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МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное
образовательное учреждение высшего образования
«СЕВЕРО-КАВКАЗСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»

Пятигорский институт (филиал) СКФУ

УТВЕРЖДАЮ
И.о. заведующего кафедрой
физики, электротехники и электроэнергетики
Масютина Г.В.

ФОНД ОЦЕНОЧНЫХ СРЕДСТВ

для проведения текущего контроля успеваемости и промежуточной аттестации по дисциплине **«Иностранный язык в сфере профессиональной коммуникации»**

(ЭЛЕКТРОННЫЙ ДОКУМЕНТ)

Направление подготовки	13.03.02 Электроэнергетика и электротехника
Направленность (профиль)	Передача и распределение электрической энергии в системах электроснабжения
Квалификация выпускника	Бакалавр
Форма обучения	заочная
Год начала обучения	2021 г
Реализуется в 3,4,5 семестре	

Предисловие

1. Назначение: контроль уровня сформированности компетенции УК-4 как средства, позволяющего обеспечить коммуникативно-познавательные потребности в сферах академической, профессиональной и социально-гуманитарной деятельности.
2. Фонд оценочных средств текущего контроля успеваемости и промежуточной аттестации разработан на основе рабочей программы дисциплины «Иностранный язык в профессиональной сфере» в соответствии с образовательной программой высшего образования по направлению подготовки 13.03.02 Электроэнергетика и электротехника, утвержденной на заседании Учебно-методического совета СКФУ, протокол № ____ от «___»_____2019 г.

3. Разработчик – _____

4. ФОС рассмотрен и утвержден на заседании кафедры лингвистики и межкультурной коммуникации, протокол №___ от «___»_____20___г.

5. ФОС согласован с выпускающей кафедрой физики, электротехники и электроэнергетики, протокол №___ от «___»_____20___ г.

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

Экспертное заключение: Фонд оценочных средств для проведения текущего контроля успеваемости и промежуточной аттестации по дисциплине «Иностранный язык в профессиональной сфере» соответствует требованиям ФГОС ВО и образовательной программе по направлению подготовки 13.03.02 Электроэнергетика и электротехника и может применяться в учебном процессе.

«____»_____20__ г._____

7. Срок действия ФОС: 1 год

Паспорт фонда оценочных средств
для проведения текущего контроля и промежуточной аттестации

Дисциплина	Иностранный язык в сфере профессиональной коммуникации
Направление подготовки	13.03.02 Электроэнергетика и электротехника
Направленность (профиль)	Передача и распределение электрической энергии в системах электроснабжения
Квалификация выпускника	бакалавр
Форма обучения	заочная
Год начала обучения	2021
Изучается	в 3, 4, 5 семестрах

Код оцениваемой компетенции	Этап формирования компетенции (№ темы)	Средства и технологии оценки	Вид контроля, аттестация	Тип контроля	Наименование оценочного средства	Количество заданий для каждого уровня, шт.	
						Базовый	Повышенный
УК-4	№ 1 – 23	Собеседование	текущий	устный	Вопросы для собеседования	94	188 (94)
УК-4	№ 1 – 23	Собеседование	текущий	устный, письменный	Темы индивидуальных заданий	10	10

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
«__» _____ 20__ г.

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

Базовый уровень

Тема 5. Arithmetic Operations / Арифметические действия
1. Solve these problems and read them:

99 + 77 = _____	8 - 3 = _____	315 + 145 = _____
61 - 50 = _____	47 - 18 = _____	859 - 600 = _____
114 + 316 = _____	1,203 + 419 = _____	4,444 + 7,777 = _____
10 × 7 = _____	49 : 7 = _____	13 × 3 = _____
100 × 100 = _____	175 : 25 = _____	618 : 6 = _____

Тема 1, 2. Electric Circuit / Электрическая цепь
1. What elements does a circuit consist of?
2. What is the function of a voltage source?
3. What is the function of a conductor?
4. What is the function of a resistor?

Тема 3. Meters / Измерительные приборы
1. What is the ammeter used for?
2. What is the voltmeter used for?
3. What is the ohmmeter used for?
4. What terminals does a meter have?

Тема 4. Resistors / Резисторы
1. What is a resistor used for?
2. When does the temperature of a resistor rise?
3. What element is used to change the value of voltage?
4. What types of resistors do you know?

Тема 5. Electric Cells / Электрические элементы
1. What is a cell used for?
2. What does a cell consist of?
3. What is the function of the terminals?

4. In what way are cells connected in order to increase the voltage output?
5. In what way are cells connected in order to increase the current capacity?
6. In what way are the terminals of series cells connected?
7. In what case does a cell stop operating?

Тема 6. Conductors and Insulators / Проводники и изоляторы

1. What materials are called conductors?
2. What is the advantage of copper compared with silver?
3. What is the most common function of wire conductors?
4. Why is a minimum voltage drop produced in copper conductors?
5. What is the relation between the value of resistance and the temperature in carbon?
6. What materials are called insulators?
7. What are the most common insulators?

Тема 7. Types of Current / Типы тока

1. What is current?
2. What types of current do you know?
3. What type of current is called an alternating current?
4. What type of current is called a direct current?
5. What is called the frequency of current?
6. What value of inductance do conductors have?
7. What is the function of inductors?

Тема 8. Coupling / Соединение

1. What is a filter used for?
2. What does a filter consist of?
3. What is the function of a low-pass filter?
4. What is the function of a high-pass filter?

Тема 9. Electron Tubes / Электронные лампы

1. What types of electron tubes are used nowadays?
2. How many electrodes does a diode (a triode, a tetrode, a pentode) contain?
3. What is the function of the cathode (the plate, the control grid, the screen grid, the suppressor grid)?
4. What does the constant use of a tube result in?
5. What does low emission result from?
6. When must a tube be replaced?

Тема 10. Electromagnetic Relay / Электромагнитное реле

1. What are the main parts of a relay?
2. How is a relay put into operation?
3. When does the spring pull the armature?
4. What wires connect the panel with the relay?
5. By what means are street lights switched on and off?
6. In what position does die switch have high (low) resistance?

Тема 11. Components of Electric Circuits / Компоненты электрических цепей

1. What are the main components of an electric circuit?
2. What is the function of an electric source?
3. What is the function of a load?
4. What is the function of wire conductors?
5. What other devices are utilized in a circuit?

6. Why is aluminium widely used nowadays?

Тема 12. Transmission Lines / Линии электропередачи

1. By what means is electric power system transmitted?
2. Which system has no parallel branches?
3. Into what groups are all the transmitting lines classed?
4. What components does an overhead line have?

Тема 13. Safety Earthing System. Electric Shock / Система защитного заземления. Электрический шок

1. What does an earthing system serve for?
2. What parts are termed dead (live)?
3. In what air does the risk of an electric shock decrease?
4. By what means is connection to ground made?

