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**ОСНОВЫ ТЕОРИИ ПЕРВОГО ИНОСТРАННОГО ЯЗЫКА.
ТЕОРЕТИЧЕСКАЯ ФОНЕТИКА АНГЛИЙСКОГО ЯЗЫКА**

(учебное пособие для самостоятельной работы студентов 3 курса)

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Настоящее пособие, выполненное на модульной основе, предназначено для подготовки учащихся к практическим занятиям по дисциплине «Основы теории первого иностранного языка. Теоретическая фонетика английского языка». Лекционный материал к каждой теме сопровождается комплексом заданий, направленных на его усвоение. Задания представляют собой эффективную систему повторения и закрепления пройденного материала, основанную на прогрессивных формах организации учебного процесса.

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Дисциплина «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» входит в вариативную часть профессионального цикла и предназначена для студентов 3 курса по направлению подготовки «Лингвистика» для профиля «Теория и методика преподавания иностранных языков и культур».

Принимая во внимание требования к уровню подготовки учителей иностранного языка в вузе, согласно которым выпускник должен владеть системой представлений о языковой системе как целостном, исторически сложившемся функциональном образовании, обладать высоким уровнем развития теоретического мышления, способностью соотнести понятийный аппарат изученных дисциплин с реальными фактами и явлениями профессиональной деятельности, умением творчески использовать теоретические положения для решения практических профессиональных задач, **основной целью** освоения дисциплины «Теоретическая фонетика английского языка» является формирование системы знаний о фонетическом строе языка вообще и английского языка в частности в соответствии с современным состоянием фонетики как науки.

Достижение поставленной цели обеспечивается комплексным решением следующих **задач**, как профессионального, так и образовательного характера:

- 1) выработать у студентов теоретически обоснованное понимание специфики фонетической системы языка;
- 2) систематизировать элементы фонетической теории, усвоенные студентами при изучении нормативного курса и курса «Введение в общее языкознание», дать более полные сведения обо всех компонентах фонетической системы языка;
- 3) развить навыки сопоставительного анализа, описания и интерпретации фактов родного и изучаемого языков и умение делать самостоятельные обобщения и выводы из положений специальной литературы и наблюдений над фактическим языковым материалом;
- 4) сформировать общefonетический понятийный и терминологический аппарат, раскрыть содержание понятий, отражающих особенности фонетической системы английского языка, в их взаимосвязи;
- 5) развить у студентов умение самостоятельно извлекать из лингвистической литературы и перерабатывать научную информацию и сформировать критический подход к положениям и методам фонетической теории;
- 6) показать студентам возможности транслирования теоретических знаний в педагогической деятельности;
- 7) подготовить студентов к самостоятельной научно-исследовательской работе.

Дисциплина «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» логически и содержательно-методически связана с такими предыдущими дисциплинами, как «Основы языкознания»; «Практический курс первого иностранного языка: Практическая фонетика английского языка»; «Практический курс первого иностранного языка: Практическая грамматика».

английского языка»; «Основы теории первого иностранного языка: История английского языка».

Дисциплина «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» логически и содержательно-методически связана с такими последующими дисциплинами, как «Основы теории первого иностранного языка: Лексикология английского языка», Основы теории первого иностранного языка: Стилистика английского языка», а также входит в итоговый экзамен по лингвистике и теории обучения иностранным языкам.

Содержательное наполнение предлагаемого учебного пособия обусловлено базовым статусом дисциплины и ее включенностью в систему дисциплин, связанных с теорией и историей изучаемого языка.

Отбор содержания и организация материала курса «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» построены на основе **принципов** преемственности, контрастивности, компаративности, интегративности и систематичности. Так, предназначенные для изучения темы отобранные с учетом принципа *преемственности*, поскольку в рамках курса систематизируются ранее полученные фрагментарные знания в области фонетики. Благодаря принципу *интегративности* и *систематичности* учебно-методический материал обеспечивает общелингвистическую подготовку студентов, формирует многоаспектное понимание фонетической системы языка, природа которой определяется ее коммуникативной функцией и взаимосвязью с другими языковыми явлениями. В процессе усвоения иностранного языка студент неизбежно опирается на определенную систему категоризации явлений, опосредованную деятельностью и речью на родном языке. Поэтому в курсе «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» обозначаются основные точки соответствия и несовпадения фонетических систем русского и иностранного языков, иными словами, отбор содержания обусловлен также ориентацией на принципы *контрастивности* и *компаративности*. Реализация данного принципа предусматривает учет учебной ситуации, связанной с преподаванием и усвоением чужого языка, при этом не в меньшей степени предусматривается возможность более глубокого проникновения в суть структуры и процессов фонетического строя родного языка и более глубокого понимания законов, управляющих этими процессами.

Требования к «входным» знаниям и умениям, приобретенным в результате освоения предшествующих дисциплин:

- знание иностранной общеупотребительной и общенаучной лексики; владение иноязычными словообразовательными моделями, моделями построения словосочетаний и предложений;
- умение с опорой на несколько источников делать четкие, подробные письменные и устные сообщения по обсуждаемым научным вопросам, точно формулировать свои мысли и обстоятельно их излагать, показывать преимущества и недостатки разных мнений, развивать отдельные положения и делать соответствующие выводы, не испытывая при этом затруднений с подбором слов и выраже-

ний, демонстрируя владение моделями организации текста, средствами связи и объединением его элементов;

– умение использовать потенциал языка и выстраивать стратегии для достижения поставленных коммуникативных задач и желаемого воздействия, учитывать стилистические особенности научного дискурса;

– владение информационными технологиями, готовность самостоятельно работать с информацией различных источников, искать, анализировать, извлекать, отбирать, организовывать, преобразовывать, сохранять оформлять и передавать ее.

В результате освоения дисциплины «Основы теории первого иностранного языка: Теоретическая фонетика английского языка» студенты должны приобрести следующие **компетенции**, сформулированные в ФГОС ВО по направлению подготовки «Лингвистика», а именно:

а) общекультурные (ОК):

владение наследием отечественной научной мысли, направленной на решение общегуманитарных и общечеловеческих задач (ОК 6);

владение культурой мышления, способность к анализу, обобщению информации, постановке целей и выбору путей их достижения, владение культурой устной и письменной речи (ОК 7);

способность применять методы и средства познания, обучения и самоконтроля для своего интеллектуального развития, повышения культурного уровня, профессиональной компетенции, сохранение своего здоровья, нравственного и физического самосовершенствования (ОК 8);

готовность к постоянному саморазвитию, повышению своей квалификации и мастерства; способностью критически оценить свои достоинства и недостатки, наметить пути и выбрать средства саморазвития (ОК-11);

б) общепрофессиональные (ОПК):

способность использовать понятийный аппарат философии, теоретической и прикладной лингвистики, переводоведения, лингводидактики и теории межкультурной коммуникации для решения профессиональных задач (ОПК-1);

способность видеть междисциплинарные связи изучаемых дисциплин, понимает их значение для будущей профессиональной деятельности (ОПК-2);

владение системой лингвистических знаний, включающей в себя знание основных фонетических, лексических, грамматических, словообразовательных явлений и закономерностей функционирования изучаемого иностранного языка, его функциональных разновидностей (ОПК-3);

способностью свободно выражать свои мысли, адекватно используя разнообразные языковые средства с целью выделения релевантной информации (ОПК-7);

в) профессиональные (ПК):

способность выдвигать гипотезы и последовательно развивать аргументацию в их защиту (ПК-24);

В частности, обучающийся должен:

Знать:

- принципы классификации и функционального потенциала сегментных и супрасегментных фонетических средств;
- языковую норму и ее вариативность;
- структуру фонетики как дисциплины;
- многоаспектность предмета ее изучения;
- комплексный характер методики его исследования;
- соотношение понятий фонемы, варианта, инварианта и оттенка фонемы в ракурсе общего взаимодействия языковой системы и речевой среды а также
- корреляцию звуковой, слоговой, акцентной и интонационной структур языка.

Уметь:

- теоретически обосновать значимость фонетического строя языка для лексики, грамматики и стилистики речи;
- находить и анализировать сходства и отличия артикуляционных и интонационных особенностей английского и русского языков, диалектическое единство различных аспектов фонетических явлений, обуславливающее многообразие подходов к их исследованию.

