. What is the choice of materials governed by?

### **Тема 29. Some Basic Problems in Construction / Основные проблемы в строительстве.**

1. Why is research so important for construction?
2. What methods of construction do you know?
3. What is the role of specialists in construction?

### **Тема 30. Footing and foundations/ Фундамент.**

1. What are the more common types of foundation structure?
2. Name the features of spread, combined footings and raft foundation?

### **31. Roofs: Types and Parts / Крыши: виды крыш и их части**

1. What flooring materials help create a brighter room?
2. How are roofs classified nowadays?

### **32. Walls/ Стены.**

1. Explain the purpose of construction walls.
2. How are walls classified?
3. What does this division mean?

### **Тема 33. Walls / Виды стен. Walls Strength /Мощность стен.**

1. How are walls classified nowadays?
2. Why must the walls and other parts of the building be carefully proportioned?

### **Тема 34. Floors / Этажи. Напольные покрытия.**

1. How should floors be designed?
2. What problems should the designers deal with?
3. What are the functions of the floors?
4. Floors divide the building into stories. What material may the floors be of?

### **Тема 35. Floors / Напольные покрытия(2).**

1. What are the basement wood floors constructed for?
2. What do double floors consist of?
3. What is triple-joisted floor used for?
4. Name the advantages of fire-resisting floors.
5. What are Ferro slab floors formed of?

## **РАЗДЕЛ 5. MIXING, MOLDING AND CURING EQUIPMENT /Оборудование для смешивания, формования и отверждения строительных смесей**

### **Тема 36. On Mixing, Molding and Curing Equipment / Об оборудовании для смешивания, формования и отверждения строительных смесей.**

1. What kind of mixers is in for more general use and why?



2. Explain the principle of batch mixer's work.
3. Why is continuous mixer used mostly in very large operations?
4. Molding of what kind of building units is accomplished with the help of vibration and with centrifugal process? Why?
5. What happens with concrete in the mould?

**Тема 37. Earth-Moving Machinery/Техника для земляных работ.**

1. What are the types of earth-moving machines?
2. Which are the most important of earth-moving machines?

**Тема 38. Cranes/ Краны.**

1. What are the types of cranes and their functions?
2. What is the use of Tower Cranes in construction practice?
3. What are the principal advantages of The Climbing Crane?

**РАЗДЕЛ 6. THE BASIC PROBLEMS OF A BUILDING MATERIAL'S INDUSTRY / ОСНОВНЫЕ ПРОБЛЕМЫ ПРОИЗВОДСТВА СТРОИТЕЛЬНЫХ МАТЕРИАЛОВ**

**Тема 39. The Basic Problems of a Building Material's Industry / Основные проблемы производства строительных материалов.**

1. What materials are yet a challenge of the future?
2. What are the most important properties of building materials?
3. What new building materials have chemists created?
4. What helps eliminate mistakes in design and construction?
5. What new discipline is being created and why is it necessary?

**Тема 40. Modern Building Materials / Современные строительные материалы.**

1. What are the external forces that cause the elastic deformation of materials? Describe those forces that change the form and size of materials.
2. What are the results of external forces?
3. What kinds of deformation are the combinations of tension and compression?
4. What is the result of tension? What happens if the elastic limit of material is exceeded under tension?

**Тема 41. Modern Building Materials (2) / Современные строительные материалы.**

1. What is the density of a material?
2. What are the units of density? Where low density is needed?
3. What are the densities of water, aluminium and steel?
4. A measure of what properties is stiffness? When stiffness is important?
5. What is Young modulus?
6. What is strength?
7. What is toughness?

**42. Classification of Building Materials / Классификация строительных материалов. Concrete /Бетон, Plastics /Пластик в строительстве, Metals / Металлы, Timber / Лесоматериалы.**

1. What is the application all building material?
2. What are the traditional and the newest building materials?
3. How many groups are all building materials divided in as to their application?
4. What natural building materials do you know?
5. What materials have been known from time immemorial?

### **43. Concrete/ Бетон**

1. What does the most common form of concrete consist of?
2. When does concrete harden?
3. How is this process called?
4. What is concrete used for?
5. Is concrete a popular material?

### **44. Reinforced concrete/ Железобетон**

1. Is reinforced concrete a popular material?
2. What is reinforced concrete used for?

### **45. Woodworking / Деревообработка**

1. What is woodworking?
2. When does the history of woodworking begin?
3. Where can a skilled woodworker build simple and complicated items?
4. Where can you buy tools for a workshop?
5. What do lumber retail stores sell?
6. Who constructs the wooden framework of buildings?
7. What other professions do woodworkers include?
8. What do cabinetmakers deal with?

### **46. Woodworking (2) / Деревообработка**

1. What do woodworkers use drilling for?
2. How do they usually connect sections of wood?
3. What do woodworkers use for making holes of different sizes?
4. What do portable electric drills have for sanding?
5. What are metal fasteners used for?
6. What tools for fastening do woodworkers usually use?

### **47. Sanding and finishing / Шлифовка и отделка.**

1. How do woodworkers make wood surfaces smooth for finishing?
2. When should woodworkers begin sanding?
3. For what use is most abrasive paper manufactured?
4. What common sanding material is used in sanding machines?
5. What sanding machines are considered to be the best ones?
6. What do woodworkers use to protect wood?