Тема 14, 18. Transformers / Трансформаторы

1. What is a transformer used for?
2. What does a transformer consist of?
3. What is the function of the primary winding?
4. What is the function of the secondary winding?
5. What type of transformer is called a step-up transformer?

Тема 15, 19. Electric Motors / Электродвигатели

1. What types of magnets are used in heavy industry?
2. How long is motors' service life under normal conditions?
3. What are the main types of motors in use nowadays?
4. What are motors used for?

Тема 16, 20. Faults of Motors and Ways of Their Repair / Неисправности двигателей и способы их устранения

1. What do motors' faults result from?
2. Are there any faults that can be ignored?
3. What makes motors' service life shorter?
4. What does voltage supply stop result in?
5. What processes show the (dis)advantages of devices?
6. What should be done in case the motor is overloaded?

Тема 17, 22. Electric Power Consumers and Power Systems / Потребители электроэнергии и энергосистемы

1. What enterprises are called electric power consumers?
2. When do their operating characteristics vary?
3. What consumers belong to the four different groups?
4. What conditions does the load graph determine?
5. What type of system is called a power system?
6. What processes interconnect the components of a power system?
7. In what way is an economical utilization of power installations achieved?
8. What does a substation serve for?
9. What type of consumers does a substation feed?

Тема 18, 23. Atomic Power Plants and Environmental Protection / Атомные электростанции и защита окружающей среды

1. What are the main units of an atomic power plant?

2. By what means is the nuclear reactor cooled?
3. At what pressure does the water pass into the reactor?
4. What types of power plants pollute the air with dust and smoke?
5. Why is it necessary to protect attending personnel?
6. By what means is it done?

Повышенный уровень

Тема 5. Arithmetic Operations / Арифметические действия

1. Solve these problems and read them:

99 + 77 = _____	8 - 3 = _____	315 + 145 = _____
61 - 50 = _____	47 - 18 = _____	859 - 600 = _____
114 + 316 = _____	1,203 + 419 = _____	4,444 + 7,777 = _____
10 × 7 = _____	49 : 7 = _____	13 × 3 = _____
100 × 100 = _____	175 : 25 = _____	618 : 6 = _____

2. Read these common and decimal fractions:

1/3	2/5	5/8	7 1/2	9 5/8	15 8/9
0.23	0.009	10.01	205.35	79.31	0.0003

Тема 2. Electric Circuit / Электрическая цепь

1. What elements does a circuit consist of?
2. What is the function of a voltage source?
3. What is the function of a conductor?
4. What is the function of a resistor?
5. What type of circuit has the main line and parallel branches?
6. What type of circuit is used in order to have the same value of current in all the elements?
7. What type of circuit is used in order to have the same value of voltage in all the elements?
8. What is the difference between series and parallel circuits?

Тема 3. Meters / Измерительные приборы

1. What is the ammeter used for?
2. What is the voltmeter used for?
3. What is the ohmmeter used for?
4. What terminals does a meter have?
5. In what way should the voltmeter be connected to the circuit?
6. In what way should the ammeter be connected to the circuit?
7. What is the difference between a voltmeter and an ammeter?
8. What common meters are used to measure the values in a circuit?

Тема 4. Resistors / Резисторы

1. What is a resistor used for?
2. When does the temperature of a resistor rise?

3. What element is used to change the value of voltage?
4. What types of resistors do you know?
5. What is the difference between a fixed resistor and a variable resistor?
6. How much is the current-carrying capacity of a two-ohm resistor?
7. What resistors have a variable value?
8. What type of resistor is a rheostat?

Тема 5. Electric Cells / Электрические элементы

1. What is a cell used for?
2. What does a cell consist of?
3. What is the function of the terminals?
4. In what way are cells connected in order to increase the voltage output?
5. In what way are cells connected in order to increase the current capacity?
6. In what way are the terminals of series cells connected?
7. In what case does a cell stop operating?
8. What should be done in case it stops operating?
9. What is a capacitor used for?
10. What are the main parts of a capacitor?
11. What is the function of insulators?
12. What is the difference between a fixed capacitor and a variable one?
13. What should be done in order to change a capacitor?
14. What is the relation between the value of capacity and the distance of plates?

Тема 6. Conductors and Insulators / Проводники и изоляторы

1. What materials are called conductors?
2. What is the advantage of copper compared with silver?
3. What is the most common function of wire conductors?
4. Why is a minimum voltage drop produced in copper conductors?
5. What is the relation between the value of resistance and the temperature in carbon?
6. What materials are called insulators?
7. What are the most common insulators?
8. What are the two main functions of insulators?
9. What is the difference between conductors and insulators?
10. How does current pass through insulators?
11. What materials are commonly used to produce insulators?
12. What materials are commonly used to produce conductors?
13. In what case do insulators conduct current?
14. How does resistance change when the temperature decreases?

Тема 7. Types of Current / Типы тока

1. What is current?
2. What types of current do you know?
3. What type of current is called an alternating current?
4. What type of current is called a direct current?
5. What is called the frequency of current?
6. What value of inductance do conductors have?
7. What is the function of inductors?
8. What are elements with a definite value of inductance called?
9. What does induction by a varying current result from?
10. What is the relation between the current changes and the value of induced voltage?
11. What is the unit of resistance?
12. What is the unit of potential difference?

13. For what type of current is an air core used?
14. What is the relation between the number of turns of a coil and its inductance value?

Тема 8. Coupling / Соединение

1. What is a filter used for?
2. What does a filter consist of?
3. What is the function of a low-pass filter?
4. What is the function of a high-pass filter?
5. What is the difference between a low-pass filter and a high-pass filter?
6. What elements are used as a bypass?
7. What is the function of a choke coil?
8. What is the function of an inductance coil?

Тема 9. Electron Tubes / Электронные лампы

1. What types of electron tubes are used nowadays?
2. How many electrodes does a diode (a triode, a tetrode, a pentode) contain?
3. What is the function of the cathode (the plate, the control grid, the screen grid, the suppressor grid)?
4. What does the constant use of a tube result in?
5. What does low emission result from?
6. When must a tube be replaced?
7. How are electron tubes used?
8. What type of device is called a rectifier?
9. By what means is alternating current rectified into direct current?
10. What elements does a half-wave rectifier consist of?
11. What current should be applied to put a half-wave rectifier into operation?
12. By what means are pulsations eliminated?

Тема 10. Electromagnetic Relay / Электромагнитное реле

1. What are the main parts of a relay?
2. How is a relay put into operation?
3. When does the spring pull the armature?
4. What wires connect the panel with the relay?
5. By what means are street lights switched on and off?
6. In what position does die switch have high (low) resistance?
7. In what position is the switch open? Closed?
8. In what way is the switch connected to the circuit?
9. What does a fuse serve for?
10. For what type of current are fuses used?
11. What should be done in case of a faulty fuse?
12. What principle is fuse protection based on?