Владеть:

- общefonетическим понятийным и терминологическим аппаратом;
- элементарными знаниями о фонетических особенностях языков других типов;
- представлением о целостности и функциональности фонетической системы языка;
- сведениями о наследии отечественной и зарубежной научной мысли в области фонетических исследований.

Данное учебное пособие составлено с учетом учебного плана и задач курса теоретической фонетики английского языка. Оно включает **три тематических модуля**, а именно: «Введение в теоретическую фонетику английского языка», «Сегментные фонетические средства», «Супрасегментные фонетические средства», в которых систематизирован материал по следующим темам: «Фонетика как лингвистическая дисциплина», «Основные варианты английского произношения», «История развития теории фонемы в отечественной и зарубежной лингвистике», «Фонема как единица фонологического уровня», «Система английских гласных и согласных фонем и их модификация в потоке речи», «Слог и слоговоеделение в английском языке», «Словесное ударение в английском языке», «Интонационная структура английской речи». Изучение каждого из трех модулей завершается разработкой коллективного проекта в форме электронных презентаций.

Перечисленные темы, в свою очередь, представляют собой **учебно-методические модули**, основанные на теории, практике и контроле, в которых лекционный материал сопровождается заданиями для самостоятельной работы студентов. К ним относятся: обсуждение теоретических вопросов, работа с лингвистической терминологией, заполнение таблицы по содержанию, интерпретация научных положений, сопоставительный анализ существующих определений и теорий. Обсуждение возможностей применения теоретических знаний в практике преподавания иностранного языка и практические упражнения способству-

ют не только закреплению теоретического материала, но и осуществлению дидактически ориентированного изучения курса теоретической фонетики, имеющего целью совершенствование профессиональной подготовки студентов.

Предлагаемые здесь **тестовые задания** носят обзорный характер и ориентированы на оценку и самооценку уровня конкретных знаний. Согласно определению тест является базовым понятием тестологии, представляющим собой систему заданий стандартной формы, выполнение которых проходит в равных для всех испытуемых условиях, поддается количественному учету, позволяет установить уровень сформированности знаний, умений и навыков тестируемого.* Главные преимущества методики тестового контроля заключаются в ее объективности, обуславливающей оптимальный контроль полученных знаний, несложной процедуре сравнения ответов с заранее подготовленными эталонами, а также в непосредственной фиксации и возможности статистической обработки результатов тестирования, позволяющей дать максимум достоверной информации об испытуемом. Кроме этого, методика тестового контроля способствует созданию варианта обучения, направленного на успешное решение учебных задач при рациональных затратах времени студентов и преподавателя, повышает эффективность учебного процесса путем повторения и закрепления пройденного материала, помогает развитию памяти, внимания и других способностей личности. Поскольку одним из основных аспектов подготовки педагогических кадров является формирование умений и навыков самостоятельной работы, методика тестового контроля может быть использована и для сознательного оценивания результатов собственной учебной деятельности.

Каждый тематический модуль сопровождается полиморфным тестом рубежного контроля, содержащим следующие формы заданий:

- 1) тестовые задания на исключение лишнего элемента;
- 2) тесты перекрестного выбора, при выполнении которых необходимо установить соответствие между элементами двух множеств;
- 3) тесты на систематизацию, состоящие в установлении правильной последовательности определенных элементов;
- 4) тесты оценки правильности суждения, требующие утвердительного или отрицательного ответа;
- 5) закрытые тестовые задания, заключающиеся в выборе ответа из нескольких предложенных вариантов, один из которых – правильный, а остальные – отвлекающие;
- 6) тесты со свободно конструируемым ответом, основанные на припоминании и дополнении, при выполнении которых необходимо самостоятельно сформулировать ответ или подставить на месте прочерка пропущенный элемент предложения.

Проектные задания к каждому тематическому модулю предназначены для коллективной работы и позволяет решить заданную научную проблему в резуль-

*Балыхина Т.М. Словарь терминов и понятий тестологии. – М.: Изд-во МГУП, 2000. – С. 83.

тате самостоятельных действий учащихся с обязательной презентацией этих результатов.

К пособию прилагаются полиморфный обзорный тренировочный тест, являющийся бумажным аналогом электронных тестов промежуточного контроля и служащий для подготовки к дистанционному тестированию, рекомендации по выполнению и оформлению групповых проектов, рекомендации к написанию рефератов, список литературы, экзаменационные требования и критерии оценки.

Поскольку согласно учебному плану курс теоретической фонетики английского языка читается на английском языке, учебное пособие также разработано на английском языке.

UNIT I
INTRODUCTION TO THE THEORETICAL PHONETICS OF
THE ENGLISH LANGUAGE

TOPIC 1
PHONETICS AS A BRANCH OF LINGUISTICS

1. The subject matter of phonetics and its history. The contribution of Russian and foreign linguists into the development of phonetics

The term “phonetics” comes from the Greek word “phōneticòs”, which means “pertaining to voice and sound”. It is an independent branch of linguistics dealing with the sound system of the language, word stress, syllabic structure and intonation. Phonetics is concerned with the human noises by which the thought is actualized or given audible shape. It studies the nature of these noises, their combinations and their functions in relation to the meaning, because only meaningful sound sequences (i.e. which contain some organized information), produced by human articulatory organs, are regarded as speech. Phonetics also focuses on the relation between written and spoken language.

Phonetics began long before there was either grammar or linguistics. Ancient objects, drawings and written documents show that people were aware of and interested in speech, its origin and abnormalities a long time ago. A science of phonetics flourished in India more than 2000 years ago.

The study of the human organs producing speech sounds began in the 17th century and was determined by the necessity to teach deaf and dumb people. This work is connected with the names of the Spanish linguist Bonet and the Dutch scholar Amman. At the end of the 18th century the acoustic theory of vowels was introduced by the German researcher Kratzenstein and later developed by Helmholtz. In the middle of the 19th century the results of the investigation in the sphere of anatomy and physiology of speech sound formation were summed up in the works of the German scientist Brücke. After the invention of laryngoscope, in 1852 the first observations of the vocal cords were made. The research of the sound system of the language from the linguistic point of view was first presented in the book of the German phonetician Sievers “Grundzüge der Lautphysiologie” (1876), the second edition was published under the title “Grundzüge der Phonetik” (1881). In 1886 International Phonetic Association (IPA) was founded. IPA started publications of a special phonetic magazine “Le Maître Phonétique”. It stated symbols for sounds of many existing languages, including English. Now two kinds of transcription can be distinguished: phonemic transcription, used to represent the phonemic system of a language, and phonetic transcription used to represent phonemic variants.

Many Russian and foreign linguists contributed to the development of phonetics by generating various theories. Working on the phoneme theory I.A. Baudouin de Courtenay stated synchronic and diachronic alternations of sounds within a morpheme, L.V. Shcherba put forward the theory of phonemic independence which was later developed by his follower L.R. Zinder. Besides, L.V. Shcherba traced the evolution of

phonemic variants into separate phonemes and the opposite process. N.S. Trubetzkoy's contribution into the development of phonetics consisted in the theory of phonological oppositions and the theory of the neutralization of the phoneme. Distinguishing phonemic level in the language structure, the American scholar L. Bloomfield emphasized the importance of the analysis of the phonemes for making the thorough and complete description of the language. American and English phoneticians tried to single out various degrees of word stress and principle nuclear tones of a syntagm. Such foreign scholars as H. Sweet, D. Jones, G. Palmer, L. Armstrong, I. Ward, R. Kingdon, J. O'Connor, A. Gimson, M. Halliday, K. Pike made investigation of intonation and its components. Syllabic structure of words was also carefully studied. Among theories of syllable formation and syllable division there are the expiratory theory, proved by instrumental technique of Stetson, the relevant sonority theory, suggested by O. Jespersen, the muscular tension and the three types of consonant theories, put forward by L.V. Shcherba, the loudness theory, created by N.I. Zhinkin.

2. The connection of phonetics with other branches of linguistics

Phonetics is an essential part of the language because it gives language a definite form – the vocabulary and grammar of a language can function only when lexical and grammatical phenomena are expressed phonetically. So phonetics is closely connected with other branches of linguistics such as grammar, lexicology and stylistics.

