

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ  
РОССИЙСКОЙ ФЕДЕРАЦИИ  
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ  
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ  
«ИНГУШСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ»**

**ФИЗИКО-МАТЕМАТИЧЕСКИЙ ФАКУЛЬТЕТ  
Кафедра «Информационные системы и технологии»**

**СОГЛАСОВАНО**

Руководитель образовательной программы

\_\_\_\_\_/М.Х. Мальсагов  
«20» мая 2024г.

**УТВЕРЖДАЮ**

И.о. декана физико-математического  
факультета

\_\_\_\_\_/Б.С.Кульбужев  
«23» мая 2024г.

**ФОНД ОЦЕНОЧНЫХ СРЕДСТВ ДИСЦИПЛИНЫ (МОДУЛЯ)**

**Б1.О.03 Английский язык**

**Направление подготовки**

**09.03.02 Информационные системы и технологии**

**Направленность (профиль подготовки)**

**Информационные системы и технологии**

**Квалификация выпускника**

**Бакалавр**

**Форма обучения**

**Очная, заочная, очно-заочная**

Магас, 2024г

# 1.Описание показателей и критериев оценивания компетенций на различных этапах их формирования, описание шкал оценивания

## Сопоставление шкал оценивания

4-балльная шкала (уровень освоения)	Отлично (повышенный уровень)	Хорошо (базовый уровень)	Удовлетворительно (пороговый уровень)	Неудовлетворительно (уровень не сформирован)
100-балльная шкала	91-100	81-90	61-80	0-60
Бинарная шкала	Зачтено			Не зачтено

## Оценивание ответа на вопросы по темам для устного опроса

4-балльная шкала (уровень освоения)	Показатели	Критерии
Отлично (повышенный уровень)	<ul style="list-style-type: none"> <li>- Полнота изложения теоретического материала;</li> <li>- Правильность и/или аргументированность изложения (последовательность действий);</li> <li>- Самостоятельность ответа;</li> <li>- Культура речи.</li> </ul>	Студентом дан полный, в логической последовательности развернутый ответ на поставленный вопрос, где он продемонстрировал знания предмета в полном объеме учебной программы, достаточно глубоко осмысливает дисциплину, приводит собственные примеры по проблематике поставленного вопроса.
Хорошо (базовый уровень)		Студентом дан развернутый ответ на поставленный вопрос, приводит примеры, в ответе присутствует свободное владение монологической речью, логичность и последовательность ответа. Однако допускается неточность в ответе.
Удовлетворительно (пороговый уровень)		Студентом дан ответ, свидетельствующий в основном о знании процессов изучаемой дисциплины, отличающийся недостаточной глубиной и полнотой раскрытия темы, знанием основных вопросов теории, недостаточным умением давать аргументированные ответы и приводить примеры, недостаточно свободным владением монологической речью, логичностью и последовательностью ответа.
Неудовлетворительно (уровень не сформирован)		Студентом дан ответ, который содержит ряд серьезных неточностей, обнаруживающий незнание процессов изучаемой предметной области, отличающийся неглубоким раскрытием темы, незнанием основных вопросов теории, неумением давать аргументированные ответы, слабым владением монологической речью, отсутствием логичности и последовательности. Студент не способен

		ответить на вопросы даже при дополнительных наводящих вопросах преподавателя.
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#### Оценивание ответа на зачете, экзамене

	4-балльная шкала (уровень освоения)	Показатели	Критерии
«Зачтено»	Отлично (повышенный уровень)	<ul style="list-style-type: none"> <li>- Полнота изложения теоретического материала;</li> <li>- Полнота и правильность решения практического задания;</li> <li>- Правильность и/или аргументированность изложения (последовательность действий);</li> <li>- Самостоятельность ответа;</li> </ul>	Студентом дан полный, в логической последовательности развернутый ответ на поставленный вопрос, где он продемонстрировал знания предмета в полном объеме учебной программы, достаточно глубоко осмысливает дисциплину, самостоятельно, и исчерпывающе отвечает на дополнительные вопросы, приводит собственные примеры по проблематике поставленного вопроса, решил предложенные практические задания без ошибок.
	Хорошо (базовый уровень)	<ul style="list-style-type: none"> <li>- Культура речи.</li> </ul>	Студентом дан развернутый ответ на поставленный вопрос, где студент демонстрирует знания, приобретенные на лекционных и семинарских занятиях, а также полученные посредством изучения обязательных учебных материалов по курсу, дает аргументированные ответы, приводит примеры, в ответе присутствует свободное владение монологической речью, логичность и последовательность ответа. Однако допускается неточность в ответе. Решил предложенные практические задания с небольшими неточностями.
	Удовлетворительн о (пороговый уровень)		Студентом дан ответ, свидетельствующий в основном о знании процессов изучаемой дисциплины, отличающийся недостаточной глубиной и полнотой раскрытия темы, знанием основных вопросов теории, слабо сформированными навыками анализа явлений, процессов, недостаточным умением давать аргументированные ответы и приводить примеры, недостаточно свободным владением монологической речью, логичностью и последовательностью ответа. Допускается несколько ошибок в

			содержании ответа и решении практических заданий.
«Не зачтено»	Неудовлетворительно (уровень не сформирован)		Студентом дан ответ, который содержит ряд серьезных неточностей, обнаруживающий незнание процессов изучаемой предметной области, отличающийся неглубоким раскрытием темы, незнанием основных вопросов теории, несформированными навыками анализа явлений, процессов, неумением давать аргументированные ответы, слабым владением монологической речью, отсутствием логичности и последовательности. Выводы поверхностны. Решение практических заданий не выполнено. Т.е студент не способен ответить на вопросы даже при дополнительных наводящих вопросах преподавателя.