Тема 11. Components of Electric Circuits / Компоненты электрических цепей

1. What are the main components of an electric circuit?
2. What is the function of an electric source?
3. What is the function of a load?
4. What is the function of wire conductors?
5. What other devices are utilized in a circuit?
6. Why is aluminium widely used nowadays?
7. Is its cost very low or comparatively low?
8. What is the cross-section of copper conductors?
9. May one ignore power loss in short wire? Why?

10. What does the efficiency of a line depend on?
11. What are fuses used for?
12. When does a line become inefficient?

Тема 12. Transmission Lines / Линии электропередачи

1. By what means is electric power system transmitted?
2. Which system has no parallel branches?
3. Into what groups are all the transmitting lines classed?
4. What components does an overhead line have?
5. What elements do conductors consist of?
6. In what areas are overhead (underground) lines used?
7. Where is the current potential difference lowered?
8. Where is the main step-down substation installed?

Тема 13. Safety Earthing System. Electric Shock / Система защитного заземления. Электрический шок

1. What does an earthing system serve for?
2. What parts are termed dead (live)?
3. In what air does the risk of an electric shock decrease?
4. By what means is connection to ground made?
5. What does an electric shock result from?
6. Is a current of 50 mA dangerous for a man?
7. Is wet and hot atmosphere dangerous for the attending personnel?
8. Does the risk of an electric shock decrease with increasing current?

Тема 14, 18. Transformers / Трансформаторы

1. What is a transformer used for?
2. What does a transformer consist of?
3. What is the function of the primary winding?
4. What is the function of the secondary winding?
5. What type of transformer is called a step-up transformer?
6. What type of transformer is used for high-frequency currents?
7. What type of transformer is called a step-down transformer?
8. What type of transformer is used for low-frequency currents?
9. What are common troubles in a transformer?
10. What should be done in case a transformer has a trouble?

Тема 15, 19. Electric Motors / Электродвигатели

1. What types of magnets are used in heavy industry?
2. How long is motors' service life under normal conditions?
3. What are the main types of motors in use nowadays?
4. What are motors used for?
5. What is the motor's main part?
6. Where is the armature placed?
7. What ratings does the nameplate of a motor bear?
8. Under what conditions does a motor operate normally (poorly)?

Тема 16, 20. Faults of Motors and Ways of Their Repair / Неисправности двигателей и способы их устранения

1. What do motors' faults result from?
2. Are there any faults that can be ignored?
3. What makes motors' service life shorter?

4. What does voltage supply stop result in?
5. What processes show the (dis)advantages of devices?
6. What should be done in case the motor is overloaded?
7. What should be done in case the fuses are faulty?
8. What should be done in case the rheostat is shorted?
9. What should be done in case the brushes spark?
10. What should be done in case the pressure is low?
11. What should be done in case the ventilation does not operate?
12. What should be done in case the rotor brushes against stator?

Тема 17, 21. Electric Power Consumers and Power Systems / Потребители электроэнергии и энергосистемы

1. What enterprises are called electric power consumers?
2. When do their operating characteristics vary?
3. What consumers belong to the four different groups?
4. What conditions does the load graph determine?
5. What type of system is called a power system?
6. What processes interconnect the components of a power system?
7. In what way is an economical utilization of power installations achieved?
8. What does a substation serve for?
9. What type of consumers does a substation feed?
10. What parts are the power transmission lines connected to?
11. What components does a substation comprise?
12. What types are substations classed into?
13. What are advantages of a transformer substation?
14. On what sites are hydroelectric power plants built?
15. Are large-capacity plants located far from consumers of power?
16. Is the production process at the plants simple or is it complex?
17. What influences the power capacity of a plant?
18. According to what factors does the daily inflow of water fluctuate?

Тема 18, 23. Atomic Power Plants and Environmental Protection / Атомные электростанции и защита окружающей среды

1. What are the main units of an atomic power plant?
2. By what means is the nuclear reactor cooled?
3. At what pressure does the water pass into the reactor?
4. What types of power plants pollute the air with dust and smoke?
5. Why is it necessary to protect attending personnel?
6. By what means is it done?
7. What kind of products does the operating nuclear power plant release?
8. What installations are used to prevent the harmful effects of a nuclear power plant operation?
9. What material are the tubes made of?
10. Where are the fission products confined?
11. In what part of the installation is the reactor vessel placed?
12. In what way are the hot radioactive waste products disposed?

1. Критерии оценивания компетенций

Отметка «отлично» выставляется студенту, если он твердо знает базовые нормы употребления лексики и фонетики; основные способы работы над языковым и речевым материалом; лексико-грамматический минимум по специальности в объеме, необходимом

для работы с иноязычным материалом и текстами в процессе профессиональной деятельности; способен планировать самостоятельную работу, структурировать информацию на иностранном языке и самостоятельно использовать их в профессиональных целях, владеет приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы; способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры необходимыми навыками профессионального общения на иностранном языке; техникой работы с основными типами справочной и учебно-справочной литературы (словари, энциклопедические справочники).

Отметка «хорошо» выставляется студенту, если он твердо знает базовые нормы практических задач в области иностранного языка и основные способы работы над языковым и речевым материалом; умеет работать с текстами профессиональной направленности на иностранном языке, владеет приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

Отметка «удовлетворительно» выставляется студенту если он имеет знания только базовых норм употребления лексики и фонетики; и основных способов работы над языковым и речевым материалом, частично умеет работать с текстами профессиональной направленности на иностранном языке, частично владеет способами пополнения знаний на основе использования оригинальных источников на иностранном языке, но испытывает трудности в общении на иностранном языке и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

Отметка «неудовлетворительно» выставляется студенту, который не знает базовых норм употребления лексики и фонетики на иностранном языке и основных способов работы над языковым и речевым материалом, имеет минимальные способности в работе с текстами профессиональной направленности, владеет минимальными приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

2. Описание шкалы оценивания

Максимально возможный балл за весь текущий контроль устанавливается равным **60** (**55** баллов за текущий контроль и от **1 до 5** дополнительных баллов за регулярную хорошую работу, ответственное отношение к дисциплине). 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	**100**

Хороший	**80**
Удовлетворительный	**60**
Неудовлетворительный	**0**

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 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 отличаются от базовых более глубоких знаний материала. Для подготовки к данному оценочному мероприятию необходимо 48,6 часов самостоятельной работы.

Оценка **«отлично»** выставляется студенту, если при ответе на вопросы, допущено не более 1 ошибки.

Оценка **«хорошо»** выставляется студенту, если при ответе на вопросы, допущено 2 ошибки.

Оценка **«удовлетворительно»** выставляется студенту, если при ответе на вопросы, допущено от 3 до 5 ошибок.

Оценка **«неудовлетворительно»** выставляется студенту, если при ответе на вопросы, допущено 6 и более ошибок.

Составитель _____ _____

«____»_____20__ 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
«____» __ _____ 20__ г.