### **48. Beams/ Балочные перекрытия**

1. What are the types of beams?
2. What are they used for?

### **49. Strength of slabs/ Прочность плит**

1. What happens if slabs are supported or fixed at two opposite sides only?
2. What happens if slabs are supported or fixed at four sides?
3. What are differences between a square slab supported on four sides and the same slab supported on two opposite sides only?
4. What does ratio depend upon?

## **РАЗДЕЛ 7. ARCHITECTURE./ АРХИТЕКТУРА**

**Тема 50. Architecture / Архитектура.**

1. What is architecture?
2. What is architecture landscape?
3. What is architecture employed for?

**Тема 51. Architectural Planning, /Архитектурное планирование.**

1. When does the architect begin to work on the project?
2. What are the main aspects of architectural planning?

**Тема 52. Architecture of Ancient Times / Архитектура древнейших времён.  
Современная архитектура.**

1. Who was the earliest named architect?
2. How do the structures of the Old, Middle and New Kingdoms differ?
3. When did the final revival of ancient Egyptian architecture take place?

**Тема 53. Orders of Architecture/Ордер архитектора.**

1. What is term order?
2. What orders in classical architecture do you know?

**Тема 54. British Architecture / Британская архитектура.**

1. Where did the first inhabitants of the British Isles live?
2. What sort of monument is the so-called Stonehenge?
3. When did the first towns begin to appear?

**Тема 55. Russian Architecture / Русская архитектура.**

1. Where did Russia borrow its early architecture from?
2. What has always been the most natural building material in Russia?
3. Did wooden and masonry architecture develop side by side in medieval Russia?

**Тема 56. Famous Architects / Знаменитые архитекторы.**

1. What famous English and Russian architects do you know?
2. Who is your favourite architect?
3. What works of the world famous architects can you mention?

**Повышенный уровень**

**Тема 1. From the History of Building/ История строительства.**

1. How did Greeks built?
2. What changes in building happened during the Romanian period?

**Тема 2. From the history of building. Tower of Babel.**

1. Why did the King of Babylonia decide to build a great tall tower?
2. What did God do to keep the invaders out ?
3. What is the history of Babylonia?
4. Where do we know it from?

**Тема 3. Engineering and Its Present Status / Инженерное дело и его положение в настоящее время.**

1. What is industrial engineering?
2. What do industrial buildings vary in?

3. What are industrial structures intended for?
4. Speak about current projects of industrial construction in Pyatigorsk.

**Тема 4. Civil Engineering / Гражданское строительство.**

1. What does the word "engineering" mean?
2. Is engineering a science?
3. Into what branches is civil engineering divided?
4. How old is the profession of a civil engineer?
5. What distinct meanings has the term "civil engineering"?
6. What fields of civil engineering do you know?
7. What are the most important branches of civil engineering?
8. What invention laid the foundation for mechanical engineers?
9. When was electrical engineering developed?
10. What are the main subdivisions of the electrical engineering?

**Тема 5. Geotechnical engineering. Transportation engineering / Инженерная геология. Транспортное проектирование.**

1. Is geotechnical engineering concerned with maintaining transportation infrastructure?
2. What kinds of soil properties concern geotechnical engineering?
3. What is transportation engineering concerned with?
4. What does moving people and goods involve?
5. What does transportation infrastructure include?
6. Does transportation infrastructure deal with traffic, urban and pavement engineering?

**Тема 6. Environmental engineering / Инженерное обеспечение охраны окружающей среды**

What is the relation between environmental engineering and civil engineering?

1. Is wastewater treatment a very important activity in environmental engineering?
2. What does environmental engineering deal with?
3. How do many sites become contaminated?
4. What topics are covered by environmental engineering?
5. What can environmental engineers be involved with?
6. What kind of information does environmental engineering deal with?
7. What is the purpose of gathering of such kind of information?

**Тема 7. Construction engineering / Строительная промышленность**

1. Construction of what structures concerns the planning and management in construction engineering?
2. What knowledge does construction of highways, bridges, airports, buildings and things like that require?
3. What do construction engineers deal with?
4. Does Construction Engineering differ from Construction Management?
5. Why are construction engineers very popular among people?
6. What aspects of construction does construction engineering involve?
7. Is construction engineering a large industry?
8. Do many people work on construction in the USA?
9. Are there many unemployed among construction engineers in the USA?

**Тема 8. Construction industry in the United States / Строительная индустрия в США.**

1. Whom does construction industry provide jobs to?
2. Construction engineers follow the plans of architects, don't they?
3. How do construction engineers make sure the structure has been built correctly?

4. What is a main part of construction engineers' job description?
5. What do construction engineers have to use computer software for?
6. When do construction engineers have to conduct surveying the land?
7. What must construction engineers do with impediments that happen to be in the way of where the structure will be built?
8. Why do construction engineers have to test the soils and materials used?
9. What do construction engineers have to provide to the managers?

**Тема 9. Industrial construction / Промышленное строительство.**

1. Industrial construction is a relatively small part of the entire construction, isn't it?
2. Who are the owners of industrial construction projects?
3. Where can these corporations be found?
4. What kind of expertise do processes in these industries require?
5. What does industrial construction require a team of individuals for?
6. What does construction usually involve in the modern industrialized world?

**Тема 10. Building construction / Строительство зданий.**

1. What does building construction deal with?
2. What does a small renovation usually include?
3. How does the owner of the property usually act?
4. What do all building construction projects include?
5. What do many projects of varying sizes sometimes reach?
6. Why should careful oversight be maintained during the project?
7. What will the owner likely establish a team of workers and advisors for?
8. What ensures that the project will proceed in an orderly way to a desirable end?
9. Whom do frequently used advisors include?
10. Do their roles overlap?
11. What does each area of expertise address?