**3. Типовые контрольные задания, необходимые для оценки знаний, умений, навыков и (или) опыта деятельности, характеризующих этапы формирования компетенций в процессе освоения основной профессиональной образовательной программы**

#### ОБРАЗЕЦ ТИПОВЫХ ТЕСТОВЫХ ЗАДАНИЙ АНГЛИЙСКИЙ ЯЗЫК

##### **Рубежная аттестация.**

Рубежная аттестация по дисциплине принимается в письменной форме – контрольные работы по 10 вопросов.

##### **1 семестр**

##### **I – рубежная аттестация**

**Грамматика:** Фонетика, порядок слов в предложении, числительные, глагол to be, to have, местоимения, существительное, притяжательный падеж. Типы вопросов (общий, альтернативный, специальный и разделительный). Структура there is (are);

Прилагательное. Степени сравнения прилагательных. Числительное (количественное и порядковое)

Тема: «Acquaintance»

##### **Контрольная работа:**

##### **Вариант 1.**

##### **1. Напишите транскрипцию следующих слов:**

Best, east, such, hue, tide, sit, grain, bake, fly, hole.

##### **2. Вставьте артикль, где необходимо.**

1. This is ... file. It's your ... file.

2. I see ... engineer. ... engineer is very clever.

3. We study ... English.

4. What ... interesting subject!

**3. Напишите следующие существительные во множественном числе:**

A tree, a baby, a day, a sheep, a leaf, a tooth, a watch, a glass, a word, a brush.

**4. Поставьте следующие предложения во множественном числе:**

1. It is a long ruler.

2. This compass is very good.

3. That is a clean blackboard.

4. There is a computer on the table.

5. Is that story short?

**5. Перефразируйте следующие словосочетания и предложения, употребляя притяжательный падеж.**

1. A test of Ann.

2. A copy-book of my friend.

3. The pages of the book.

4. The tests of the students are on the shelf.

5. These are the bags of Ted.

**6. Вставьте глаголы to be и to have в Present Indefinite Tense.**

1. I ... a student. – I ... a student of the college.

2. My father ... not a teacher, he ... a scientist.

3. ... your parents at home? – No, they ... not at home, they ... at work.

4. How old ... you? – I ... twenty.

5. We ... a friend. He ... a lot of English books.

**7. Задайте 4 типа вопросов к следующим предложениям.**

1. A computer is on the table.

2. The students have two lectures on Monday.

**8. Переведите на английский язык следующие предложения.**

1. Это ваш учебник? – Нет, это учебник нашего преподавателя.

2. Чья это ручка? – Это ручка Бена.

3. Где ваша сестра? – Она в институте.

4. Как зовут вашего друга? – Его зовут Майк.

5. Сколько твоей маме? – Ей 42 года.

**9. Вставьте глагол to be в нужной форме в обороте there is (are)**

1. There ... a new cloth on the table.

2. There ...much work last week.
3. ...there any telegrams from Moscow? Yes, there...some.
4. There...a lot of stars and planets in space.
5. Soon there ...a new film on.

#### **10. Раскройте скобки, употребив нужную степень сравнения прилаг./наречия**

1. Winter is (cold) season.
2. The Alps are (high) mountains in Europe.
3. Even (long) day has an end.
4. Health is (good) than wealth.
5. Today he worked (slowly) than usually.

#### **2 семестр**

**I – рубежная аттестация** Грамматика: Past Perfect, Future Perfect, Present Perfect Continuous, Past Perfect Continuous, Future Perfect Continuous Тема: «Welcome», «Cities like people».

#### **Вариант 2.**

##### **1. Раскройте скобки, употребляя глаголы в Present, Past или Future Simple**

1. I (to go) to bed at ten o'clock every day.
2. I (to go) to bed at ten o'clock yesterday.
3. I (to go) to bed at ten o'clock tomorrow.
4. I (not to go) to the cinema every day.
5. I (not to go) to the cinema yesterday.

##### **2. Переведите задание №1.**

##### **3. Раскройте скобки, употребляя глаголы в Past Simple или Past Continuous.**

1. I (to go) to the cinema yesterday.
2. I (to go) to the cinema at four o'clock yesterday.
3. I (to go) to the cinema when you met me.
4. I (to do) my homework the whole evening yesterday.
5. I (to do) my homework when mother came home.

##### **4. Раскройте скобки, употребляя глаголы в Present Perfect или Past Simple**

1. Helen speaks French so well because she (to live) in France.
2. She (to live) there last year.
3. The rain (to stop) and the sun is shining in the sky again.
4. The rain (to stop) half an hour ago.
5. Mary (to buy) a new hat.

##### **5. Образуйте сравнительную и превосходную степень следующих прилагательных.**

Hot, long, short, clever, silly, great, red, black, white, thin.

##### **6. Раскройте скобки, употребляя глаголы в Present Simple, Present Perfect, Present Continuous, Past Simple, Past Continuous).**

1. Alice ... (not to take) the bus to school every day. She usually ... (to walk) to school...
2. (to take) ... you the bus to get to school or ... (to walk) you?