Grammar and phonetics. Phonetics is connected with grammar through sound alternation and intonation.

Sound alternation may be defined as a regularly occurring replacement of one sound inside a morpheme by another sound, by a group of sounds, by “zero” sound. The sounds which can replace one another in certain definite cases form an alternation series. Sound alternations are of two different kinds: phonetic alternations and historical alternations. Phonetic alternations are the result of the phonetic laws which function in the modern stage of a particular language. They are caused by assimilation, accommodation and reduction in speech. Historical alternations are not affected by the phonetic position or context, they are the result of phonetic laws that functioned at another period in the development of the language.

Phonetic alternations, as a rule, have no definite grammatical functions, they accompany some grammatical phenomena. In the English language, for example, they help to pronounce correctly singular and plural forms of nouns, the past tense forms and past participle forms of regular verbs, definite and indefinite articles.

- Ex. [s] is pronounced after voiceless consonants (books);
[z] is pronounced after voiced consonants and vowel (bags, boys);
[ɪz] is pronounced after sibilants, (which helps to differentiate singular and plural forms in some words of Latin origin – crisis [ɪs] – crises [ɪz]).
- Ex. [d] is pronounced after voiced consonants and vowels (played);
[t] is pronounced after voiceless consonants (looked);
[ɪd] after [t], [d] (wanted).
- Ex. [ðɪ] before vowels (the apple)
[ðə] before consonants (the pen)

[æ], [æn], [ə], [ən] a pan, an apple

Historical alternations, on the contrary, always have definite grammatical functions. In the English language, for example, historical alternations are connected with the conjugation of irregular verbs and help to distinguish singular and plural of some nouns:

Ex. sing – sang – sung; send – sent – sent

man [mæn] – men [men], foot [fu:t] – feet [fi:t].

The role of intonation in grammar is also great. Sometimes intonation alone can serve to single out the communicative centre of the utterance.

Ex. 'This is Mr. 'Brown's study.

'This is Mr. Brown's study.

'This is Mr. Brown's study.

This is Mr. Brown's study.

This is Mr. Brown's study.

'Did John 'phone you yesterday?

'Did John phone you yesterday?

Did John phone you yesterday?

The rising nuclear tone may serve as the only indicator of an interrogation in the general questions with direct word order.

Ex. Tom saw it. (a statement) Tom saw it? (a question)

The grammatical structure and consequently the meaning of a sentence, pronounced with different intonation patterns may be different.

Ex. He brought his friend a doctor and a gentleman.

He brought his friend a doctor and a gentleman.

He brought his friend a doctor and a gentleman.

Lexicology and phonetics. Phonetics is connected with lexicology through pronunciation, sound alternation, word-stress and onomatopoeia.

One word may differ from another in one sound only.

Ex. big [i], bag [æ], bog [o], beg [e], bug [ʌ].

Homographs can be differentiated only due to pronunciation, because they are identical in spelling.

Ex. bow [bəʊ]

row [rəʊ]

wind [wind]

bow [bau];

row [rau];

wind [waind].

Historical alternation can help to differentiate parts of speech, such as:

nouns and verbs (ex. life – live [f] – [v] + [ai] – [i], advice – advise [s] – [z]);

adjectives and nouns (ex. hot – heat [o] – [i:]);

verbs and adjectives (ex. moderate – moderate [ei] – [i]).

It also helps to distinguish causative verbs from other verbs (ex. rise – raise [ai] – [ei]) as well as etymologically related words (ex. shade – shadow [ei] – [æ]).

Due to the position of stress one can distinguish certain nouns from verbs.

Ex. 'object object;

'export exp'ort;

'present pre'sent.

Due to the position of word accent one can distinguish between homonymous words and word groups.

Ex. 'blackbird	'black 'bird;
'dancing-girl	'dancing 'girl.

Onomatopoeia or a combination of sounds which imitate sounds produced in nature (wind, sea, thunder etc.), by things (machines, tools etc.), by people (sighing, laughter, patter of feet, etc.) and by animals is a means of word formation.

Ex. crash, clang, bang, slap, clap, dab, ping-pong, buzz, cuckoo, roar, rustle, crow, splash.

Stylistics and phonetics. Phonetics is connected with stylistics through intonation and its components: speech melody, word stress, rhythm, pausation and voice timbre, which serve to express emotions, to distinguish between different attitudes on the part of the author and speaker. Very often the writer helps the reader to interpret his ideas through special words and remarks such as: *a pause, a short pause, angrily, gently, hopefully, with irritation, in a fury, miserable, reprovngly, surprised, at once, with curiosity* etc.

Ex. "You are what?" shouted Nigel in a fury, turning pale with emotion.
 "Where am I to sit?" repeated John with irritation.
 "Can you finish them?" we inquired hopefully.

To make a word or a sentence specially prominent or logically accented, the author uses graphical expressive means such as *italic*.

Ex. "I am also in the process of tearing down the wallpaper in the kitchen. It came with the house. Doris never liked it."
 "The question is whether *you* like it. You're the one who lives there now."
 "First I'll tell you what we didn't find."
 "Then tell us what you *did* find."

Phonetics is also connected with stylistics through repetition of sounds, words, and phrases which serves the basis of rhythm, rhyme and alliteration.

Rhythm, or regular recurrence of stressed and unstressed elements, may be used as a special device not only in poetry, but in prose as well.

Ex. I was brought up by two old aunts. I've never been anywhere. I've never done anything. I've been married for six years. I have no children (W.S. Maugham, *The Happy Man*).

Alliteration, or repetition of identical or similar sounds, helps to convey a melodic effect to the utterance and to express certain emotions.

Ex. There are twelve months in all the year,
 As I hear many men say,
 But the merriest month in all the year
 Is the merry month of May.

In the given above lines of the ballade the repetition of the sonorant [m] helps to produce the effect of merriment. The repetition of the words *year, say, May* produces the effect of rhyme.

Ex. Deep into the darkness peering, long I stood there wondering, fearing.
 Doubting, dreaming dreams no mortals ever dared to dream before.

Here in the lines quoted from Poe's poem "The Raven" the repetition of the sound [d] prompts the feeling of anxiety, fear, horror, anguish or all these feelings simultaneously.

Onomatopoeia is not only the word-building means but also a stylistic device which can be proved by the lines taken from Shakespeare's verse "Winter"

Ex. Then nightly sings the staring owl,

To-who

To-whit, to-who – a merry note...

Thus, phonetics is an independent branch of linguistics but not a separated one.

3. Branches of phonetics and their interconnection

Phonetics has branches of its own. First of all it is divided into special phonetics and general phonetics.

Special phonetics is concerned with the study of the phonetic structure of a particular language. It is subdivided into descriptive phonetics and historical phonetics.

Descriptive phonetics deals with the phonetic system of a particular language at a particular (mostly contemporary) period.

Historical phonetics aims at tracing and establishing the successive changes in the phonetic system of a given language at different stages of its development. It uses the philological method of investigation, which consists in studying written monuments and comparing different spellings of one and the same word. Historical phonetics is a part of the history of a language. But it is also important for the study of the modern phonetic system of a language because without a historical approach it is impossible to understand how this modern phonetic system came to be and what further changes it is likely to undergo. Historical phonetics is connected with general history, the history of the people whose language is studied and archeology.

General phonetics studies all the sound-producing possibilities of the human speech organs and the ways they are used for purposes of human communication by means of language, i.e. it finds out the types of speech sounds in different languages of the world, the way they are produced and the role they play in forming and expressing thoughts; it investigates the laws governing the changes of speech sounds in the flow of speech and finds out the types of such changes in various languages it determines the nature, types and role of other phonetic means necessary to convey thoughts in various languages, such as word accent, syllabic structure and intonation. General phonetics is a part of general linguistics.