**11. Residential construction / Жилищное строительство**

1. What are more and more families looking into?
2. When must a home owners warranty be obtained?
3. What does heavy/highway construction deal with?
4. Who is the owner of heavy/highway construction projects?
5. Are heavy/highway construction projects undertaken for profit?
6. What do heavy/highway construction projects include?
7. What does the owner of the project assemble a team of advisors for?
8. What do a team of advisors create an overall plan for?

**Тема 12. New project: the architect-engineer-contractor team / Новый проект: Команда архитектор-инженер -подрядчик.**

1. What are the advantages and disadvantages of project?
2. What do all building construction projects include?
3. . What do many projects of varying sizes sometimes reach?
4. How do you appreciate the work of the architect, the engineer and the contractor?

**Тема 13. Construction engineers / Инженеры-строители**

1. Execution of what designs does construction engineering deal with?
2. What kind of risk do construction firms tend to have?
3. What role do many construction engineers tend to take on?

4. What do construction engineers often have to do?

#### **Тема 14. Construction engineers(2) / Инженеры-строители**

1. What science does civil engineering also include?
2. What construction materials with broad applications in civil engineering do you know?
3. What do current research of construction materials focus around?
4. How must elements of a building be sized and positioned?
5. How are civil engineers in the USA trained?

#### **Тема 15. Education and Licensure of civil engineers / Образование и лицензирование инженера-строителя**

1. What do civil engineers complete to become a practicing engineer?
2. Who regulates civil engineering practice?
3. Who can do any civil engineering work in the USA?
4. What do licensure requirements entail?
5. Who supervises the work of a practicing engineer during several years of his practical experience?
6. What degrees in Civil Engineering are accepted in the United States?
7. Is the situation with the acceptability of degrees in other fields the same in all states?
8. Are advanced degrees obligatory for civil engineers in the United States nowadays?
9. What degree follows after a Master of Engineering degree in the USA?

#### **Тема 16. Careers / Карьера**

1. Is there only one typical career path for civil engineers in the United States?
2. How do most engineering graduates start their career path?
3. What do entry-level engineers have to do in some engineering firms?
4. What are more senior engineers meantime busy with?
5. How can salaries for Civil Engineers be compared with those for other fields of engineering?

#### **Тема 17. Design team/ Проектная группа.**

1. What may a formal design team be assembled for?
2. Who usually prepares drawings and specifications?
3. Whom does a design team include?
4. Who commonly employs the design team?
5. When may a number of construction companies or construction management companies be asked to make a bid for a work?
6. Who provides a bill of quantities?
7. Whom does the owner typically award a contract to?

#### **Тема 18. Authority having jurisdiction / Официальные контролирующие органы**

1. When must drawings be accepted?
2. Who represents the authority having jurisdiction during the construction of a building?
3. What does municipal building inspector do?
4. When may an occupancy permit be issued?
5. What must an operating building comply with?
6. Where does the fire prevention officer work?
7. What changes made to a building require acceptance by the authority having jurisdiction?

8. What changes may a fire prevention officer accept?
9. What may changes affecting basic safety functions require the owner?
10. Why may changes affecting basic safety functions require the owner to apply for a building permit?

### **РАЗДЕЛ 3. INDUSTRIAL AND CIVIL ENGINEERING.ПРОМЫШЛЕННОЕ И ГРАЖДАНСКОЕ СТРОИТЕЛЬСТВО**

#### **Тема 19. Town Planning / Градостроительство**

1. What are the main points that should be included in a survey?
2. What is the purpose of a town plan?
3. What is necessary to do before a town plan is designed?
4. Why is it necessary to make a survey of the existing environment?
5. What does a survey consist in?
6. History has shown that a plan should be flexible. Why?

#### **Тема 20. Design of the Complete Town./Город под ключ.**

1. Why should the whole town, and even its details, be beautiful?
2. Should a town be a nice place to live, to work and to rest in? Explain your statement.
3. What should the town designer remember about the role of raw materials in the future?
4. Why are all the objects in the town called the raw materials of town design?
5. Do the raw materials of a planned town influence the existing environment?
6. Why should city growth be controlled?

#### **Тема 21. Housing and Industrial Construction / Жилищное и промышленное строительство.**

1. What are the functions of industrial buildings?
2. What are the new methods of housing?
3. Talk about present-day design for residential construction.
4. Name the advantages of reinforced concrete for modern industrial buildings?
5. How does the building industry influence the National Economy?

#### **Тема 22. Types of Buildings / Типы зданий.**

1. What do types of buildings depend upon?
2. How may the types of buildings be classified?
3. What are the types of buildings according to the role in the community?
4. The type and the function of a building govern its design, building materials and techniques. Name the common and necessary conditions of buildings.

#### **Тема 23. Sanitary engineering in the modern town. Panel heating/ Сантехника в современном городе. Панельное отопление.**

1. What are heating and ventilation concerned with?
2. Why do industrial buildings maintain a lower air temperature?
3. What is the basic advantage of panel heating?
4. What makes panel heating so very comfortable?
5. What does a hot-water system consist of?
6. What is the most widely used system of heating?