3. Who is this man? I ... (to think) that I ... (to know) him, but I ... (to forget) his name.
4. The children ... (to have) a good time in the park yesterday. They ... (to give) small pieces of bread to the ducks. Then they ... (to take) pictures of themselves.
5. Where are the children? They ... (to watch) TV in the room now. Some minutes ago they ... (to play) a game.
5. Now I am in my class. I... (to sit) at my desk. I always ... (to sit) at the same desk.

**7. Переведите предложения на английский язык используя модальные глаголы и/или их эквиваленты.**

1. Я должен идти в школу. 2. Вчера они должны были слушать лекции весь день. 3. Нам пришлось прождать там всё утро. 4. Завтра они смогут вам помочь. 5. Мне можно будет прийти на ваши занятия?

**8. Раскройте скобки, употребляя глаголы в одном из следующих времен: Present Simple, Present Continuous, Present Perfect, Past Simple, Past Continuous**

1. I (listen) to the radio while Mary (cook) dinner.
2. You (buy) this book yesterday?
3. Last Friday Jill (go) home early because she (want) to see a film.
4. When your brother usually (get) home in the evening?
5. Jane always (bring) us a nice present.
6. What those people (do) in the middle of the road?

**9. Поставьте глаголы в скобках в Present Simple или в Present Continuous.**

1. What you (to do) here? – I (to wait) for a friend.
2. He (to speak) French? – Yes, he (to speak) French quite fluently.
3. Listen! Someone (to knock) at the door.
4. Don't go into the classroom! The students (to write) a dictation there.
5. She (to write) letters to her mother every week.

**10. Переведите следующие предложения с русского на английский.**

1. Этот студент всегда задает много вопросов.
2. Студенты переводят текст с английского на русский.
3. Я собираюсь взять словарь.
4. Он звонил вам 10 минут назад.
5. Мы обсуждали последние новости с 3-х до 4-х вчера.

6. Я был в Англии 2 раза.

**II – рубежная аттестация** Грамматика: Passive Voice, Infinitive, Absolute Participle, Direct and Indirect Speech, Sequence of Tenses

**Вариант 3.**

**1. Раскройте скобки, употребляя глаголы в Past Indefinite, Past Continuous или Past Perfect.**

1. When I (to see) Ann, she, (to sort) the flowers which she (to pick) in the field. 2. When I (to come) home yesterday, I (to see) that my little brother (to break) my pen and (to play) with its pieces. 3. When I (to open) the door of the classroom, I (to see) that the teacher already (to come) and the pupils (to write) a dictation. 4. When I (to come) home, my sister (to read) a book which she (to bring) from the library. 5. When mother (to come) home, the children (to eat) the soup which she (to cook) in the morning.

**2. Переведите задание №1.**

**3. Раскройте скобки, употребляя глаголы в Present, Past или Future Simple.**

1. I (not to go) to the cinema tomorrow. 2. You (to watch) TV every day? 3. You (to watch) TV yesterday? 4. You (to watch) TV tomorrow? 5. When you (to leave) home for school every day?

**2. Раскройте скобки, употребляя глаголы в Past Simple или Past Continuous.**

1. I (to do) my homework yesterday. 2. I (to do) my homework from five till eight yesterday. 3. I (to do) my homework at six o'clock yesterday. 4. I (not to play) the piano yesterday. I (to write) a letter to my friend. 5. I (not to play) the piano at four o'clock yesterday. I (to read) a book.

**5. Раскройте скобки, употребляя глаголы в Present Perfect или Past Simple**

1. I (to buy) a pair of gloves yesterday. 2. The wind (to blow) off the man's hat, and he cannot catch it. 3. The weather (to change), and we can go for a walk. 4. The wind (to change) in the morning. 5. We (to travel) around Europe last year. 11. My father knows so much because he (to travel) a lot.

**6. Раскройте скобки, употребляя глаголы в одном из следующих времен: Present Indefinite, Present Continuous, Present Perfect, Present Perfect Continuous.**

1. Where he (to be) now? — He (to play) volleyball with his friends. They (to play) since breakfast

time. 2. I (to live) in St. Petersburg. I (to live) in St. Petersburg since 1990. 3. This is the factory where my father (to work). He (to work) here for fifteen years. 4. You (to find) your notebook? —



No! I still (to look) for it. I already (to look) for it for two hours, but (not yet to find) it. 5. You (to play) with a ball for already three hours. Go home and do your homework.

**7. Переведите на английский язык, употребляя модальные глаголы can, must или их эквиваленты.**

1. Я умею говорить по-английски. 2. Вы не должны опаздывать. 3. Этот ребенок должен проводить больше времени на свежем воздухе. 4. В прошлом году я не умел плавать. 5. Я думаю, она не сможет сделать эту работу. 6. Завтра я буду свободен и смогу помочь тебе.

**8. Переведите текст с английского на русский.**

People use radio or television. They switch on the radio set or TV set and choose the program they like best. Some people like music. They listen to various concerts of modern and old music, new and old songs, and see dances. Those who are fond of sports listen to or watch football and hockey matches. There are a lot of fans among people. They also see championships in athletics and other kinds of sports. Radio and television extend our knowledge about the world in which we live.