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

Базовый уровень

1. Read the text and find in it the answers to the questions that follow it.

Switchboard

Switchboard is an assemblage of switches, controlling or indicating devices mounted upon a frame for the purpose of control or an inspection of an electric path, circuit or system of circuits. Usually it is a metal frame carrying vertical slabs with switches, controlling handles and indicating or controlling instruments mounted thereon in an electric central station or distributing centre.

1. What is described in the text?
2. Where is the device used?

2. Read the text and find in it the answers to the questions that follow it.

Dynamo

Dynamo is a common device for converting mechanical energy into electric energy. This process depends on the fact that if an electrical conductor moves across a magnetic field, an electric current flows in the conductor.

Usually a dynamo includes an electromagnet, called the field mag net, between the poles of which a suitable conductor, usually in the form of a coil, called the armature, is rotated. The mechanical energy of the rotation, in the form of a current in the armature, is thus converted into electric energy.

1. What device is described in the text?
2. What types of the device do you know?

3. Read the text and find in it the answers to the questions that follow it.

Test Blocks Types B-4 and B-6

The types B-4 and B-6 test blocks with test plugs are designed as multipole connectors in the circuits of protective relays and measuring instruments.

The test blocks provide an easy and safe checking and replacement of relays and instruments during operation without breaking connections in wiring and on terminal blocks.

The test blocks are made in several versions which differ in the number of poles and in the way of wire connection.

Design. The test blocks consist of two units: the base and the removable cover.

While testing, the cover is removed and is replaced by the test plug which is inserted into the base and is electrically connected to the circuit for testing purposes.

Technical data. Rated voltage: 250 V; rated current: 5 A. Test voltage: 2 kV, a.c. 50 c.p.s. Transient stability: 300 A. The insulation resistance at ambient temperatures of 20±5°C should be not less than 2 megohms at relative humidity up to 80%, and not less than 2 megohms at relative humidity of 95%.

Mounting. Test blocks are mounted on the front panel. Before mounting, blocks should be provided with current-carrying pins.

Operating conditions. The blocks are designed for indoor use in stationary installations at ambient temperature and relative air humidity which are indicated. The blocks are produced in three types of designs: 1. conventional; 2. export; 3. tropicalized. Ambient temperatures for the blocks of the first type of design are from -20 up to +35; for blocks of the second type – from -10 up to +35, and for the third type – from -10 up to +55. As to relative air humidity, it is also different for different types of devices. For the first type it is 80% at 20±5°C; for the second type it is also up to 80% in the same range of temperatures, and for the third type it is 95% at 40°C.

The test blocks are not to be used a) in an atmosphere containing current-conducting dust or gases which damage metals and insulation; b) where shock and vibration can take place; c) in an explosion-hazardous atmosphere.

The delivery set includes a) base; b) cover; c) fastenings for mounting blocks and connections of wires.

Order form. When ordering, state the type of the block, kind of wire connection and number of units. For example, ORDER: Test block type B-6 for back connection – 3 pcs (=pieces).

1. What are the main characteristics of test blocks types B-4 and B-6?
2. When are the test blocks described not to be used?

4. Read the text and find in it the answers to the questions that follow it.

Starting Resistors Types 50-51

The electrical block resistors are generally used in starting and regulating installations for motors of any type and power.

Starting resistors have the capacity to support very high temperature variations, to which they are subjected due to their operating duty, without alteration or distortion.

Resistors consist of silicon sheet-steel or of special cast iron elements. Said elements are grouped in an assembly by means of steel rods interlocked by bolts in order to obtain rigid assemblies. These units are suitable for use in any type of machine and operate under high vibration conditions. For protection purposes, the resistor units are assembled in sheet-steel cases supplied with ventilation slits.

Starting resistors have a number of advantages; they are unbreakable, light, rigid; they can withstand, without variation, vibration and shocks. They are also easily detachable; their elements are interchangeable. Resistors are intended for operation in an ambient temperature of up to 300°C.

1. What device is described in the article?
2. What is the device used for?

3. What elements does it consist of?
4. What are the advantages of the device?

5. Study the figure and complete the sentences stating what metals are used for producing the devices *a-e*.

What Metals Are Used in Making Electrical Devices?

1. *Alnico* is an alloy of iron, aluminium, nickel, and cobalt used in making… .
2. *Phosphor bronze* springs are used to produce… .
3. *Tungsten* is used in … .
4. *Nickel* and *cadmium* are used in … rechargeable.
5. *Nichrome* is high-resistance alloy of nickel and chromium used for … .

a) meter pointer

b) permanent magnet

c) battery cell

d) lamp

e) heater element

6. Arrange the paragraphs of the text in the logical order.

Aviation Signal

A glass tube filled with neon gas was found to be suitable for this kind of work. Instead of a neon lamp, in some cases, a low current filament lamp may also be used as a signalling source.

In order to assist the aviator in locating the transmission line, a signal marking its position is provided; this signal is a luminous lamp attached to the conductors of the transmission line; the lamp is lighted by the potential on the line and serves to indicate its position. This signal also makes a safety device. If the line is under tension, the attending personnel working on it will know that potential is on the line.

A high tension transmission line leading from one city to another makes a guideway for aviators during the day time, since it is visible from great distances. However, at night the high tension transmission line becomes a danger for the aviator, rather than a help.

7. Read the text and find in it the answers to the questions that follow it.

Thermal Steam-turbine Power Plants

Large steam-turbine plants have two forms: condensing plants or electric power plants.

The great masses of hot steam, having accomplished the mechanical work in the turbines of condensing steam-turbine plants, are condensed, i.e. are cooled down and turned back into distilled water, and returned to the boiler for production of steam to activate the turbine.

Condensation of steam takes place in condensers where the hot steam is cooled when it comes in contact with tubes through which cold water, supplied from a water reservoir (river or lake), is circulated. This cooling water, after it takes the heat from the spent steam, is returned to the water source carrying along with it the unutilized heat energy. This water is called the circulating water. The importance of the distilled water for feeding steam boilers is extremely great since chemically clean water decreases the formation of scale in the boiler tubes, and, thus, makes their service life longer.

Condensing plants of large generating capacity are built close to sources of fuel, in order not to transport large quantities of fuel over considerable distances.

The electric power generated in such plants is transmitted over long distances for the supply of large industrial regions. So these plants are called regional thermal power plants.

Heat and electric power plants, in addition to electric power generation, also supply heat to closely located consumers (within a radius of 50 km), i.e. serve as district heat plants. To such heat consumers belong all kinds of industrial enterprises that require heat for production purposes, and also municipal consumers such as baths, laundries and the heating systems of dwelling houses and other buildings.

The electric power developed by the generators is fed to the switchboard of the plant, whence it is delivered by overhead transmission and cable lines to the consumers.

1. In what part of the power plant does condensation of steam take place?
2. Why is distilled water used for feeding steam boilers?

8. Arrange the paragraphs of the text below in the logical order.

Testing Motors and Generators

It is of great importance, therefore, to make regular tests of insulation resistance of all machinery so as to detect possible faults. Different conditions may influence the value of the insulation resistance.