#### **Тема 24. Sanitary engineering in the modern town. All-year Air Conditioning, Ventilation, Gas Supply/ Сантехника в современном городе.Круглогодичный кондиционер, вентиляция, газоснабжение.**

1. What are heating and ventilation concerned with?
2. Why do industrial buildings maintain a lower air temperature?
3. What is the basic advantage of panel heating?
4. What makes panel heating so very comfortable?
5. What does a hot-water system consist of?
6. What is the most widely used system of heating?

**Тема 25. Sanitary engineering in the modern town. Water Supply./ Сантехника в современном городе. Водоснабжение.**

1. Why is an adequate supply of water one of the main requirements for maintaining high standards of health?
2. The rivers and lakes contain a great amount of chemical and biological pollution. Why?
3. Why has the problem of water treatment become very urgent nowadays?
4. Name the main sources of water on the earth.
5. Why were the man's earliest settlements always close to natural water sources?
6. Water is an important part of nature, isn't it?

**РАЗДЕЛ 4. ARCHITECTURE OF A HOUSE./АРХИТЕКТУРА ДОМА**

**Тема 26. Orientation and Surveying the Building/ Планировка и обследование здания**

1. Is excavation for a basement a very important problem in the building?
2. Has an exterior appearance has any practical considerations?
3. Is it necessary to have a plan of landscape before erecting any structure?
4. Is it necessary to fulfill building sufficiently to have erecting ways, sewerage line etc.?
5. What are the latest inventions in construction?
6. Where do the people prefer to place the central heating nowadays?

**Тема 27. Styling of a House. Designing Elevations./ Стиль дома. Проектирование высоты дома.**

1. What points must be kept in mind before building any structure?
2. What factors does the choice of elevation style depend upon?
3. What size can window openings be? Why?
4. Which rooms must an up-to-date house contain?

**Тема 28. Architecture of a house. Архитектура дома.**

1. What kind of things should be given careful thought before the plans for the building are drawn? Why?
2. What means an elevation?
3. What kind of dimensions can be shown on the elevation?
4. What is the purpose of elevation?
5. What for the floor plans are prepared?
6. What do the plans and elevations give taken together?
7. What factors does the choice of style of elevation depend upon?
8. What is the choice of materials governed by?
9. What materials used for roofs? Walls?
10. What size should the door be? What are differences between front and rear doors? Why?
11. How many kinds of windows used in houses? What are they?
12. What means an up-to-date house?

**Тема 29. Some Basic Problems in Construction / Основные проблемы в строительстве.**

1. What are the most important problems in construction?



2. What factors does the productivity of construction depend on?
3. What factors does the productivity of construction depend on?
4. What is the role of specialists in construction?
5. What do builders do?
6. What do they need for qualified work?
7. What municipal projects do you think are really worthy of admiration in Pyatigorsk?

### **Тема 30. Footing and foundations/ Фундамент.**

1. What are the more common types of foundation structure?
2. Name the features of spread, combined footings and raft foundation?
3. May the footings and foundations rest either on the bearing soil or on the heads of piling?
4. What is *floating foundations*?

### **Тема 31. Roofs: Types and Parts / Крыши: виды крыш и их части**

1. What are the functions of the roof?
2. What flooring materials help create a brighter room?
3. How are roofs classified nowadays?
4. What for the inclination of the roof is made as flat as possible?

### **Тема 32. Walls/ Стены.**

1. Explain the purpose of construction walls.
2. How are walls classified?
3. What does this division mean?
4. What are differences between inside and outside walls?
5. What is classification of stone walling?

### **Тема 33. Walls / Виды стен. Walls Strength /Мощность стен.**

1. How are walls classified nowadays?
2. Why must the walls and other parts of the building be carefully proportioned?
3. What can cause cracks in walls?
4. What materials are used for the wall construction?

### **Тема 34. Floors / Этажи. Напольные покрытия.**

5. How should floors be designed?
6. What problems should the designers deal with?
7. What are the functions of the floors?
8. Floors divide the building into stories. What material may the floors be of?
9. What type of floor may be consist of timber?
10. What does the strength of a floor depend on?

### **Тема 35. Floors / Напольные покрытия(2).**

1. What are the basement wood floors constructed for?
2. What do double floors consist of?
3. What is triple-joisted floor used for?
4. Name the advantages of fire-resisting floors.
5. What are Ferro slab floors formed of?
6. What are Hollow block floors formed of?
7. What are Precast beam floors consist of?

## **РАЗДЕЛ 5. MIXING, MOLDING AND CURING EQUIPMENT /Оборудование для смешивания, формования и отверждения строительных смесей**

**Тема 36. On Mixing, Molding and Curing Equipment / Об оборудовании для смешивания, формования и отверждения строительных смесей.**

1. What kind of mixers is in for more general use and why?
2. Explain the principle of batch mixer's work.
3. Why is continuous mixer used mostly in very large operations?
4. Molding of what kind of building units is accomplished with the help of vibration and with centrifugal process? Why?
5. What happens with concrete in the mould?
6. What conditions are necessary for manufacture of concrete?
7. What difficulties are happened to be in this process?
8. How is it possible to reduce the concrete curing period?

**Тема 37. Earth-Moving Machinery/Техника для земляных работ.**

1. What are the types of earth-moving machines?
2. Which are the most important of earth-moving machines?
3. What is the use of a bulldozer?
4. What is scraper and its functions?