**9. Раскройте скобки, употребляя глаголы в Past Indefinite, Past Continuous или Past Perfect.**

1. By eight o'clock yesterday I (to do) my home-work and at eight I (to play) the piano. 2. By six o'clock father (to come) home and at six he (to have) dinner. 3. By nine o'clock yesterday grandmother (to wash) the dishes and at nine she (to watch) TV. 4. When I (to meet) Tom, he (to eat) an ice cream which he (to buy) at the corner on the street. 5. When father (to come) home, we (to cook) the mushrooms which we (to gather) in the wood.

**10. Раскройте скобки, употребляя глаголы в Past Indefinite, Past Continuous или Past Perfect.**

1. When I (to ring) up Mike, he still (to learn) the poem which he (to begin) learning at school. 2. When I (to look) out of the window, the children (to play) with a ball which Pete (to bring) from home. 3. By ten o'clock the children (to settle) comfortably on the sofa and at ten they (to watch) a TV film. 4. He (to tell) me he (to learn) it from the newspaper. 5. He (to enter) the room, (to take) something from the desk and (to go) out.

**II – рубежная аттестация**

Грамматика: Passive Voice, Infinitive, Absolute Participle, Direct and Indirect Speech, Sequence of Tenses

### **1. Перевести на английский язык словосочетания в Passive Voice**

Их находят – их нашли – их найдут.

Его прощают – его простили – его простят.

Её ищут – её искали – её будут искать.

Мне предлагают – мне предложили – мне предложат.

Нас встречают – нас встретили – нас встретят.

Вам дают – вам дали – вам дадут.

### **2. Передайте следующие предложения в Passive Voice.**

1. They were playing tennis from four till five. 2. They have made a number of important experiments in this laboratory. 3. Livingstone explored Central Africa in the 19th century. 4. By the middle of autumn we had planted all the trees. 5. They will stage this play at the beginning of next season. 6. They have forgotten the story. 7. Has anybody explained the rules of the game to you? 8. They haven't brought back my skates.

### **3. Раскройте скобки, употребляя глаголы в требуемой форме.**

1. If my brother (to be) in trouble, I shall help him, of course. 2. If I don't manage to finish my report today, I (to stay) at home tomorrow. 3. If she were more careful about her diet, she (not to be) so stout. 4. You would not feel so bad if you (not to smoke) too much. 5. If he (to learn) the poem, he would not have got a bad mark. 6. If you gave me your dictionary for a couple of days, I (to translate) this text. 7. If I (to be) a musician, I should be very happy. 8. If Barbara (to get) up at half past eight, she would have been late for school.

### **4. Передайте следующие предложения в косвенной речи.**

1. She asked me: "Where have you put my hat? I cannot find them." 2. He said to me: "Try this trousers on before buying it. Maybe you won't like it when you have put it on." 3. The officer said to his assistant: "You have made great progress." 4. The teacher said to us: "You must read this text at home." 5. Helen said: "We shall have to discuss this text tomorrow." 6. He asked me: "Do you know who has taken my magazine?" 7. We asked him: "What has happened to you? You look so pale!" 8. She said to us: "I hope you haven't forgotten to post the letter."

### **5. Раскрой скобки, употребляя глаголы в Past Indefinite, Past Continuous или Past Perfect.**

1. By eight o'clock yesterday I (to do) my home-work and at eight I (to play) the piano. 2. By six o'clock father, to come) home and at six he (to have) dinner. 3. By nine o'clock yesterday grandmother (to wash) the dishes and at nine she (to watch) TV. 4. When I (to meet) Tom, he (to

eat) an ice cream which he (to buy) at the corner on the street. 5. When father (to come) home, we (to cook) the mushrooms which we (to gather) in the wood.

**6. Раскройте скобки, употребляя глаголы в одном из следующих времен: Present Indefinite, Present Continuous, Present Perfect, Present Perfect Continuous.**

1. This man (to write) books since he was a young man. He already (to write) eight books. 2. What you (to do) here since morning? 3. Anna is a very good girl. She always (to help) her mother about the house. 4. He (to run) now. He (to run) for ten minutes without any rest. 5. What they (to do) now? — They (to work) in the reading room. They (to work) there for already three hours.

**7. Написать вопросы к предложениям**

1. Girls are beating boys in subjects such as science and maths.
2. Alexander switches on his computer every day.
3. Computers can be divided into three main types.
4. Computers have resulted in massive unemployment in many countries.

**3—семестр**

**I – рубежная аттестация**

**1. Поставить глаголы в нужной форме.**

1. Ben (to give up) smoking two years ago. He (to smoke) for thirty years. 2. It (not rain) when we (to go) out. The sun (to shine). 3. But It (to rain) for a few hours. 4. There (to be) nobody in the room put there (to be) a small of cigarettes. 5. Last year Mark (to go) to Denmark. It (to be) the first time there. 6. The company (to want) to have a sales representative who (to know) foreign language. 7. When I (to meet) Tom, he (to eat) an ice-cream which he (to buy) at the corner of the street.

**2. Перефразируйте следующие предложения, употребляя сложное подлежащее.**

1. It was reported that five ships were missed after the battle.
2. It appeared that he was losing patience.
3. It happened that I was present at the opening session.
4. It turned out that my prediction was correct.
5. It seems they know all about it.