It is advisable, therefore, to make the test of the machine as soon after it has been shut down as possible, when the insulation resistance is likely to be lowest. If, after the motor has just been shut down, the insulation resistance is found to be satisfactory, it may be assumed that it will be better at any other time provided that the machine does not stand idle for long in a humid atmosphere.

Faults on electrical machinery must be due to one of two causes. One is the absence of continuity in the conductor which is supposed to be carrying the current. The other is the absence, or partial absence, of insulation. The latter is by far the more common and the more dangerous of the two. A burnt out armature, for example, is usually due to insulation failure.

A drop in insulation resistance may often be accounted for, for example, by damp weather.

As regards the effect of temperature it should be noted that the insulation resistance of motors and generators is generally lower when they are hot than when they are cold as the insulating varnishes used in the building of the machines have a lower resistance when hot than when cold.

9. Read and translate the text. Think of 8-10 questions covering the contents of the text below.

In science and engineering, **conductors** are materials that contain movable charges of electricity. When an electric potential difference is impressed across separate points on a conductor, the mobile charges within the conductor are forced to move, and an electric current between those points appears in accordance with Ohm's law. While many conductors are metallic, there are many non-metallic conductors as well, including all plasmas.

Under normal conditions, all materials offer some resistance to flowing charges, which generates heat. Thus, proper design of an electrical conductor includes an estimate of the temperature that the conductor is expected to endure without damage, as well as the quantity of electrical current. The motion of charges also creates an electromagnetic field around the conductor that exerts a mechanical radial squeezing force on the conductor. A conductor of a given material and volume (length x cross-sectional area) has no real limit to the current it can carry without being destroyed as long as the heat generated by the resistive loss is removed and the conductor can withstand the radial forces. This effect is especially critical in printed circuits, where conductors are relatively small and the heat produced, if not properly removed, can cause fusing of the tracks.

Non-conducting materials lack mobile charges and are called insulators. A material can be an electrical conductor without being a thermal conductor, although a metal can be both an electrical conductor and a thermal conductor. Electrically conductive materials are usually classified according to their electrical resistance; ranging from high to null resistance, there are semiconductors, ordinary metallic conductors (also called normal metals), and superconductors.

10. Read and translate the text. Think of 8-10 questions covering the contents of the text below.

In electricity, current refers to electric current, which is the flow of electrons. Lightning is an example of an electric current, as is the solar wind, the source of the polar aurora. Probably the most familiar form of electric current is the flow of conduction electrons in a metallic wire. This is how utility companies deliver electricity. In electronics, electric current is most often the flow of electrons through conductors and devices such as resistors, but it is also the flow of ions inside a battery or the flow of holes within a semiconductor.

Conventional current was defined early in the history of electrical science as a flow of positive charge. In solid metals, like wires, the positive charges are immobile, and only the negatively charged electrons flow in the direction opposite conventional current, but this is not the case in most non-metallic conductors. In other materials, charged particles flow in both directions at the same time. Electric currents in electrolytes are flows of electrically charged atoms (ions), which exist in both positive and negative varieties. For example, an electrochemical cell may be constructed with salt water (a solution of sodium chloride) on one side of a membrane and pure water on the other. The membrane lets the positive sodium ions pass, but not the negative chlorine ions, so a net current results. Electric currents in plasma are flows of electrons as well as positive and negative ions. In ice and in certain solid electrolytes, flowing protons constitute the electric current. To simplify this situation, the original definition of conventional current still stands.

There are also instances where the electrons are the charge that is physically moving, but where it makes more sense to think of the current as the movement of positive "holes" (the spots that should have an electron to make the conductor neutral). This is the case in a p-type semiconductor.The SI unit of electrical current is the ampere.

Electric current is therefore sometimes informally referred to as *amperage* or *ampage*, by analogy with the term *voltage*. Though this is a valid term, some engineers frown on it.

Повышенный уровень

1. Read the text and find in it the answer to the question that follows it.

How to Make Tests on Installations

a) Insulation tests to earth.

Disconnect the supply by opening the main switch and withdrawing the main fuses.

Insert all fuses at the distribution board. Insert all lamps.

Close all single-pole switches.

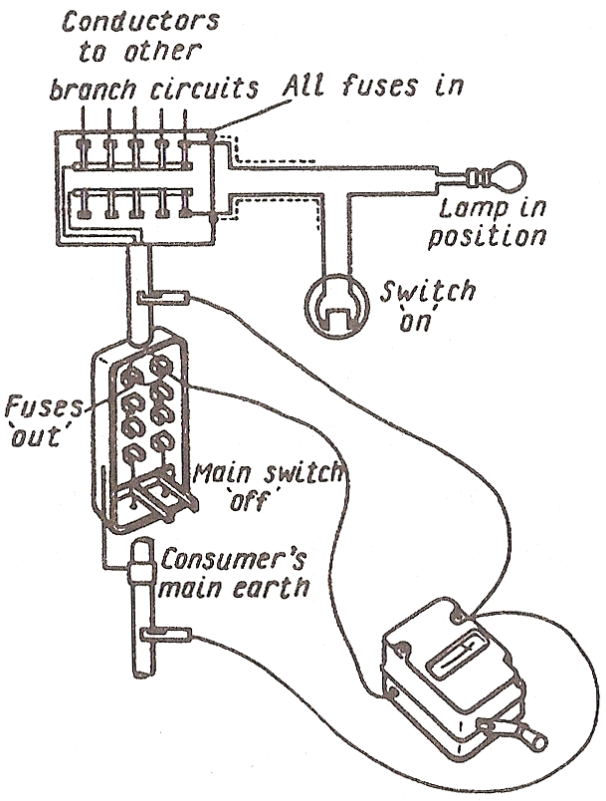
Join together the two contacts on the installation side on the main switch, and connect them to one terminal of the Insulation Tester used.

Connect the other terminal of the Tester to the conduit in which the wiring is run or, if lead-covered cable is used, to the lead sheathing. A second connection should also be made to the consumer's main earth. This second connection is, however, unnecessary if the continuity and earthing of the conduit had been previously tested.

Turn the handle of the Tester at about 160 r.p.m. and take a reading.

In case the result of the test is considered satisfactory the installation is in proper order so far as resistance to earth is concerned.

If, however, the values obtained are not sufficiently high, withdraw all fuses at the distribution fuse board and test again. This test should include only the portion of the installation between the main switch and the busbars of the fuse board.



If the fault is not detected, oneshould proceed to the distributionfuse board and test each branch circuit in turn till the faulty circuit or circuits are discovered. These should be subjected to further tests till the actual fault is detected.

b) Insulation test between conductors.

Remove all lamps.

The main switch should be opened, all fuses inserted at the distribution board, and all single-pole switches in the closed or «on» position.

Connect one terminal of the Insulation Tester to fuse contact and the other to another contact and make a test.

Two readings should be taken on an insulation containing two-way switches, one with both switches on the «on» position and the other with both switches in the «off» position.