**Тема 38. Cranes/ Краны.**

1. What are the types of cranes and their functions?
2. What is the use of Tower Cranes in construction practice?
3. What are the principal advantages of The Climbing Crane?
4. What is the range of uses of Mobile Cranes?
5. Tower cranes are employed for installation of separate elements, aren't they?

**РАЗДЕЛ 6. THE BASIC PROBLEMS OF A BUILDING MATERIAL'S INDUSTRY / ОСНОВНЫЕ ПРОБЛЕМЫ ПРОИЗВОДСТВА СТРОИТЕЛЬНЫХ МАТЕРИАЛОВ**

**Тема 39. The Basic Problems of a Building Material's Industry / Основные проблемы производства строительных материалов.**

1. What materials are yet a challenge of the future?
2. What are the most important properties of building materials?
3. What new building materials have chemists created?
4. What helps eliminate mistakes in design and construction?
5. What new discipline is being created and why is it necessary?
6. Where are the problems of strength of materials hidden?
7. Is simulating a new way of creating materials?
8. What makes it possible to simulate the properties of building materials?

**Тема 40. Modern Building Materials / Современные строительные материалы.**

1. What are the external forces that cause the elastic deformation of materials? Describe those forces that change the form and size of materials.
2. What are the results of external forces?
3. What kinds of deformation are the combinations of tension and compression?
4. What is the result of tension? What happens if the elastic limit of material is exceeded under tension?
5. What do we call fatigue? When does it occur? What are the results of fatigue?
6. What do we call creep? When does this type of permanent deformation take place? What are the results of creep?

#### **Тема 41. Modern Building Materials (2) / Современные строительные материалы.**

1. What is the density of a material?
2. What are the units of density? Where low density is needed?
3. What are the densities of water, aluminium and steel?
4. A measure of what properties is stiffness? When stiffness is important?
5. What is Young modulus?
6. What is strength?
7. What is yield strength? Why fracture strength is always greater than yield strength?
8. What is ductility? Give the examples of ductile materials. Give the examples of brittle materials.
8. What is toughness?
9. What properties of steel are necessary for the manufacturing of: a) springs, b) car body parts, c) bolts and nuts, d) cutting tools?
10. Where is aluminium mostly used because of its light weight?

#### **42. Classification of Building Materials / Классификация строительных материалов. Concrete /Бетон, Plastics /Пластик в строительстве, Metals / Металлы, Timber / Лесоматериалы.**

- 1. What is the application all building material?**
2. What are the traditional and the newest building materials?
3. How many groups are all building materials divided in as to their application?
4. What natural building materials do you know?
5. What materials have been known from time immemorial?
6. What are the physical properties of materials?
7. What are the chemical properties of materials?
8. What are the mechanical properties?

#### **43. Concrete/ Бетон**

1. What does the most common form of concrete consist of?
2. When does concrete harden?
3. How is this process called?
4. What is concrete used for?
5. Is concrete a popular material?
6. How much concrete is made each year?
7. How many people does concrete production employ in the United States?
8. How many miles of highways are made of concrete in America?
9. Who is the largest consumer of world cement production?

#### **44. Reinforced concrete/ Железобетон**

1. Is reinforced concrete a popular material?
2. What is reinforced concrete used for?
3. What does the most common form of **reinforced** concrete consist of?
4. What are the advantages of reinforced concrete for modern industrial buildings?

#### **45. Woodworking / Деревообработка**

1. What is woodworking?
2. When does the history of woodworking begin?
3. Where can a skilled woodworker build simple and complicated items?

4. Where can you buy tools for a workshop?
5. What do lumber retail stores sell?
6. Who constructs the wooden framework of buildings?
7. What other professions do woodworkers include?
8. What do cabinetmakers deal with?
9. Who does the inside trim work around wooden features that must fit exactly?
10. When did people use an ax as a woodworking tool?
11. When did woodworkers start forming guilds?
12. Were the guilds similar to any today's organizations?

#### **46. Woodworking (2) / Деревообработка**

1. What do woodworkers use drilling for?
2. How do they usually connect sections of wood?
3. What do woodworkers use for making holes of different sizes?
4. What do portable electric drills have for sanding?
5. What are metal fasteners used for?
6. What tools for fastening do woodworkers usually use?
7. How do woodworkers use hammers?
8. What is used for glueing sections of wood?
9. How can white glue be applied?
10. When shouldn't white glue be used?

#### **47. Sanding and finishing / Шлифовка и отделка.**

1. How do woodworkers make wood surfaces smooth for finishing?
2. When should woodworkers begin sanding?
3. For what use is most abrasive paper manufactured?
4. What common sanding material is used in sanding machines?
5. What sanding machines are considered to be the best ones?
6. What do woodworkers use to protect wood?
7. Does a stain hide the pattern and feel of the grain?
8. What are varnish, shellac, and lacquer used for?
9. How do woodworkers make the surface of the wood smooth and shiny?

#### **48. Beams/ Балочные перекрытия**

1. What are the types of beams?
2. What are they used for?
3. Characterize the type, usage, building materials of
  - ribbed slabs or channel units;
  - beams of hollow core type;
  - i-beam section, with either cast-in-place or precast slab;
  - inverted I-beam joists with lightweight filler blocks between;
  - beams assembled from hollow concrete blocks;
  - precast and prestressed floor units.

#### **49. Strength of slabs/ Прочность плит**

1. What happens if slabs are supported or fixed at two opposite sides only?
2. What happens if slabs are supported or fixed at four sides?
3. What are differences between a square slab supported on four sides and the same slab supported on two opposite sides only?
4. What does ratio depend upon?