**3. Переведите и поставьте в нужные формы страдательного залога.**

1. He stole a lot of money from the shop.
2. By six o'clock they had finished the work.

3. At twelve o'clock the workers were loading the trucks.

4. By three o'clock the workers had loaded the trucks.

5. We send our daughter to rest in the south every year.

**4. Переведите на английский язык и затем переведите их в действительный залог.**

1. Нас спросили, преподают ли французский язык в нашей школе. 2. Когда будет отправлена

эта контрольная работа. 3. В первый раз меня повели в театр, когда мне было пять лет. 4.

После лекции было задано много вопросов. 5. Мне сказали, что вы завтра уезжаете.

5. Переведите предложения из прямой речи в косвенную и затем переведите.

1. "Explain to me how to solve this problem", said my friend to me. 2. The woman said to her son "I am glad I am here. 3. Mother asked me "Did you play with your friends yesterday. 4. I am very thirsty, please give me some lemonade, Ann, "said Tom. 5. "Don't lie to me, Tom," said aunt Polly, "I am tired of your lies. 6. Are you fond of going to the theatre? asked my friend.

**6. Переведите из косвенной речи в прямую. Переведите на русский язык.**

1. I asked him whether he would go there. 2. She told him to come at five o'clock.

3. I asked her to bring me a glass of water. 4. She told him to close the door. 5. She asked her whether she wanted to see the new film. 6. He asked me who will go to the cinema with him

**7. Поставьте, где нужно, частицу to перед инфинитивом.**

1. I think you ought ... apologize. 2. Make him ... speak louder. 3. Help me ... carry this bag. 4. My son asked me ... let him ... go to the club. 5. I must ... go to the country.

**8. Поставьте глагол в скобках в нужной форме причастия.**

1. The exercises (do) by the pupils were easy

2. The house (surround) by tall trees is very beautiful

3. The girl (write) on the blackboard is our best pupil

4. Everything (write) here is quite right 5. Read the (translated) sentences) once more

**9. Переведите на английский язык, употребляя герундий.**

1. У меня нет надежды увидеть его скоро

2. Мысль (идея) провести каникулы на Волге принадлежит моему брату

3. Вы можете улучшить свое произношение, читая вслух каждый день.

4. Я не смогу перевести этот документ, не посмотрев нескольких слов в словаре.

5. Мы отложили обсуждение доклада.

**10. Раскройте скобки, образуя от глаголов, стоящих в инфинитиве, требуемую форму.**

1. I would come to see you if not (live) so far away. 2. If I had the money, I (buy) that motorbike.  
3. They not (go) tomorrow if it (rain). 4. If you (stay) here a little longer, you (see) him. 5. If it (rain) on Saturday, I shall stay at home.

## **II – рубежная аттестация**

### **Pollution and its Negative Effects**

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Develop your reading skills. Read the following text on pollution and its effect on the environment.

Then answer the comprehension questions

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Pollution is the degradation of natural environment by external substances introduced directly or indirectly. Human health, ecosystem quality and aquatic and terrestrial biodiversity may be affected and altered permanently by pollution.

Pollution occurs when ecosystems cannot get rid of substances introduced into the environment. The critical threshold of its ability to naturally eliminate substances is compromised and the balance of the ecosystem is broken.

The sources of pollution are numerous. The identification of these different pollutants and their effects on ecosystems is complex. They can come from natural disasters or the result of human activity, such as oil spills, chemical spills, nuclear accidents ... These can have terrible consequences on people and the planet where they live: destruction of the biodiversity, increased mortality of the human and animal species, destruction of natural habitat, damage caused to the quality of soil, water and air ...

Preventing pollution and protecting the environment necessitate the application of the principles of sustainable development. We have to consider to satisfy the needs of today without compromising the ability of future generations to meet their needs. This means that we should remedy existing pollution, but also anticipate and prevent future pollution sources in order to protect the environment and public health. Any environmental damage must be punishable by law, and polluters should pay compensation for the damage caused to the environment.

#### **Comprehension**

The damage caused by pollution might be irreversible:

- a. True
- b. False

The ecosystem

- a. can always cope with pollutants
- b. may not always be able to cope with pollution.

#### **Pollution**

- a. is always caused by humans.
- b. may sometimes be caused by natural disasters.

An ideal solution to prevent pollution would be to

- a. refrain the development of some countries.
- b. continue developmental projects.
- c. take into consideration the future generations need to live in a healthy environment.

**Topic: Environment.**

1. Read the text and answer the questions bellow.

**Вариант 1.**

**READING**

Text 1

**1. Read the text, and match the questions (A–F) to the numbered spaces (1–5), as in the example (0).**

- A.** How did the invention of the incandescent light bulb change people's life?
- B.** Was Edison the only one who dealt with electricity?
- C.** What did Thomas Edison and George Westinghouse do to control the industry?
- D.** What was invented by Thomas Alva Edison?
- E.** Why did many inventors try to perfect incandescent lamps?
- F.** How do incandescent lamps make light?

**THE MODERN WORLD IS AN ELECTRIFIED WORLD**

0. The incandescent light bulb changed human existence by illuminating the night and making it hospitable to a wide range of human activity.

1. The electric light, one of the everyday conveniences that most affects our lives, was invented in 1879 by Thomas Alva Edison.

2. Incandescent lamps make light by using electricity to heat a thin strip of material (called a filament) until it gets hot enough to glow.

3. Many inventors had tried to perfect incandescent lamps to «subdivide» electric light or make it smaller and weaker than it was in the existing electric arc lamps, which were too bright to be used for small spaces such as the rooms of a house.