If the result of the test between conductors is also satisfactory, no further insulation tests are necessary and the insulation may be considered to be in order.

If, however, the results of the tests are unsatisfactory, proceed to the distribution board, withdraw all fuses and test each branch circuit individually between conductors until the faulty circuit or circuits are located.

1. What elements should be disconnected, inserted, closed, joined together, connected, etc. for making test on installations?

2. Read the text and find in it the answers to the questions that follow it.

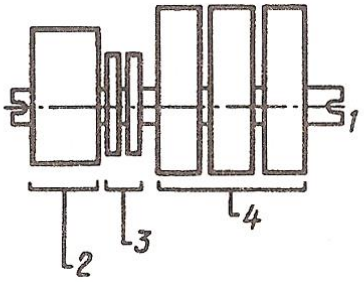
Contactors Type 370

These contactors consist of the following main parts:

- one fixed bar
- one magnetic circuit which may be either a.c. or d.c.
- one or more auxiliary contacts (the maximum number of auxiliary contacts is 4)
- one or more poles for use with a.c. or d.c. loads.

These components are to be installed.

Their functions are as follows: fixed bar has the function of supporting all the stationary parts of the contactor. At both ends it is provided with holes for mounting the contactor. Moving shaft is made of steel. It is insulated for the installation of both main pole and auxiliary moving contacts.



Schematic positioning of the different contactor components:
1 – fixed bar; 2 – magnetic circuit: 3 – auxiliary contacts; 4 – poles

1. What are the main parts of the contactors?
2. Which are the functions of each of these parts?
3. Describe the figure.

3. Read the text and find in it the answers to the questions that follow it.

Disconnecting Switches

Application. Indoor disconnecting switches are devices that are intended to make and break electric circuits rated at 6 to 10 kV, a.c. with no load currents. The single-pole disconnecting switches are controlled manually, by means of an insulated rod. The triple-pole disconnecting switches are controlled by means of manual lever-type operating mechanisms.

Mounting Instructions. 1. Clean the switch from dust and dirt. 2. Inspect it on the outside. 3. When insulating the switch, see that the bolts and switch terminals are reliably protected.

1. What are indoor disconnecting switches intended for?
2. What means are the single-pole switches controlled by?
3. What means are the triple-pole switches controlled by?
4. What recommendations do the mounting instructions include?

4. Think of 8-10 questions covering the contents of the text below. Use them in a talk with your groupmate.

Electric Power

Electric power is generated by converting heat, light, chemical energy, or mechanical energy to electrical energy. Most electrical energy is produced in large power stations by the conversion

of mechanical energy or heat. The mechanical energy of falling water is used to drive turbine generators in hydroelectric stations, and the heat derived by burning coal, oil, or other fossil fuels is used to operate steam turbines or internal-combustion engines that drive electric generators. Also, the heat from the fissioning of uranium or plutonium is used to generate steam for the turbine generator in a nuclear power plant.

Electricity generated by the conversion of light or chemical energy is used mainly for portable power sources. For example, a photoelectric cell converts the energy from light to electrical energy for operating the exposure meter in a camera, and a lead-acid battery converts chemical energy to electrical energy for starting an automobile engine.

Electric power produced in large power stations generally is transmitted by using an alternating current that reverses direction 25, 50, or 60 times per second. The basic unit for measuring electric power is the watt – the rate at which work is being done in an electric circuit in which the current is one ampere and the electromotive force is one volt. Ratings for power plants are expressed in kilowatts (1,000 watts) or megawatts (1 million watts). Electric energy consumption normally is given in kilowatt-hours – that is, the number of kilowatts used times the number of hours of use. Electricity is clean, inexpensive, and easily transmitted over long distances. Since the 1880's, electricity has had an ever-increasing role in improving the standard of living. It now is used to operate lights, pumps, elevators, power tools, furnaces, refrigerators, air-conditioners, radios, television sets, industrial machinery, and many other kinds of equipment. It has been counted that in developed countries about 43% of the electric power is generally used for industrial purposes, 32% in homes, and 21% in commercial enterprises.

5. Read the text and find in it the answer to the question that follows it.

Electric Power Interruptions

On November 9, 1965, at 5:16 p.m., a back-up relay failed at one of the five main transmission lines at No. 2 station near Toronto, Canada. As the load had shifted to the other four lines, they became overloaded, and as a result the relays failed in all four lines. The failure resulted in the load being shifted to the other plants in the system. The plants got overloaded, which caused them to shut down. Within minutes, power plants in Canada, New York, and the New England states got out of service. The blackout affected 30 million people and covered an area of 306,000 sq. m. In some areas, such as New York City, power was not restored for about 13 hours.

This massive power blackout resulted in the construction of the national Electric Reliability Council in June 1958. This council sets standards for the design, operation, and maintenance of generating and transmission systems. These standards serve to prevent a failure in one power system from spreading to other systems. Yet local system failures cannot be avoided.

Nowadays in some European countries and in the US there are from 60 to 80 power interruptions per year, in which there is a loss of service for customers for more than 15 minutes. Mostly these interruptions are caused by weather conditions – ice, freezing snow, lightning or storms. There can be also failures of equipment – transformers, relays, insulators and so on. However, the reliability of electric service is extremely high.

1. Have you been a witness to an electric service failure? Describe it, please.

6. Read and translate the text. What do you think is meant by «Member countries»?

Give the new units for the following: röntgen, rad, rem, curie.

Quantities and Units

For many years, special measurement units for quantities of interest in radiation protection were used, which were not coherent with the International System of Units (SI). These old units (*röntgen*, *rad*, *rem* and *curie*) have been superseded in the last few years by a new set of units which are coherent with the SI system.