5. What happens when the length exceeds twice the width?
6. What are differences in fractures between a square slab and a rectangular slab?
7. In what case the bending moment equates with the moment of resistance?

## **РАЗДЕЛ 7. ARCHITECTURE./ АРХИТЕКТУРА**

### **Тема 50. Architecture / Архитектура.**

1. What is architecture?
2. What is architecture landscape?
3. What is architecture employed for?
4. What does architecture give for a man?
5. What are the main features that distinguish work of architecture from other man made structures?
6. Which of them is a constant?

### **Тема 51. Architectural Planning, /Архитектурное планирование.**

1. When does the architect begin to work on the project?
2. What are the main aspects of architectural planning?
3. What must the architect control to make buildings habitable and comfortable?
4. What is the planning for use concerned with?
5. What are the major expenses in building?

### **Тема 52. Architecture of Ancient Times / Архитектура древнейших времён.**

#### **Современная архитектура.**

1. Who was the earliest named architect?
2. How do the structures of the Old, Middle and New Kingdoms differ?
3. When did the final revival of ancient Egyptian architecture take place?
4. What elements did this architecture invert?
5. What is the only remained wonder of the world?

### **Тема 53. Orders of Architecture/Ордер архитектора.**

1. What is term order?
2. What orders in classical architecture do you know?
3. What orders were invented by the Greeks?
4. What is difference between Greek Doric and Roman Doric?

### **Тема 54. British Architecture / Британская архитектура.**

1. Where did the first inhabitants of the British Isles live?
2. What sort of monument it the so-called Stonehenge?
3. When did the first towns begin to appear?
4. How did the British architecture develop?
5. What ancient British towns do you know?
6. What architectural monuments would you like to see being in Britain?

### **Тема 55. Russian Architecture / Русская архитектура.**

1. Where did Russia borrow its early architecture from?
2. What has always been the most natural building material in Russia?
3. Did wooden and masonry architecture develop side by side in medieval Russia?
4. Are you fond of Russian architecture? Why?
5. Where can one see the finest examples of traditional Russian architecture?
6. What are the best examples of Russian architecture?

## Тема 56. Famous Architects / Знаменитые архитекторы.

1. What famous English architects do you know?
2. What famous Russian architects do you know?
3. Who is your favourite architect?
4. What works of the world famous architects can you mention?
5. Do you agree with the statement that an architect is a contemporary of the future?

### 1. Критерии оценивания компетенций

Оценка «отлично» выставляется студенту, если он отлично знает лексику профессиональной направленности, нормы употребления лексики английского языка в профессиональной сфере и особенности грамматики профессионального английского языка. Отлично умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке, читать и переводить специальную литературу для пополнения профессиональных знаний. Уверенно владеет навыками профессионального общения на английском языке и способами пополнения профессиональных знаний из оригинальных источников на английском языке.

Оценка «хорошо» выставляется студенту, если он хорошо знает лексику профессиональной направленности, нормы употребления лексики английского языка в профессиональной сфере. Хорошо умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Хорошо владеет навыками профессионального общения на английском языке.

Оценка «удовлетворительно» выставляется студенту, если он частично знает лексику профессиональной направленности и нормы употребления лексики английского языка в профессиональной сфере. Частично умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Частично владеет навыками профессионального общения на английском языке.

Оценка «неудовлетворительно» выставляется студенту, если он имеет слабые знания лексики профессиональной направленности и норм употребления лексики английского языка в профессиональной сфере. Имеет минимальные способности осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Владеет минимальными навыками профессионального общения на английском языке.

### 2. Описание шкалы оценивания

Максимально возможный балл за весь текущий контроль устанавливается равным **55**. Текущее контрольное мероприятие считается сданным, если студент получил за него не менее 60% от установленного для этого контроля максимального балла. Рейтинговый балл, выставляемый студенту за текущее контрольное мероприятие, сданное студентом в установленные графиком контрольных мероприятий сроки, определяется следующим образом:

Уровень выполнения контрольного задания	Рейтинговый балл (в % от максимального балла за контрольное задание)
Отличный	<b>100</b>
Хороший	<b>80</b>
Удовлетворительный	<b>60</b>
Неудовлетворительный	<b>0</b>

**1. Методические материалы, определяющие процедуры оценивания знаний, умений, навыков и (или) опыта деятельности, характеризующих этапы формирования компетенций**

Процедура проведения данного оценочного мероприятия включает в себя перечень вопросов базового и повышенного уровней для собеседования.

Предлагаемые студенту задания позволяют проверить компетенцию УК-4 – Способен осуществлять деловую коммуникацию в устной и письменной формах на государственном языке Российской Федерации и иностранном(ых) языке(ах);

Вопросы для собеседования повышенного уровня являются более сложными и требуют для ответа более глубоких знаний материала.

При подготовке к ответу студенту предоставляется право пользоваться подготовленным им конспектом.

При проведении собеседования оцениваются: умение вести беседу, грамотность, логичность и последовательность изложения материала, темп речи.

#### Оценочный лист

Оцениваемый критерий	Оценка
Уровень раскрытия содержания материала	
Грамотность и логичность изложения материала	
Использование терминологии	
Умение иллюстрировать теоретические положения конкретными примерами	
Самостоятельность ответа, без наводящих вопросов	
Способность творчески применять знание теории к решению профессиональных задач	
Знание современной учебной и научной литературы	

Составитель \_\_\_\_\_ Т.В. Мухортова

«\_\_\_» \_\_\_\_\_ 2020 г.