4. Edison was neither the first nor the only person trying to invent an incandescent electric lamp. Many inventors had tried and failed, some were discouraged and went on to invent other devices. Among those inventors who made a step forward in understanding the eclectic light were Sir Humphrey Davy, Warren De la Rue, James Bowman Lindsay, James Prescott Joule, Frederick de Moleyns and Heinrich Göbel.

5. Between the years 1878 and 1892 the electric light industry was growing. Thomas Edison and George Westinghouse determined to control the industry. They formed the Board of Patent Control, a joint arrangement

between General Electric and the Westinghouse Company

**Text 2**

2. Read the article. Choose the best word (A, B or C) for each space (1–8).

## RESISTIVITY OF VARIOUS MATERIALS

A conductor such as a metal has high 1.....and a low resistivity. An insulator like glass has low conductivity and a 2 .....resistivity.

The conductivity of a semiconductor is generally intermediate, but varies widely under different conditions, such as exposure of the material to 3.... fields or specific frequencies of light, and, most important, with temperature and composition of the semiconductor material.

The degree of doping in semiconductors makes a large difference in conductivity. To a point, more doping leads to higher 4..... The conductivity of a solution of water is highly 5..... on its concentration of dissolved salts,

and other chemical species that ionize in the solution. Electrical conductivity of water samples is used as an 6..... of how salt-free, ion-free, or impurityfree the sample is; the purer the water, 7.....the conductivity (the higher the

resistivity). Conductivity measurements in water are often reported as specific conductance, relative to the conductivity of pure water at 25 °C. An EC meter is normally used to 8.....conductivity in a solution.

1. a. conductivity b. resistivity c. impurity 2. a. conventional b. low c. high 3. a. electric b. dielectric c. specific 4. a. conductivity b. transition c. temperature 5. a. dependent b. depends c. dependency 6. a. conductor b. insulator c. indicator 7. a. the lower b. the higher c. the colder 8. a. decrease b. increase c. measure

## VOCABULARY AND GRAMMAR TEST

### 3. Choose the right option.

1. In electronic design and.....transmission, various techniques are used to compensate for the effect of voltage drop.

- A. power
- B. current
- C. wire

2. Resistivity is electrical .....of a conductor of unit cross-sectional area and unit length.

- A. resistance
- B. conductivity

C. transition

3. An electric current flowing in a loop of superconducting ..... can persist indefinitely with no power source.

- A. current
- B. circuit
- C. wire

4. Voltage drop is the reduction in .....in the passive elements (not containing sources) of an electrical circuit.

- A. voltage
- B. power
- C. resistance

5. The idea behind an electron gun is to create electrons and then.....them to a very high speed.

A. facilitate

B. accelerate

C. persist

6. Electric .....is a flow of electric charge through a medium.

A. current

B. circuit

C. wire

7. Electrical engineering is a field of engineering that generally deals .....  
the study and application of electricity, electronics and electromagnetism.

A. at

B. in

C. with

8. Electrical engineers .....new and better electronics.

A. design

B. designs

C. designers

9. Many projects..... at first.

A. does not work

B. do not works

C. do not work

10. Electrical engineers are usually concerned with using electricity to .....  
energy

A. transmit

B. transmission

C. transmitted

TRANSLATION

**4. Translate the sentences from English into Russian.**

1. The simplest way to reduce voltage drop is to increase the diameter of the conductor between  
the source

and the load which lowers the overall resistance.

2. Excessive voltage drop will result in unsatisfactory operation of electrical equipment.

3. The earliest mention of electric phenomena is found in ancient Egyptian texts from about 2750  
BC.

4. The magnetic effect of minerals like magnetite was known to the ancient Greeks.

5. In the 18th century, Benjamin Franklin first proved that lightning was electricity.



6. Electrical engineering gave rise to telecommunication.
7. Electrons can flow freely and easily through a copper wire, but cannot as easily flow through a steel wire of the same shape and size.
8. The difference between, copper, steel, and rubber is related to their microscopic structure and electron configuration, and is quantified by a property called resistivity.
9. The voltage drop is the driving force pushing current through a resistor.
10. Conductance and resistance are reciprocals.

## **WRITING**

### **5. Read the text and write an abstract.**

#### **WELCOME TO CALTECH ELECTRICAL ENGINEERING**

EE at Caltech has a century-long record of excellence, innovation and training many distinguished leaders in

the field. As a discipline, EE has had a huge impact on the technologies that define modern-day life and

society.

EE at Caltech emphasizes both the fundamentals of electronics and systems, as well as acknowledging the

multi-disciplinary nature of the field.

Closely allied with Computation and Neural Systems, Applied Physics, Bioengineering, Computer Science,

and Control and Dynamical System, it offers

students the opportunity for study and research, both theoretical and experimental, in a wide variety of

subjects, including wireless systems, quantum electronics, modern optics, lasers and guided waves, solid-state

materials and devices, bio-optics and bio-electronics, power and energy systems, control theory, learning

systems, computational finance, signal processing, datacompression, communications, parallel and distributed

computing, faulttolerant computing, and computational vision. Substantial experimental laboratory facilities,

housed mainly in the Moore Laboratory of Engineering, are associated with each of these research fields. The

Charles Wilts Prize is awarded every year to one EE graduate student for outstanding independent research in

Electrical Engineering leading to a PhD. Caltech has a reputation as a world-class research university, and it is

no exaggeration to say that much of this reputation is based on the quality of its graduate students. Its bright

and motivated graduate students collaborate with its professors in their research efforts and make it one of the

top Electrical Engineering departments in the country.