General phonetics and special phonetics are closely interconnected. On the one hand general phonetics is based on the extensive material which the special phonetics of a great number of languages provides. It is also based on the achievements data of other sciences, such as physics, biology, psychology, speech pathology etc. As a result, general phonetics has been able to analyze phonetic phenomena from different points of view and to formulate a number of important theories: the phoneme theory, the theories of syllable formation and division, theories connected with syntagm, stress, intonation, graphical rules and rules of orthography etc. On the other hand, general phonetics pro-

vides valuable theoretical material which enables us to understand clearly and to interpret correctly the different phonetic phenomena of a concrete language.

Comparative phonetics investigates the phonetic system of two or more languages especially kindred ones, and find out the correspondences between the elements of phonetic system of these languages.

Phonetics is also divided into **segmental phonetics**, which is concerned with individual sounds and **suprasegmental phonetics**, which is concerned with the larger units of connected speech: syllables, words, phrases and texts where prosodic characteristics of speech are revealed.

The next division of phonetics into several branches is determined by the complex nature of speech sounds which manifests itself in four different aspects such as articulatory, physical, or acoustic, auditory and functional, or linguistic. Each aspect is studied by a certain branch of phonetics.

Articulatory phonetics. From the articulatory point of view every speech sound is a complex of definite, finely coordinated and differentiated movements and position of the various speech organs. All the movements and positions of the speech organs necessary to pronounce a speech sound constitute its articulation.

Organs of speech include the power mechanism, the vibrator mechanism, the resonator mechanism, the obstrucater mechanism. The power mechanism consists of the diaphragm, the lungs, the bronchi, the windpipe (or trachea), the glottis, the larynx, the mouth cavity and the nasal cavity. The vibrator (or voice producing) mechanism consists of the vocal cords. The resonator mechanism consists of the pharynx, the larynx, the mouth cavity and the nasal cavity. The obstrucater mechanism consists of the tongue, the lips, the teeth, the soft palate, the uvula, the hard palate, the alveolar ridge. The four mechanisms are not only closely interconnected, but actually also overlap, as the speech organs forming part of one mechanism may form at the same time part of another mechanism thus performing different functions. Each speech sound is the result of the simultaneous work of all the four mechanisms. From the point of view of their functions the speech organs of the obstrucater mechanism are divided into active and passive. The active organs of speech are the vocal cords, the tongue, the lips, the soft palate with the uvula. The passive organs of speech are: the teeth, the teeth ridge, the hard palate, and the walls of the resonance chambers (or the supra-laryngeal cavities). The active speech organs are mobile; in articulating sounds they occupy one or more positions in respect to the passive organs of speech which are immobile.

So articulatory phonetics is concerned with the study, description and classification of speech sounds in the framework of their articulation and in connection with the organs of speech by which they are produced. It is connected with such non-linguistic sciences as physiology and anatomy.

Acoustic phonetics. From the physical, or more exactly, acoustic point of view a speech sound like any other sound in nature is a physical phenomenon and it is communicated to the air in the form of sound waves, which appears due to the disturbance of the air stream by the movements of the speech organs. These movements push the particles of air which are next to it and displace them. The displaced layer of particles displaces the next layer, and the pressure is transmitted through the air. Thus, the space

between the air particles becomes smaller and the air is compressed or condensed. Compressed air particles reach the listener's ear-drum and cause pressure to it. When the pressing force has spent itself, the displaced particles return to their original position because of the elasticity of air and produce rarefactions behind them – that is the space between two neighbouring particles is increased. These alternating waves of condensation and rarefaction are sound waves.

Sound waves have a number of physical properties, such as *frequency*, *length*, *amplitude* and *duration*, which all exist and manifest themselves simultaneously; each of them can be singled out and separated from the others only for purposes of analysis. *Frequency* is the number of vibrations per second. Sound waves may follow one another at different rates of frequency, therefore the number of vibrations, or cycles per second varies greatly. *Length* is the distance between the point of maximum compression in one wave to the point of maximum compression in the next wave, or, in other words the distance between points having the same phase (position) in two adjacent waves. Wave length is inversely proportional to the frequency of vibrations; the higher the frequency, the shorter the wave length. Frequency of repeated pressure on the ear-drum is perceived as the pitch of the sound. The greater the frequency, the higher the pitch, and vice versa. The frequency of sound depends on certain physical properties of the vibrator, such as its mass, length and tension. The greater the mass of the vibrator, the slower its vibrations, and the lower the pitch (other conditions being equal). Some people's vocal cords are thicker and heavier than those of others and their voices are lower than the voices of those with thinner, lighter vocal cords. The longer the vibrator, the slower the vibrations, the lower the frequency and the pitch. A man's voice is lower than a woman's partly because his vocal cords are longer. As the tension of the vibrator increases, the frequency increases and the pitch rises. *Amplitude* of vibrations is the distance to which the air particles are displaced from their position of rest by the application of external force, produced by the movement of speech organs, or, in other words, by the degree of the condensation of air and therefore by the force of the pressure which the displaced air particles exert on the ear-drum. The amplitude of vibration is correlated with the intensity of the sound, changes in which are perceived primarily as variations in the loudness of sound. Naturally, the greater the external force applied to cause vibration, the greater the amplitude of vibration, the greater the intensity of sound, the greater the pressure of the displaced air particles upon the ear-drum, the louder the sound. Intensity is measured in decibels. Closely connected with the frequency and amplitude of sound is its composition or complexity. A physical body that is set into vibration vibrates not only as a whole but also in its parts (segmental vibrations). The sound wave produced by the vibration of the whole body is called the fundamental. Waves produced by the vibrations of the parts of the body are called partial waves. Most sound waves are complex ones i.e. they consist of the fundamental and partial waves blended together. The frequency of the fundamental wave is lower than that of the partial waves. The sound wave which results from the vibrations of the whole body and which has the lowest frequency is perceived as the fundamental tone. The characteristic partial waves which result from the vibrations of the parts of the vibrating body are perceived as partial tones, or overtones. They are perceived as changes

in tambre. Like any other form of matter sound can only exist and develop, or move, in time. In other words, any sound has a certain *duration*. It can be defined as the quantity of time during which the same vibratory motion, the same patterns of vibration are maintained.

So acoustic phonetics studies all the above mentioned acoustic properties of speech sounds, the way in which the air vibrates between the speaker's mouth and the listener's ear. It is connected with such non-linguistic science as physics.

Auditory phonetics. From the auditory point of view speech sounds are perceived by the listener's hearing organs and transmitted through the nervous system to the brain as a spoken message.

So auditory phonetics investigates the hearing process, caused by brain activity, the means by which we discriminate sounds, that is pitch, tamber, loudness, length of sounds, which are correlated with the physical properties of the corresponding sound waves. It is connected with such non-linguistic sciences as physiology, anatomy and psychology.

Functional phonetics (phonology, phonological phonetics). From the functional point of view speech sounds are significant units of the language which perform different linguistic functions, such as constitutive, recognitive and distinctive. In contrast to the greater language units, such as morphemes, words and sentences, speech sounds have no meaning by themselves. But a morpheme or a word can only exist in the form of a speech sound or a sequence of speech sound, and any modification of a word can be effected only on the basis of speech sound. Sentences as material forms of thoughts are, too although indirectly made up of definite sequences of speech sounds, whose order is determined by the order and grammatical form of words, used in them. Morphemes, words and sentences differ from one another, and are recognizable by interlocutor, which is also achieved due to the difference in speech sounds and their sequences.

So, functional phonetics deals with linguistically relevant or phonological (functional) properties of speech sounds, the properties which are essential for the communicative process.

Recently within functional phonetics **sociophonetics** has been singled out. It studies the ways in which phonetic structures interact with society and change in response to different social functions.

Functional phonetics is connected with such non-linguistic sciences as sociology and statistics.

The interconnection of articulatory, acoustic, auditory and linguistic aspects of speech sounds is observed in the succession of stages in the human speech production. First, the formation of the concept takes place in the brain of the speaker. The message formed within the brain is transmitted along the nervous system to the speech organs which articulate a particular pattern of speech sounds. The materialized sound waves have certain acoustic properties by which the listener's auditory apparatus perceives them and the nervous system sends the message to the brain, where the linguistic interpretation of the information is conveyed.

4. Methods and instruments of phonetic investigation

The methods of investigation used in phonetics fall into three groups: a) the methods of direct observation; b) the experimental (instrumental) methods; c) the linguistic methods.