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ  
ФЕДЕРАЦИИ**  
**Федеральное государственное автономное образовательное учреждение  
высшего образования**  
**«СЕВЕРО-КАВКАЗСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»**  
**Институт сервиса, туризма и дизайна (филиал) СКФУ в г. Пятигорске**

**УТВЕРЖДАЮ:**  
И. о. зав. кафедрой ЛиМК  
\_\_\_\_\_ Н.Ю. Климова  
«\_\_\_\_\_» \_\_\_\_\_ 2020 г.

**Темы индивидуальных заданий  
по дисциплине «Иностранный язык в профессиональной сфере»**

**Индивидуальные творческие задания:**

**1. Read and translate the text**

**Civil Engineering**

The term "engineering" is a modern one. The New Marriam-Webster Dictionary gives the explanation of the word "engineering" as the practical application of scientific and mathematical principles. Nowadays the term "engineering" means, as a rule, the art of designing, constructing or using engines. But this word is now applied \*in a more extended sense.<sup>1</sup> It is applied also to the art of executing such works as the objects of civil and military architecture, in which engines or other mechanical appliances are used. Engineering is divided into many branches. The most important of them are: civil, mechanical, electrical, nuclear, mining, military, marine and sanitary engineering.

While the definition "civil engineering" dates back only two centuries, the profession of civil engineer is as old as civilized life. It started developing with the rise of ancient Rome. In order to understand clearly what civil engineering constitutes nowadays, let us consider briefly the development of different branches of engineering. Some form of building and utilization of the materials and forces of nature have always been necessary for the people from the prehistoric times. The people had to protect themselves against the elements and sustain themselves in the conflict with nature.

First the word "civil engineering" was used to distinguish the work of the engineer with a non-military purpose from that of a military engineer. And up to about the middle of the 18<sup>th</sup> century there were two main branches of engineering — civil and military. \*The former included all those branches of the constructive art not directly connected with military operations and the constructions of fortifications, while the latter<sup>2</sup>, military engineering, concerned itself with the applications of science and the utilization of building materials in the art of war.

But as time went on, the art of civil engineering was enriched with new achievements of science. With the beginning of the Industrial Revolution and later there came a remarkable series of mechanical inventions, great discoveries in electrical science and atomic energy. It led to differentiation of mechanical, electrical, nuclear engineering, etc.

It is a well-known fact that with the invention of the steam engine and the growth of factories a number of civil engineers became interested in the practical application of the science of mechanics and thermodynamics to the design of machines. They separated themselves from civil engineering, and were called "mechanical engineers".



With the development of the science of electricity, there appeared another branch of the engineering — electrical engineering. It is divided now into two main branches: communications engineering and power engineering.

In the middle of the 20<sup>th</sup> century there appeared some other new branches of engineering—nuclear engineering and space engineering. The former is based on atomic physics, the latter — on the achievements of modern science and engineering.

At present there are hundreds of subdivisions of engineering, but they all, at one time or another, branched off from civil engineering.

The term "civil engineering" has two distinct meanings. In the widest and oldest sense it includes all non-military branches of engineering as it did two centuries ago. But in its narrower, and at the present day more correct sense, civil engineering includes mechanical engineering, electrical engineering, metallurgical and mining engineering.

\*Here are some fields of civil engineering<sup>3</sup>:

1. Housing, industrial and agricultural construction.

2. Structural engineering comprises the construction of all fixed structures with their foundations.

3. The construction of highways and city streets and pavements.

4. The construction of railroads.

5. The construction of harbours and canals.

6. Hydraulic engineering which includes the construction of dams and power plants.

The above enumeration will make clear the vast extent of the field of civil engineering.

## 2. A few explanations to the text

1. ... in a more extended sense — в более широком смысле

2. The former..., while the latter... — первый (имеется в виду из двух упомянутых)..., тогда как последний... (из двух упомянутых)

3. Here are some fields of civil engineering. — Вот некоторые области строительства.

## 3. Key vocabulary /expressions. Divide these words into groups according to types of engineering

appliance — приспособление, прибор

apply — обращаться (for — за помощью, справкой и т.д, to — к кому-л)

branch — ветвь; филиал; отрасль

concern (with)— касаться, относиться; интересоваться

conflict with nature — противоречить природе, бороться с природой

deal (with)— иметь дело с чем-л., кем-л.

distinguish (from) —отличать

execute —выполнять

harbor — гавань

lead (to)— вести (к)

sustain]— поддерживать; выдерживать

engine —двигатель

military — военный

nuclear — ядерный

mining — горный, горнодобывающий

marine — морской

rise — возникновение, подъем

utilization — использование

fortification — укрепление

to enrich — обогатить, разнообразить

remarkable – замечательный, отличный  
 steam – engine – паровой двигатель  
 growth – рост, увеличение  
 space – космос  
 to comprise – содержать  
 pavement – тротуар  
 vast – обширный, громадный  
 extent – степень, мера

**4. Word construction (Different ways to construct words). Translate the words keeping in mind their suffixes and prefixes**

military — **non**-military — militarisation; enumerate — enumeration;  
 decide — decision — decision-**maker**; invent — inventor—**invention**;  
 apply — appliance — application; explain — explanatory — explanation;  
 build — builder — building —rebuilt; achieve—achievement;  
 construct — constructor—construction — constructive—reconstruct

**5. General understanding. Answer the questions**

1. What does the word "engineering" mean?
2. Is engineering a science?
3. Into what branches is civil engineering divided?
4. How old is the profession of a civil engineer?
5. What distinct meanings has the term "civil engineering"?
6. What fields of civil engineering do you know?
7. What are the most important branches of civil engineering?
8. What invention laid the foundation for mechanical engineers?
9. When was electrical engineering developed?
10. What are the main subdivisions of the electrical engineering?