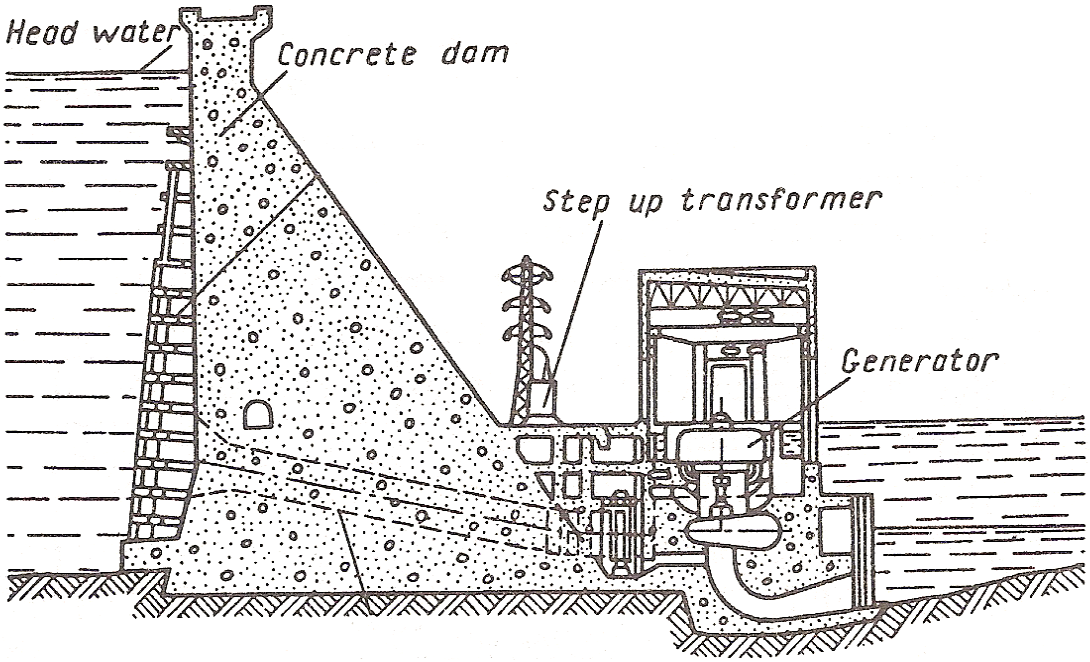
These new units, the *gray* for absorbed dose, the *sievert* for dose equivalent, and the *becquerel* for activity of radioactive materials, have been progressively adopted in Member countries, although some residual cases of use of the old units are still being observed. The relationships between the new SI units and those previously used are shown in the following table:

Quantity	*SI Unit*	*New Name and Symbol*	*Old Unit and Symbol*	*Conversion Factors*
Exposure	kg^{-1}	–	röntgen (R)	1 C kg^{-1} = 3876 R 1 R = 2.5 × 10^{-4} C kg^{-1}
Absorbed dose	J kg^{-1}	gray (Gy)	rad (rad)	1 Gy = 100 rad 1 rad = 10^{-2} Gy
Dose equivalent	J kg^{-1}	sievert (Sv)	rem (rem)	1 Sv = 100 rem 1 rem = 10^{-2} Sv
Activity	s^{-1}	becquerel (Bq)	curie (Ci)	1 Bq = 2.7 × 10^{-11} Ci 1 Ci = 3.7 × 10^{10} Bq

7. Read the text and find in it the answers to the questions that follow it.

Electric Power Plants

The two main types of power plants traditionally have been the fossil-fuel steam-electric plant and the hydroelectric plant. Other types, including internal-combustion-engine plants and nuclear plants also have been built. The selection of a particular type of generating plant and its location involves consideration of a number of factors such as plant, fuel, and transmission line costs; availability of cooling water, and environmental considerations.



.Cross-section through the main structures and units of hydroelectric power plant

For several reasons, the relative importance of the various types of power plants has been shifting. Good sites for new hydroelectric plants have become scarce in many countries. Distribution networks have been extended so that less expensive power from large steam-electric stations has been replacing power from smaller diesel-generator units. Nuclear-electric power plants have been built instead of fossil-fuel steam-electric plants because the cost of coal and oil has been increasing.

In the United States in 1970, fossil-fuel steam-electric plants accounted for 76% of the power generated, hydroelectric plants for 16%, and nuclear plants for 2%.

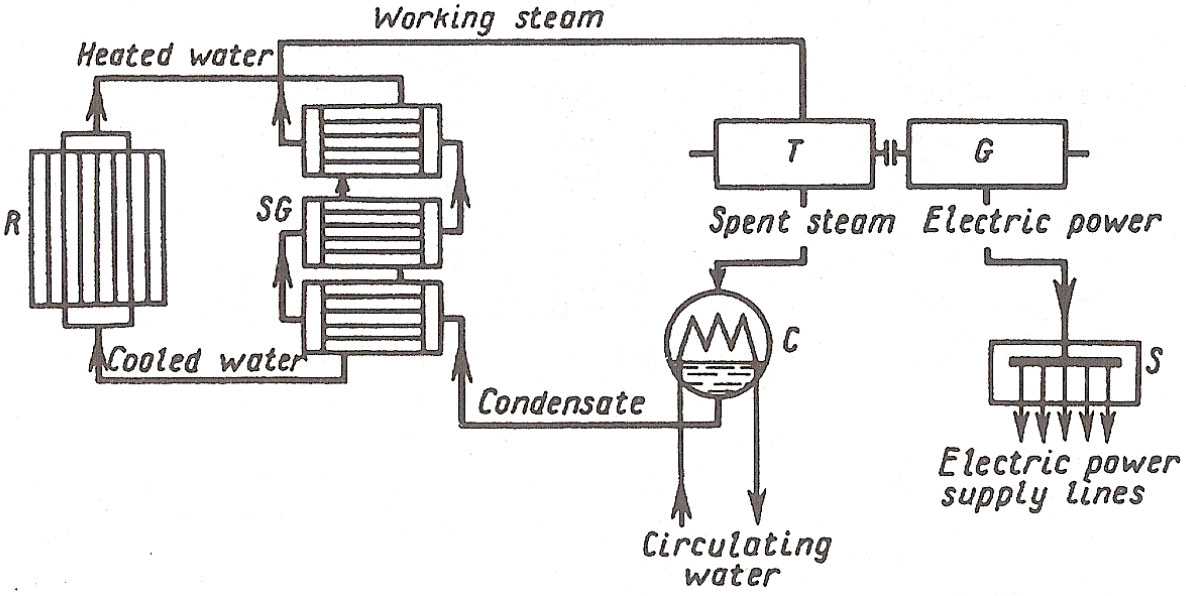
In 2000 45% of the electric power in the United States is generated from fossil-fuel steam-electric plants, 45% from nuclear plants, and 10% from hydroelectric plants.

1. What kinds of power plants are in use nowadays?
2. What does the selection of a type of generating plant depend on?
3. For what reason are nuclear-electric power plants being built instead of fossil-fuel steam-electric plants?

8. Study the figure and read the text. Describe a nuclear power plant.

Nuclear Power Plants

The energy for operating a nuclear power plant comes from the heat released during the fissioning of uranium or plutonium atoms in a nuclear reactor. This fission heat is used to generate steam, which drives a turbine generator. Thus, there are two main differences between a nuclear power plant and a steam-electric power plant: the nuclear plant uses a nuclear fuel instead of a fossil fuel, and it uses a nuclear reactor instead of a boiler.



Simplified production process diagram of nuclear power plant:
R – nuclear reactor; SG – steam generator; T – steam turbine; G – electric power generator; C – steam condenser; S – switchboard

The fissioning of uranium-235 or plutonium-239 atoms – the primary nuclear fuels – is caused by the impacts of neutrons on these atoms. The fission process not only produces heat but also several additional neutrons that can cause fissioning of other uranium-235 or plutonium-239 atoms. Thus, by proper arrangement of the atoms of the fuel, a sustained chain reaction can be maintained to provide a steady source of heat for operating a power plant. This chain reaction is controlled by regulating the number and the energy of the neutrons as they proceed from one fission reaction to another.