The methods of direct observation comprise three modes of phonetic analyses: by ear (auditory), by sight (visual) and by muscular sensation. These methods consist in observing the movements and positions of one's own or other people's organs of speech in pronouncing various speech sounds, as well as in analyzing one's own kinaesthetic (muscular) sensations during the articulation of speech sounds and in comparing them with the resulting auditory impressions. It is oldest, simplest and most available method of investigation.

The experimental methods are based upon the use of special instruments and devices which include artificial palate, X-ray, laryngoscope, oscillograph, spectrograph, kymograph, intonograph. Due to these devices, the articulatory and acoustic properties of speech sounds are investigated. So, corresponding branches of phonetics are connected with technical sciences because they apply various technical achievements for the research work. The instrumental methods of investigation are:

- palatography which helps to determine the interaction of tongue and palate in production of speech sounds;
- X-ray photography and cinematography which help to trace the position and movement of speech organs;
- laryngoscopy which helps to observe the work of vocal cords;
- oscillography which helps to determine length, pitch and intensity of speech sounds;
- spectrography which helps to obtain the general characteristics of a speech sound, it is very useful in investigation of complex sounds;
- kymography which helps to record qualitative variations of sounds;
- intonography which helps to measure the fundamental tone of the vocal cords, the average sound pressure, the duration of speech (pausation).

The usage of such device as the tape-recorder doesn't imply in itself any instrumental analysis of the recorded speech, but serves the purpose of facilitating the speech analysis.

Methods of direct observation are rather subjective, whereas instrumental methods are objective. But these methods are complementary and not opposed to one another.

The aim of the *linguistic methods* of investigation is to determine in what way the phonetic phenomena, such as sound, syllable, stress, intonation are used in a language to convey a certain meaning.

Distributional analysis is the method of linguistic investigation which aim is to establish the distribution of speech sounds i.e. all the positions and combinations in which each speech sound of a given language occurs (or does not occur) in the words of that language. One of the steps of this analysis is substitution – the replacing of one speech sound by another in the same position to see whether a certain combination of sounds is possible or not.

The statistical method of linguistic investigation in phonetics is connected with the method of distributional analysis. Its aim is to establish the frequency, probably and predictability of occurrence of speech sounds in different positions in words.

The semantic method is used in phonetics to determine the phonological status of sounds. It consists in replacement of one sound for another in order to find out in which cases where the phonetic context remains the same such substitution leads to a change of meaning.

Thus, phonetics is a developed branch of linguistics which has its subject-matter, methods of investigation and subdivision, is closely connected with other linguistic sciences, as well as with non-linguistic ones.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The subject matter of phonetics.
2. The development of phonetics as a linguistic science. The contribution of Russian and foreign linguists into its development.
3. The connection of phonetics with other branches of linguistics:
 - a) grammar and phonetics;
 - b) lexicology and phonetics;
 - c) stylistics and phonetics.
4. Branches of phonetics:
 - a) general and special phonetics and their interconnection. Historical, descriptive and comparative phonetics as branches of special phonetics;
 - b) four aspects of speech sounds. Branches of phonetics based on these aspects, their interrelation and connection with non-linguistic sciences;
 - c) segmental and suprasegmental phonetics.
5. Methods and instruments of phonetic investigation:
 - a) the methods of direct observation;
 - b) the experimental (instrumental) methods;
 - c) the linguistic methods.

SPEAK ABOUT THE APPLICATION OF THE BASIC THEORETICAL KNOWLEDGE OF ENGLISH PHONETICS IN TEACHING.

COMMENT ON THE FOLLOWING TERMS

1. General phonetics, special phonetics, historical phonetics, descriptive phonetics, comparative phonetics, articulatory phonetics, acoustic phonetics, auditory phonetics, functional phonetics, phonology, sociophonetics, segmental phonetics, suprasegmental phonetics.

2. Palatography, x-ray photography (cinematography), laryngoscopy, oscillography, spectrography, kymography, intonography, distributional analysis.
3. Alternation, alliteration, onomatopoeia, articulation.

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. Vocabulary and grammar of a language can function only when the language has phonetic form.
2. Phonetic structures interact with society and change in response to different social functions.
3. The sound matter of language is a complex unity of four aspects.
4. Methods of direct observation are rather subjective, whereas instrumental methods are objective. But these methods are complementary and not opposite to one another.

PRACTICAL TASKS

1. **State to what part of speech belong the words in the pairs. Single out the sounds that interchange. Translate the words into Russian:**

deep — depth

antique — antiquity

know — knowledge

brief — brevity

please — pleasure

sagacious — sagacity

perceive — perception

strong — strength

nature — natural

describe — description

precise — precision

broad — breadth

mode — modify

admit — admission

assume — assumption

correct — correction

conclude — conclusion

confess — confession

divide — division

compete — competition

deceive — deception

clothe — cloth

glaze — glass

lose — loss

loathe — loath

halve — half

live — life

sell — sale

prove — proof

serve — serf.

2. Translate these words, transcribe them and single out the sounds that differentiate their meaning:

	translation	transcription
очень, меняться		
костюм, свита		
год, ухо		
набережная, очередь		
влиять, эффект		
сквозняк, засуха		
волосы, заяц, наследник		
наливать, бедный, лапа		
мужество, вагон		
бунт, маршрут		
молочная, дневник		
наполнять, чувствовать		
личный, персонал		
патруль, бензин		
мэр, майор		
выносить (терпеть), пиво		

3. Read these rhymes. State what sounds are used to produce the effect of alliteration and for what purpose.

a) She sells sea-shells on the sea-shore;
The shells she sells are sea-shells, I'm sure.
So if she sells sea-shells on the sea-shore,
Then I'm sure she sells sea-shore shells.

b) Why do you cry, Willy?
Why do you cry?
Why Willy? Why Willy?
Why Willy? Why?

c) The tutor who tooted the flute
Tried to tutor two tooters to toot
Said the two to the tutor:
"Is it harder to toot
Or to tutor two tooters to toot?"

TOPIC 2

THE PRINCIPAL TYPES OF ENGLISH PRONUNCIATION

1. Standard pronunciation of English and its development. The types of Received Pronunciation

A national language has two material forms: written and spoken. But spoken language is not the same throughout the country, it may vary from locality to locality. Distinct forms of a spoken language distinguished from each other by difference in pronunciation, grammar and vocabulary are called dialects. "Dialect" is the term broader than "accent", as the latter is used to denote varieties in pronunciation only. So the word "dialect" can be used in the meaning of accent (referring to pronunciation only), but not vice versa. Consequently, dialectology is the branch of phonetics which deals with dialectal differences in pronunciation, grammar and vocabulary.

The spoken form has its national pronunciation standard. A standard is a socially accepted variety of a language established by a codified norm of correctness. There are other terms denoting standard national pronunciation such as orthoepic norm (from the word "orthoepy" – the correct pronunciation of the words of a language), orthoepic standard, literary pronunciation.

For certain geographical, economic, political, cultural and social reasons one of the dialects develops into the standard language of the nation (literary language) and its pronunciation becomes the national standard. Thus the literary language of England developed on the basis of the London dialect, because London expanded rapidly into an

important centre of commerce, industry and learning as early as the 14th century. The pronunciation based on the London dialect became Standard English Pronunciation. It is also termed as Southern English pronunciation, Public School pronunciation, Received English Pronunciation (RP). The term “Southern English pronunciation” indicates only the birth place of this type of English pronunciation and does not mean that it is confined nowadays only to this locality. The term “Public School pronunciation” emphasizes that this type of pronunciation used to be taught in the expensive boarding school for the children of the rich. The term “Received Pronunciation” means that this type of pronunciation is accepted as correct by the majority of English people, it is the so called social standard within Britain. The British Broadcasting Corporation (BBC) adopted this form of pronunciation for its announcers. RP is acknowledged as the teaching norm in most countries, where English is taught as the foreign language.

RP is not homogeneous and stable. Some linguists distinguish four main types within it today.

1) conservative RP, used by the older generation and, traditionally, by certain professions or social groups;

2) general RP, used most commonly and adopted by the BBC;

3) advanced RP, used by young people of exclusive social groups mostly of the upper classes, but also for prestige value in certain professional circles; it reflects the tendencies typical of changes in pronunciation.