## **Вариант 2**

### **READING**

#### **Text 1**

**1. Read the text, and match the questions (A–F) to the numbered spaces (1–5), as in the example (0).**

A. How is current often described in engineering or household applications?

B. What current reverses direction repeatedly?

C. What concept was introduced by Michael Faraday?

D. What is alternating current affected by?

E. What is direct current?

F. What is the time-averaged value of an alternating current?

0. In engineering or household applications, current is often described as being either direct current (DC) or alternating current (AC). These terms refer to how the current varies in time.

1. Direct current, as produced by example from a battery and required by most electronic devices, is a unidirectional flow from the positive part of a circuit to the negative. If, as is most common, this flow is carried by electrons, they will be travelling in the opposite direction.

2. Alternating current is any current that reverses direction repeatedly; almost always this takes the form of a sinusoidal wave. Alternating current thus pulses back and forth within a conductor without the charge moving any

net distance over time.

3. The time-averaged value of an alternating current is zero, but it delivers energy in first one direction, and then the reverse.

4. Alternating current is affected by electrical properties that are not observed under steady state direct current, such as inductance and capacitance.

These properties, however, can become important when circuitry is subjected to transients, such as when first energised.

5. The concept of the electric field was introduced by Michael Faraday. An electric field is created by a charged body in the space that surrounds it, and results in a force exerted on any other charges placed within the field.

#### **Text 2**

**2. Read the text. Choose the best word (A, B or C) for each space (1–8).**

### **WHAT DO ELECTRICAL ENGINEERS DO?**

Electrical engineers design computers and incorporate them into 1.....and systems. They design two-way communications systems such as telephones and fiber-optic systems, and one-way communications systems such

as radio and television. They design control systems, such as aircraft collision-avoidance systems, and a variety of systems used in medical electronics. Electrical engineers are involved with 2... , control, and delivery of electric

3..... to homes, offices, and industry. 4..... power lights, heats, and cools working and living space and operates the many devices used in homes and offices. Electrical engineers analyze and interpret computer-aided tomography data, seismic data from earthquakes and well drilling, and data from space probes. They 5..... with systems that educate and entertain, such as computers and computer networks, compact-disk players, and multimedia

systems. The 6..... of communications equipment, control systems, computers, and other devices and processes into reliable, easily understood, and practical systems is a major challenge, which has given rise to the discipline of systems engineering. Electrical 7.....must respond to numerous demands, including signal 8... , better communications; faster and more reliable transfer of funds, orders, and information in the business world; and the need of medical professionals for access to medical data and advice from all parts of the world.

1. a. devices b. circuits c. currents 2. a. correlation. b. gravitation c. generation 3. a. power b. charge c. voltage 4. a. electricity b. electric c. electronic 5. a. deal b. design c. depend 6. a. correlation b. integration c. transmission 7. a. power b. equipment c. engineering 8. a. processing b. induction c. accumulation

## GRAMMAR AND VOCABULARY TEST

### 3. Choose the right option.

1.guns are actually the devices that are the heart of most TVs and computer monitors.

- A. electrical
- B. electricity
- C. electron

2. Electrical engineering ..... with the problems associated with large-scale electrical systems such as power transmission and motor control

- A. resist
- B. has
- C. deals

3 Resistivity of semiconductors, such as carbon and silicon, generally ..... with temperature rise.

- A. decreases
- B. measures
- C. occurs

4. Electrical engineers ..... on many kinds of products.

- A. work
- B. working
- C. works

5. The value of resistivity ..... also on the temperature of the material.

A. depends

B. resists

C. powers

6. The.....can be built up by rubbing certain objects together, such as silk and glass or rubber and fur.

A. electron

B. atom

C. charge

7. Electric fields.....by a charged body in the space that surrounds it.

A. is created

B. are created

C. is creating

8. An electric .....is an interconnection of electric components, usually to perform some useful task, with a return path to enable the charge to return

to its source.

A. circuit

B. field

C. charge

9. Electrical .....is usually generated by electro-mechanical generators driven by steam produced from fossil fuel combustion.

A. energy

B. circuit

C. charge

10. Electric current in a wire, where the charge carriers are electrons, is a ..... of the quantity of charge passing any point of the wire per unit of

time

A. energy

B. measure

C. power

## **TRANSLATION**

### **4. Translate the sentences from English into Russian.**

1. The discovery of the electron, which carries a charge designated as negative, showed that the various manifestations of electricity are the result of the accumulation or motion of numbers of electrons.

2. Electricity is a phenomenon associated with stationary or moving electric charges.

3. A long, thin copper wire has higher resistance (lower conductance) than a short, thick copper wire.

4. A photoresistor or light dependent resistor (LDR) is a resistor whose resistance decreases with increasing incident light intensity.
5. Photoresistors can be found in many consumer items such as camera light meters, street lights, clock radios, alarms, and outdoor clocks.
6. The electric light, one of the everyday conveniences that most affects our lives, was invented in 1879 by Thomas Alva Edison.
7. The need for electrical engineers was not felt until the invention of the telephone (1876) and the incandescent lamp.
8. Electrical engineering is concerned with the practical applications of electricity in all its forms, including those of electronics.
9. The Charles Wilts Prize is awarded every year to one graduate student for outstanding independent research in Electrical Engineering.
10. The university offers students the opportunity for study and research, both theoretical and experimental, in a wide variety of subjects, including wireless systems and quantum electronics.