There are various types of nuclear reactors. The major differences between them are the form of the fuel, the methods for controlling the number and energy of the neutrons, and the type of liquid or gas used to remove the heat from the reactor core.

9. Read and translate the text. Think of 8-10 questions covering the contents of the text below.

Electricity is a property of certain subatomic particles, such as electrons and protons, that gives rise to attractive and repulsive forces between them. Electromagnetism is one of the four fundamental forces of nature.

Electric charge is a fundamental property conserved of some subatomic particles, which determines their electromagnetic interactions. Electrically charged matter is influenced by, and produces, electromagnetic fields. The interaction between charge and field is the source of one of the four fundamental forces, the electromagnetic force.

According to Thales of Miletus, writing about 600 BCE, a form of electricity was known to the Ancient Greeks, who found that rubbing fur on various substances, such as amber, would cause a particular attraction between the two. The Greeks noted that the amber buttons could attract light objects such as hair, and that if they rubbed the amber for long enough, they could even get a spark to jump. This is the origin of the word "electricity", from the Greek ēlektron = "amber", which came from an old root ēlek- = "shine".

An object found in Iraq in 1938, dated to about 250 BCE and called the Baghdad Battery, resembles a galvanic cell and is believed by some to have been used for electroplating. The conjecture that this or other ancient artifacts had an electrical function remains unproven, and

such proposed ancient knowledge bears no known continuous relationship to the development of modern electrical technology.

In 1600 the English scientist William Gilbert returned to the subject in De Magnete, and coined the modern Latin word electricus from ηλεκτρον (elektron), the Greek word for "amber", which soon gave rise to the English words electric and electricity. He was followed in 1660 by Otto von Guericke, who is regarded as having invented an early electrostatic generator. Other European pioneers were Robert Boyle, who in 1675 stated that electric attraction and repulsion can act across a vacuum; Stephen Gray, who in 1729 classified materials as conductors and insulators; and C. F. Du Fay, who first identified the two types of electricity that would later be called positive and negative. The Leyden jar, a type of capacitor for electrical energy in large quantities, was invented at Leiden University by Pieter van Musschenbroek in 1745. William Watson, experimenting with the Leyden jar, discovered in 1747 that a discharge of static electricity was equivalent to an electric current.

10. Read and translate the text. Think of 8-10 questions covering the contents of the text below.

In June, 1752, Benjamin Franklin promoted his investigations of electricity and theories through the famous, though extremely dangerous, experiment of flying a kite during a thunderstorm. Following these experiments he invented a lightning rod and established the link between lightning and electricity. If Franklin did fly a kite in a storm, he did not do it the way it is often described (as it would have been dramatic but fatal). It was either Franklin (more frequently) or Ebenezer Kinnersley of Philadelphia (less frequently) who created the convention of positive and negative electricity.

Franklin's observations aided later scientists such as Michael Faraday, Luigi Galvani, Alessandro Volta, André-Marie Ampère, and Georg Simon Ohm whose work provided the basis for modern electrical technology. The work of Faraday, Volta, Ampere, and Ohm is honored by society, in that fundamental units of electrical measurement are named after them.

Volta worked with chemicals and discovered that chemical reactions could be used to create positively charged anodes and negatively charged cathodes. When a conductor was attached between these, the difference in the electrical potential (also known as voltage) drives a current between them through the conductor. The potential difference between two points is measured in units of volts in recognition of Volta's work.

The late 19th and early 20th century produced such giants of electrical engineering as Nikola Tesla, inventor of the induction motor and the fundamental alternating current transmission system; Samuel Morse, inventor of the telegraph; Antonio Meucci, inventor of the telephone; Thomas Edison inventor of the phonograph and a practical incandescent light bulb; George Westinghouse, inventor of the electric locomotive; Charles Steinmetz, theoretician of alternating current.

Nikola Tesla performed experiments with very high voltages that are the stuff of legend, involving ball lightning and other effects (some have been duplicated or explained; and others which have not). Nikola Tesla, inventor of the induction motor and developer of polyphase systems, contributed to the world of electrodynamics the theory of polyphase alternating current, which he used to build the first induction motor, invented in 1882. In May 1885, Westinghouse, then president of the Westinghouse Electric Company in Pittsburgh, Pennsylvania, bought the rights to Tesla's patents for polyphase alternating-current dynamos.

1. Критерии оценивания компетенций

Отметка «отлично» выставляется студенту, если он твердо знает базовые нормы употребления лексики и фонетики; основные способы работы над языковым и речевым материалом; лексико-грамматический минимум по специальности в объеме, необходимом для работы с иноязычным материалом и текстами в процессе профессиональной деятельности; способен планировать самостоятельную работу, структурировать информацию на иностранном языке и самостоятельно использовать их в профессиональных целях, владеет приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы; способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры необходимыми навыками профессионального общения на иностранном языке; техникой работы с основными типами справочной и учебно-справочной литературы (словари, энциклопедические справочники).

Отметка «хорошо» выставляется студенту, если он твердо знает базовые нормы практических задач в области иностранного языка и основные способы работы над языковым и речевым материалом; умеет работать с текстами профессиональной направленности на иностранном языке, владеет приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

Отметка «удовлетворительно» выставляется студенту, если он имеет знания только базовых норм употребления лексики и фонетики; и основных способов работы над языковым и речевым материалом, частично умеет работать с текстами профессиональной направленности на иностранном языке, частично владеет способами пополнения знаний на основе использования оригинальных источников на иностранном языке, но испытывает трудности в общении на иностранном языке и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

Отметка «неудовлетворительно» выставляется студенту, который не знает базовых норм употребления лексики и фонетики на иностранном языке и основных способов работы над языковым и речевым материалом, имеет минимальные способности в работе с текстами профессиональной направленности, владеет минимальными приемами самостоятельной работы с языковым материалом (лексикой, грамматикой, фонетикой) с использованием справочной и учебной литературы и способами пополнения профессиональных знаний на основе использования оригинальных источников на иностранном языке, из разных областей общей и профессиональной культуры.

2. Описание шкалы оценивания

Максимально возможный балл за весь текущий контроль устанавливается равным **60** (**55** баллов за текущий контроль и от **1 до 5** дополнительных баллов за регулярную хорошую работу, ответственное отношение к дисциплине). 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	**100**
Хороший	**80**
Удовлетворительный	**60**
Неудовлетворительный	**0**

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

Процедура проведения данного оценочного мероприятия включает в себя индивидуальные задания, которые позволяют оценить ответы студентов по дисциплине «Иностранный язык в профессиональной сфере».

Предлагаемые магистранту 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).

Для подготовки к данному оценочному мероприятию необходимо ознакомиться с методическим рекомендациями, изложенными в «Методические указания для обучающихся по организации и проведению самостоятельной работы по дисциплине «Иностранный язык в профессиональной сфере» для студентов направления подготовки 13.03.02 Электроэнергетика и электротехника. На данную работу отводится 5,4 часа.

Составитель _____ _____

«____»_____20__ г.