These three types were singled out by A. Gimson. The researchers Trudgill and Hannah suggest one more type:

4) near-RP Southern, used by many native speakers especially teachers of English and professors of colleges and universities (particularly from the South and South-East of England), which closely resembles RP but is not identical to it.

2. Regional and national variants of Standard English pronunciation

Languages, spoken by more than one nation, have several national variants of standard pronunciation. One of such languages is English. As a result of the colonial expansion of British Empire, the English language spread from the British Isles to all the continents of the earth, and as the colonies and dominions gained their independence and attained nationhood English became the national language of several countries, such as the United States of America, Australia, New Zealand and the greater part of Canada. It is native to many who live in India, Israel, Malta, Ceylon, the Republic of South Africa.

All the English-speaking nations have their own standard variants of English pronunciation, which possess many features in common, because they are of common origin. At the same time, they acquire varying number of differences due to the new conditions of their development after separation from the British English and to the degree of their connection with the British English after that separation.

Thus, there are the following national variants of Standard English pronunciation: 1) Australian pronunciation standard; 2) New Zealand pronunciation standard; 3) American pronunciation standard; 4) Canadian pronunciation standard.

New Zealand and Australian types of pronunciation are British-based standards. Canadian pronunciation standard exhibits features common with American English and British English. Like American speakers, most Canadians use the retroflex [r] and dark [ɹ] in all positions and pronounce [æ] in place of [ɑ:]. Some scholars consider Canadian pronunciation American based standard.

Besides the National variant of Standard pronunciation there may be other types of pronunciation considered equally correct or acceptable. They are spread in large regions of the country and used by educated people. Such types of Standard pronunciation are called regional variants of standard (orthoepic, or literary) pronunciation of the language in contradistinction to local dialectal variants, restricted to relatively small localities and used by uneducated people.

Thus in the British Isles the regional types of Standard English Pronunciation are: 1) Southern English pronunciation; 2) Northern English pronunciation; 3) Standard Scottish pronunciation; 4) Welsh English pronunciation; 5) Northern Ireland English pronunciation.

Of all the types of Standard English pronunciation in the British Isles Southern English Pronunciation (RP) is the least regional in character which is why it has the status of the national pronunciation standard.

The number of local (nonstandard) dialects in England is very great. They are classified into following main classes, each class including several groups: a) the dialects of Scotland (9 groups); b) the dialects of Ireland (3 groups); c) the dialects of England and Wales, which includes 5 divisions: Northern (3 groups); Midland (10 groups); Eastern (5 groups); Western (2 groups); Southern (10 groups).

There are also social dialects – varieties, spoken by a socially limited number of people.

3. The main types of American pronunciation. General American Pronunciation

In the United States there may be distinguished three main regional variants of standard pronunciation: 1) the Eastern type of standard pronunciation; 2) the Southern type of standard pronunciation; 3) the Western (Midwestern, Northern, Central Western) type of standard pronunciation.

The Eastern type is spoken along the East coast of New England and in New York City; it bears a close resemblance to the Southern English pronunciation which is explained by close contacts of the New England States with Britain during the colonization of America. But there are, of course some slight differences.

The Southern type is spoken in the South and South-East of the USA. Its most striking distinctive feature is the so called Southern drawl, which is a specific way of pronouncing vowels, consisting in the diphthongization of some simple vowels and monophthongization of some diphthongs at the expense of prolonging (“drawling”) their nuclei and dropping the glides (ex. that [ðæiet], cute [kjuət], fine [fɑ:n]). Southern American pronunciation has some features in common with RP, such as the dropping of [r] after [ɜ:], and [ə] the use of clear [l] before a vowel and others. Some linguists con-

sider Southern American pronunciation non-standard, as it is peculiar only to that part of the country and has not spread north.

The Western American is spoken in the central Atlantic States: New York, New Jersey, Wisconsin and others. It is not only the most widespread type, but also, like RP in Great Britain, the least regional in character, which is why this type of pronunciation is called General American (GA). It is close to modern Northern British Pronunciation.

These three dialects possess certain features in common that are characteristic of American pronunciation in the whole. But GA pronunciation is the national pronunciation standard of the USA, as it is the form of speech used by radio and television, in scientific, cultural and business intercourse. Besides in two important business centers – New York and St. Louis – GA is the prevailing form of speech and pronunciation, though New York is situated within the territory where Eastern American is used, and St. Louis is within the region of Southern American.

4. Received and General American Pronunciation in comparison

The most significant differences between GA and RP are: a) within the consonant system; b) within vowel system; c) within the accentual system; d) within the intonation system.

Consonants.

The phoneme [ɫ] exists in GA only in the form of its dark variant [ɫ̠], which is slightly darker than the RP dark [ɫ] and occurs both before vowels and [j] in which positions clear variants are used in RP and after a vowel or between a vowel and a consonant (as in RP):

Ex.	RP	GA
look	[lʊk]	[ɫʊk]
value	[vælju:]	[vælɫju:]
fill	[fiɫ]	[fiɫ̠]
film	[fiɫm]	[fiɫ̠m]

In GA the intervocalic [t] as in “pity” and [t] between a strongly stressed vowel and a sonorant as in ‘partly’ is most normally voiced. The result is neutralization of the opposition between [t] and [d] in this position (ex. latter – ladder). The original distinction is preserved through vowel length with the vowel before [t] being shorter.

GA speakers may drop [ɫ] in words like “twenty”, “little”. Thus “winner” and “winter” may sound identical.

In the pronunciation of GA [r] the top of the tongue is curled back further than in RP so that a wider air passage is formed. This process is called retroflexion. However, when preceded by [t, d, θ, ʃ] the phoneme [r] is articulated in both GA and RP almost identically. In pre-vocalic position [r] in GA is accompanied by lip-rounding. The phoneme [r] of GA differs from its RP counterpart not only in articulation, but also in distribution, since it is pronounced between a vowel and before a consonant or after a vowel in the word final position (ex. turn [tɜ:r̠n], bird [bɜ:r̠d], star [stɑ:r̠]).

The sonorant [j] is usually weakened or omitted by GA speakers between a consonant (especially a forelingual one) and [u:] (ex. news [nu:z], student ['stu:dənt], suit [su:t], tube [tu:b], stupid ['stu:pid] etc.).

The use of the cluster [hw] in words spelt with the initial diagraph “wh” makes in GA sound differently such words as “which” and “witch”, “whether” and “weather”, “where” and “ware”, which are considered homophones in RP.

Vowels.

In GA there is no strict division of vowels into long and short. According to D. Jones, all American vowels are long.

The distinction between monophthongs and diphthongs in GA is not very concrete. Some diphthongs have monophthongs as their phonemic variants, some monophthongs have diphthongs as their phonemic variants. Russian phoneticians distinguish five diphthongs in GA [ei, ai, oi, au, əu].

Glottal stop is made by GA speakers before initially stressed vowels (ex. in India).

The nasalization of GA vowels when they are preceded or followed by a nasal sonorant is called an American twang. It results from the lowering of the soft palate while the vowel is pronounced (ex. man, manner, candy, fine, small, name, etc.).

GA speakers use the [æ] phoneme in many words which have the vowel [ɑ:] in RP (Ex. ask [æsk], past [pæst], dance [dæns], path [pæθ] etc.).

In all words which have the [o] in RP the [ʌ] phoneme is pronounced in GA (ex. hot [hʌt], rock [rʌk], bother [bʌðə], dog [dʌg] etc.).

In unstressed position the vowel [ə] is pronounced in GA and corresponds to [əu] and [i] in RP.

Ex.	RP	GA
Negro	['nigrəu]	['nigrə]
fellow	['feləu]	['felə]
tomorrow	[tə'morəu]	[tə'mʌrə]
pocket	['pokit]	['pʌket]

Non systematic difference between GA and RP involve pronunciation of individual words or groups of words.