## WRITING

### 5. Read the text and write an abstract. The length of the abstract is 100–120 words (see Appendix).

The modern world is an electrified world. The incandescent light bulb changed human existence by illuminating the night and making it hospitable to a wide range of human activity. The electric light, one of the everyday

conveniences that most affects our lives, was invented in 1879 by Thomas Alva Edison. Incandescent lamps make light by using electricity to heat a thin strip of material (called a filament) until it gets hot enough to glow.

Many inventors had tried to perfect incandescent lamps to «sub-divide» electric light or make it smaller and weaker than it was in the existing electric arc lamps, which were too bright to be used for small spaces such as the rooms of

a house. Edison was neither the first nor the only person trying to invent an incandescent electric lamp. Many inventors had tried and failed, some were discouraged and went on to invent other devices. Among those inventors who made a step forward in understanding the electric light were Sir Humphrey Davy, Warren De la Rue, James Bowman Lindsay, James Prescott Joule, Frederick de Moleyns and Heinrich Göbel.

Between the years 1878 and 1892 the electric light industry was growing. Thomas Edison and George Westinghouse determined to control the industry and its advancement. They formed the Board of Patent Control, a joint arrangement between General Electric and the Westinghouse Company.

### Примерный перечень вопросов к промежуточному контролю - зачету

1. Имя существительное. Образование множественного числа существительных.
2. Местоимения. Разряды местоимений.
3. Спряжение глагола *to be, to have*.
4. Прилагательные. Степени сравнения прилагательных и наречий.
5. Употребление артиклей.
6. Предлоги.
7. Типы вопросов.
8. Числительные.
9. Времена группы *Indefinite*.

10. Настоящее длящееся время.
11. Настоящее совершенное время.
12. Согласование времен.
13. Модальные глаголы.
14. Причастие.
15. Лексический минимум.
16. Устные темы:

## **ГОВОРЕНИЕ (ИТОГОВЫЙ ЭКЗАМЕН)**

Темы для устного высказывания (монолог/диалог)

1. "Talking about my family."
2. "Talking about my friend."
3. "Talking about my house."
4. "My working day."
5. "Moscow."
6. "London"
7. "Our Institute."
8. "The Russian Federation."
9. "The Great Britain."
10. "Why do we learn foreign languages?"
11. "My native city."
12. "Environment."
13. "Seasons."
14. Current and circuits
15. "Our planet Earth"
16. "The Earth is our home"
17. "Electricity"
18. "Types of current"
19. "Computer science Revision of studied material."
20. "Conductors and insulators"
21. "Electromotive force and resistance"
22. "Inductance and mutual inductance."
23. "Power plant."

## **ЗАДАНИЯ НА ЭКЗАМЕНЕ**

1. Read and translate the text with a dictionary. You have 35 minutes.
2. Scan the text, choose the text to the topic and speak on this topic. (темы для устного высказывания см. выше)
3. Listen to the text and discuss it.

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

**Формы контроля при прохождении промежуточной аттестации:** Зачета, Экзамена

Оценка качества освоения программы включает текущий контроль успеваемости (контрольные работы, тесты), промежуточную аттестацию обучающихся (зачёты) и итоговую аттестацию (экзамен).

Текущий контроль осуществляется на каждом практическом занятии в ходе обсуждения проблематики курса и анализа индивидуальных заданий студентов.

Допуском к зачету является сдача индивидуального чтения по специальности объемом 600 тыс. печатных знаков. Допуском к экзамену – 750 тыс. печатных знаков. Зачет выставляется по результатам текущего контроля и сдачи индивидуального чтения.

На экзамене студенты должны продемонстрировать умение:

- 1) выполнять письменный перевод текста по специальности со словарем (1800 печатных знаков за 35 минут);
- 2) адекватно понимать и излагать содержание газетной (журнальной) статьи на иностранном языке (2000 печатных знаков за 20 минут) в форме аннотации;
- 3) вести беседу с участием экзаменатора в рамках заданной социально-культурной, научно-популярной или общественно-политической проблематики.

Предлагаемые темы:

1. "Talking about my family."
2. "Talking about my friend."
3. "Talking about my house."
4. "My working day."
5. "Moscow."
6. "London"
7. "Our Institute."
8. "The Russian Federation."
9. "The Great Britain."
10. "Why do we learn foreign languages?"
11. "My native city."
12. "Environment."
13. "Seasons."
14. Current and circuits
15. "Our planet Earth"
16. "The Earth is our home"
17. "Electricity"
18. "Types of current"
19. "Computer science Revision of studied material."
20. "Conductors and insulators"
21. "Electromotive force and resistance"
22. "Inductance and mutual inductance."
23. "Power plant."

Оценивание всех выполняемых студентами видов работ проводится по пятибалльной системе.

Минимальный зачетный балл – 4.

Расчет баллов по тестам и контрольным работам:

- 100% - 85% правильно выполненных заданий – отлично;  
84% - 70% правильно выполненных заданий – хорошо;  
69% - 55% правильно выполненных заданий – удовлетворительно;  
54% - 0% правильно выполненных заданий – неудовлетворительно.

Составитель: Гандалоева З.С.