**6. Find in the text all kinds of engineering and using words from ex. 3, fill the table. Pay attention to some peculiarities of the certain type of engineering and what it deals with**

Titles							
Definitions							

**7. Explain these phrases, using your knowledge of building terms and new words**

- a) the practical application of scientific and math principles,
- b) the art of designing and constructing, using engines,
- c) the objects of civil and military architecture,
- d) utilization of the materials and forces of nature
- e) applications of science and the utilization of building materials in the art of war,
- f) Industrial Revolution and mechanical invention.

**8. Be ready with a brief report concerning famous and the most interesting structures all over the world, their designers and constructors, some interesting facts about their life**

**9. Compose the conversation for a group of 3-4 students about civil engineering, using information from the text and your report**

Follow this plan:

- a) the history of civil engineering,

- b) civil engineering is the art of some sciences and technologies,
- c) some important and interesting facts about famous architects and constructors, their life and achievements.

### Building materials

**10. Listen to the text and fulfill some tasks**

- 1. solid – сплошной, массивный, цельный
- 2. compressive – сжимающий
- 3. sheet – листовой
- 4. rigid – устойчивый, жесткий
- 5. rod – стержень, брус
- 6. tensile – растяжение
- 7. planar – планарный
- 8. mass – монолитная

**11. Copy and complete this table by putting ticks in the boxes to show the functions of the components:**

Form of material	Function of components		
	Structural support only	Space dividing only	Both structural support and space dividing
Blocks			
Sheets			
Rods			

**12. Now say whether these statements are true or false. Correct the false statements**

- a) Rod materials can be used for both diving space and supporting the building.
- b) Concrete can be used as a block material, a sheet material and a rod material.
- c) Steel is used for frame construction because it has high tensile strength and low compressive strength.
- d) The sheet materials, which act as space dividers in a frame construction building, can be very light because they do not support structural loads.
- e) Mass construction buildings are light whereas planar construction buildings are heavy.

**13. Look at the buildings and discuss the basic forms of the materials used to build them.**

**14. Say in details about:**

- a) planar construction                      b) frame construction c) mass construction

**15. Compose brief dialogs about types of construction in your course or through projects. Prove that building materials which supposed to be used in it are suitable for the certain type of construction.**

**16. The task for two teams: draw any modern structure you like including all types of construction. Discuss necessity of each type in the certain part of your structure, the most suitable building materials for each part and for the climate conditions you choose. Prove that you structure is real to life.**

**1.Критерии оценивания компетенций**

Оценка «отлично» выставляется студенту, если он отлично знает лексику профессиональной направленности, нормы употребления лексики английского языка в профессиональной сфере и особенности грамматики профессионального английского языка. Отлично умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке, читать и переводить специальную литературу для пополнения профессиональных знаний. Уверенно владеет навыками профессионального общения на английском языке и способами пополнения профессиональных знаний из оригинальных источников на английском языке.

Оценка «хорошо» выставляется студенту, если он хорошо знает лексику профессиональной направленности, нормы употребления лексики английского языка в профессиональной сфере. Хорошо умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Хорошо владеет навыками профессионального общения на английском языке.

Оценка «удовлетворительно» выставляется студенту, если он частично знает лексику профессиональной направленности и нормы употребления лексики английского языка в профессиональной сфере. Частично умеет осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Частично владеет навыками профессионального общения на английском языке.

Оценка «неудовлетворительно» выставляется студенту, если он имеет слабые знания лексики профессиональной направленности и норм употребления лексики английского языка в профессиональной сфере. Имеет минимальные способности осуществлять профессиональную коммуникацию в устной и письменной формах на английском языке. Владеет минимальными навыками профессионального общения на английском языке.

## 2. Описание шкалы оценивания

Максимально возможный балл за весь текущий контроль устанавливается равным **55**. Текущее контрольное мероприятие считается сданным, если студент получил за него не менее 60% от установленного для этого контроля максимального балла. Рейтинговый балл, выставляемый студенту за текущее контрольное мероприятие, сданное студентом в установленные графиком контрольных мероприятий сроки, определяется следующим образом:

Уровень выполнения контрольного задания	Рейтинговый балл (в % от максимального балла за контрольное задание)
Отличный	<b>100</b>
Хороший	<b>80</b>
Удовлетворительный	<b>60</b>
Неудовлетворительный	<b>0</b>

## 3. Методические материалы, определяющие процедуры оценивания знаний, умений, навыков и (или) опыта деятельности, характеризующих этапы формирования компетенций

Процедура проведения данного оценочного мероприятия включает в себя перечень индивидуальных заданий. Предлагаемые студенту задания позволяют проверить компетенцию УК-4- способен осуществлять деловую коммуникацию в устной и письменной формах на государственном языке Российской Федерации и иностранном(ых) языке(ах).

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