Ex.	RP	GA
Asia	['eɪjə]	['eɪʒə]
either	['aɪðə]	['i:ðə]
leisure	['leɪʒə]	['li:ʒə]
schedule	['ʃedju:l]	['skedʒu:l]
tomato	[tə'mɑ:təu]	[tə'meɪtə]
vase	[vɑ:z]	[veɪz]
nephew	['nevju:]	['nefju:]
advertisement	[əd'vɜ:tɪsmənt]	[əd'və'taɪsmənt] (difference in the stress position and in a vowel)

Accent.

In words of French origin GA tends to have stress on the final syllable, where RP has it on the initial one.

Ex.	RP	GA
ballet	['bæleɪ]	[bæ'leɪ]

Some words have first syllable stress in GA whereas in RP the stress may be elsewhere.

Ex.	RP	GA
address	[əd'res]	['ædrəs]
cigarette	[sigə'ret]	['sigərət]
research	[ri'sɜ:tʃ]	['risɜ:tʃ]
adult	[æ'dʌlt]	['ædʌlt]

Some compound words have stress on the first element in GA and in RP they retain it on the second element.

Ex.	RP	GA
	week'end	'weekend
	ice-'cream	'ice-cream
	hot'dog	'hotdog
	New 'Year	'New Year

Polysyllabic words, ending in -ory, -ary, -mony, have tertiary stress in GA (ex. laboratory, dictionary, secretary, testimony).

Intonation.

GA intonation differs from RP intonation mainly in unemphatic, or emotionally neutral speech. The English speech for Americans sounds “affected” and “pretentious” or “sophisticated”. And for the English Americans sound “dull”, “monotonous”, “indifferent”. The monotony of GA intonation is explained by the following factors:

- 1) pitch characteristics (since pre-nuclear contour in RP is gradually descending in GA it is mid-level);
- 2) narrow range of the utterance (in GA the voice doesn't fall to the bottom);
- 3) stow tempo;
- 4) complicated rhythmical structure of intonation (the unstressed syllables in RP gradually descend, the unstressed syllables in GA fall to a lower pitch, besides RP unstressed vowels are characterized by qualitative reduction, while GA sounds in unstressed syllables are lengthened).

GA general questions take a falling tone, in RP they are pronounced with the rising tone. The rising tone in GA general question is used to show politeness. Requests and leave-takings in RP are usually pronounced with a Rise, whereas in GA they may take a Fall-Rise.

Thus, the English language has national and regional variants of standard pronunciation as well as non-standard dialectal variations which possess certain common and differentiating features in the articulation and distribution of phonemes, accentual structure and intonation.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. Standard pronunciation of English and its development.
2. The principle types of Received Pronunciation.
3. National variants of Standard English pronunciation.
4. Regional variants of Standard English pronunciation.
5. The main types of American pronunciation. General American Pronunciation.
6. Received and General American Pronunciation in comparison:
 - a) differences within the consonantal system;
 - b) differences within the vocalic system;
 - c) differences within the accentual system;
 - d) differences within the intonation system.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE ABOUT THE TYPES OF ENGLISH PRONUNCIATION IN TEACHING

COMMENT ON THE FOLLOWING TERMS

1. Standard, orthoepy, dialect, accent, dialectology, standard national pronunciation (orthoepic norm, orthoepic standard, literary pronunciation)
2. Standard English pronunciation, Southern English pronunciation, Public School pronunciation, Received English pronunciation (RP), conservative RP, general RP, advanced RP, near-RP Southern, General American pronunciation
3. National variant of Standard pronunciation, Regional variant of Standard pronunciation, local dialectal variant, social dialect, idiolect.

PRACTICAL TASKS

Transcribe the words below according to the RP and GA standards of pronunciation.

	Received English Pronunciation	General American Pronunciation
dictionary		
February		
ordinary		
category		
territory		
cemetery		

monastery		
matrimony		
testimony		
necessary		
elsewhere		
midday		
peanut butter		
apple pie		
otherwise		
ballet		
address		
research		
adult		
cigarette		
Asia		
cordial		
either		
leisure		
schedule		
tomato		
vase		
missile		

TEST

A. CHOOSE THE ODD VARIANT.

1. There are the following branches of phonetics:
a) general; b) special; c) biological; d) acoustic.
2. There are the following aspects of speech sounds:
a) articulatory; b) segmental; c) acoustic; d) functional.
3. Phonetics is connected with lexicology through:
a) sound alternation; c) accent;
b) alliteration; d) onomatopoeia.
4. Articulatory phonetics is connected with:
a) anatomy; b) physiology; c) technical sciences; d) chemistry.
5. The standard form of British pronunciation is also called:
a) General English Pronunciation; c) Received Pronunciation;
b) Public School Pronunciation; d) Southern English Pronunciation.
6. There are the following types of Received Pronunciation:
a) conservative; b) advanced; c) cockney; d) general.
7. National variants of Standard English pronunciation are:
a) Australian pronunciation Standard;
b) American pronunciation Standard;
c) Canadian pronunciation Standard;
d) Standard Scottish pronunciation.
8. General American is characterized by the following features:
a) Retroflexion;
b) Southern drawl;
c) Nasalization of vowels before and after nasal consonants;
d) Omission of the sonorant [j] in some positions.

B. MATCH THE BRANCHES OF PHONETICS WITH THEIR SUBJECT MATTER.

1. Descriptive phonetics	a) studies linguistically relevant properties of phonetic units
2. Historical phonetics	b) studies the correlation between the phonetic systems of several languages
3. General phonetics	c) describes and classifies the speech sounds in connection with the organs of speech by which they are produced

4. Comparative phonetics	d) traces the successive changes in the phonetic system of a given language at different stages of its development
5. Articulatory phonetics	e) studies the ways in which phonetic structures change in response to different social functions
6. Acoustic phonetics	f) investigates the hearing process caused by brain activity
7. Auditory phonetics	g) studies the way in which the air vibrates between the speaker's mouth and the listener's ear
8. Functional phonetics	h) studies all the sound-producing possibilities of the human organs of speech and the ways they are used for purposes of human communication
9. Sociophonetics	i) studies the phonetic system of a particular language at a particular period

C. AGREE OR DISAGREE WITH THE STATEMENTS AND CORRECT THE FALSE ONES.

1. General and special phonetics are closely connected.
2. The Spanish linguist Bonet stated phonetic symbols for sounds of many existing languages.
3. The acoustic theory of vowels was introduced by the German linguist Kratzenstein.
4. Phonology is an independent linguistic science.
5. Special phonetics is based on the material which the general phonetics of a great number of languages provides.
6. A combination of sounds which imitate noises produced in nature, by things, people and animals is called alliteration.
7. Every sound sequence produced by a human vocal apparatus is regarded as speech.
8. British Received Pronunciation is not homogeneous and stable.
9. The Australian type of pronunciation is American-based.
10. The Western type of American pronunciation is the least regional in character and is called General American.
11. In GA there is no strict division of vowels into long and short.
12. In GA words «weather» and «whether» are not considered homophones.
13. The phoneme [l] in GA has only its light variant.

D. FILL IN THE GAPS WITH THE APPROPRIATE WORDS OR WORD COMBINATIONS.

1. From the **a)**... point of view every **b)**... .. is a complex of definite, finely coordinated and differentiated **c)**... and **d)**... of the various **e)**... .. .
2. From the **a)**... point of view speech sounds are significant **b)**... of the language which perform **c)**..., **d)**... and **e)**... functions.

3. From the **a)**... point of view a speech sound like any other sound in nature is a **b)**...
... and it is communicated to the air in the form of **c)**... ... which appear due to the
d)... of the air stream by the movements of **e)**... ..
4. From the **a)**... point of view speech sounds are perceived by the listener's **b)**... ..
and transmitted through the **c)**... .. to the **d)**... as a spoken message.

E. CHOOSE THE CORRECT VARIANT.

1. Which methods of phonetic investigation aim at determining the way in which phonetic phenomena are used in a language to convey a certain meaning?
 - a) the direct observation methods;
 - b) the linguistic methods;
 - c) the experimental methods.

2. Which aspect of speech sounds is connected with the work of the speech organs?
 - a) linguistic;
 - b) articulatory;
 - c) acoustic.

3. Functional phonetics is connected with:
 - a) anatomy;
 - b) statistics;
 - c) physics.

4. Which experimental method of investigation is used to investigate the work of the vocal cords in production of speech sounds?
 - a) laryngoscopy;
 - b) oscillography;
 - c) palatography

5. Which of the linguists investigated speech sounds from the articulatory point of view?
 - a) Bonet;
 - b) Kratzenstein;
 - c) Helmholtz.

6. Phonetics is an independent branch of linguistics which is concerned with the:
 - a) phonemic structure of a language;
 - b) phonetic structure of a language;
 - c) phonological structure of a language.

7. Distributional analysis aims at:
 - a) determining length, pitch and intensity of speech sounds of a given language;
 - b) establishing all the positions and movements of speech organs;
 - c) establishing all the positions and combinations in which each speech sound of a given language occurs in the words of that language.

8. Which type of Received Pronunciation is adopted by the BBC?
 - a) advanced;
 - b) conservative;
 - c) general.

9. The term “Southern English pronunciation” means that:
- a) this type of standard pronunciation is restricted to the particular locality;
 - b) this type of standard pronunciation is based on the particular dialect;
 - c) this type of standard pronunciation is spoken by educated people in the South of Britain.
10. Which regional variant of American pronunciation is close to the Southern English pronunciation?
- a) the Western type of pronunciation;
 - b) the Eastern type of pronunciation;
 - c) the Southern type of pronunciation.
11. The words of French origin in General American tend to have stress:
- a) on the final syllable;
 - b) on the initial syllable;
 - c) both on the final and on the initial syllable.
12. The suffixes *-ory*, *-ary*, *-mony* of polysyllabic words in Received Pronunciation have:
- a) secondary stress;
 - b) tertiary stress;
 - c) weak stress.
13. The phoneme [r] in General American differs from Received Pronunciation:
- a) only in the articulation;
 - b) only in the distribution;
 - c) both in the articulation and distribution.
14. Individual speech of members of the same language community is called:
- a) social dialect;
 - b) idiolect;
 - c) supralect.

GROUP PROJECT

The connection of phonetics with non-linguistic sciences

UNIT II SEGMENTAL PHONETICS

TOPIC 1 THE DEVELOPMENT OF PHONEME THEORY

1. Main trends in phoneme theory

Most linguists have looked upon the phoneme as one of the basic language units. But not all of them have described it in the same way. In general, views of the phoneme fall into five main classes: 1) mentalistic or psychological; 2) functional; 3) abstract; 4) physical; 5) populational.

The *mentalistic* or *psychological view* regards the phoneme as an ideal mental image, or a target at which the speaker aims. Actually pronounced speech sounds are imperfect realizations of these images partly because an ideal repetition of a sound is next to impossible and partly because of the influence exerted by neighboring sounds. This theory was originated by the Russian linguist J.A. Baudouin de Courtenay. It was shared by the Norwegian linguist Alfred Sommerfelt who described phonemes as “models which speakers seek to reproduce” though it’s not possible to establish such ideal sounds which do not exist in reality.

The *functional view* regards the phoneme as the minimal sound unit by which meanings may be differentiated. According to this conception, in every sound only a certain number of the articulatory features are involved in the differentiation of meanings. Such features are called distinctive. Non-distinctive features are not taken into account, because they do not differentiate meanings. Such an approach to the phoneme separates it from actually pronounced speech sounds. This view is shared by N.S. Trubetzkoy, L. Bloomfield and other foreign linguists.

A stronger form of the functional approach is the *abstract view*, which regards phonemes as essentially independent of the acoustic and physiological properties associated with them, that is of speech sounds. This idea was introduced by L. Hjelmslev and developed by his colleagues.

The psychological, functional and abstract views of the phoneme can be qualified as idealistic, since all of them look upon the phoneme as an abstract conception existing in the mind but not in the reality that is in human speech and speech sounds are considered only as phonetic manifestations of these conceptions.

The *physical view* regards the phoneme as a group of articulatory similar sounds without taking into consideration its functional and abstract aspects, though it is impossible to assign sounds to the same phoneme without their substitution in the same phonetic context and regardless the change in meaning. So this approach to the phoneme, developed by D. Jones, is opposed to the previous three purely idealistic ones, as it implicitly denies, disregards or underestimates the abstracted and generalized character of the phoneme.

The *populational view* regards the phoneme as a unit of:
an idiolect – individual speech of members of the same language community (K. Pike);

a dialect – a distinct form of a language distinguished from other forms by differences in pronunciation, grammar and vocabulary (L. Bloomfield);
a multidialect – the concrete language as a whole (H. Smith);
a supralect – a standard form of a language by which the dialects and idiolects may be compared (J. Perry).

2. Russian schools of linguistics and their contribution to the phoneme theory

The Kazan school of linguistics was founded by the eminent Russian linguist I.A. Baudouin de Courtenay, the originator of the phoneme theory, whose work may be roughly subdivided into two periods: 1) the morphological approach; 2) the psychological approach.

During the first stage of the development of his phoneme theory Baudouin de Courtenay was chiefly interested in the entity of the morpheme. He perceived that the same morpheme was not always represented by the same combination of sounds. An example of this in Slavonic languages is the alternation of voiced and voiceless consonants within morphemes.

Baudouin de Courtenay introduced a new term *homogenes* to define the sounds that make up a morpheme and distinguished two kinds of *homogenes*:

1) *divergent* – variants of the same sound arising from the phonetic laws functioning in the language at the present time. They represent phonetic alternations (ex. гриб [п]– грибы [б]);

2) *correlates* – sounds that are different in character and the different qualities of which can no be explained by the existing phonetic laws of the language, as they represent historical phoneme alternations (ex. скакать [к] – скачу [ч]).

Thus Baudouin de Courtenay was the first linguist who demanded accurate distinction between synchronic and diachronic approach to phonetic investigation. The phoneme in his understanding is something that produces alternation.

But centering his attention mainly on the phenomenon of phonetic and historical alternation, Baudouin de Courtenay made his phoneme conception rather obscure.

However his theory has many followers. N.S. Tribetzkoy was influenced by it and his arch-phoneme is practically based on Baudouin de Courtenay's morphological approach. Some linguists of the Moscow school of linguistics have developed his morphological phoneme theory.

During the second stage, the morphological conception was abandoned and Baudouin de Courtenay searched for a unit which would not be bound by the limits of a morpheme. But the prevailing of the psychological approach in linguistics at that time prevented Baudouin de Courtenay from creating an adequate phoneme theory.

Now he asserts that a speech sound is a fictitious unit, an invention of the scientists. What really does exist and what is being constantly renewed in the individual mind is the perception of a sound. Thus the phoneme is a complex perception of the articulatory movements and of the muscular sensations connected with them together with the resulting acoustic impressions, all of which react on mind simultaneously.

But the second phoneme conception was also rather obscure due its purely psychological nature.

In general Baudouin de Courtenay's views upon the phoneme lack consistency, for while developing the phoneme theory; he changed his standpoint fundamentally more than once. Besides his ideas have not become widely spread, because most of his works were written either in Russian or in Polish, and few Western European scholars were acquainted with one or the other language. His phoneme theory became known chiefly through the works of his pupil L.V. Shcherba.

The St. Petersburg (Leningrad) school of linguistics was headed by L.V. Shcherba, whose research work may be subdivided into two periods: 1) pre-revolutionary period; 2) post-revolutionary period.

In the first period of his research work L.V. Shcherba was under the influence of J.A. Baudouin de Courtenay and the general trend in linguistics then current. His approach to the phoneme is also psychological in character. The phoneme is defined as the shortest generic phonetical perception in a given language capable of being associated with semantic perceptions, of distinguishing words, and of being easily isolated from a word.

So this conception of phoneme is a step forward, as L.V. Shcherba considers phonemes not only "perceptions", as Baudouin de Courtenay did, but as "generic perceptions". Moreover, he was the first, to advance the idea of the distinctive function of phoneme.

The principal points of L.V. Shcherba's phoneme theory are: 1) the theory of phonemic variants; 2) the theory of phonemic independence.

L.V. Shcherba attaches very great importance to phonemic variants because they represent phonemes in actual speech, and the whole groups of phonemic variants give rise to the same type perception. Besides, on the one hand, phonemic variants may develop into new phonemes; on the other hand, a phoneme may cease to function as such, and may become a phonemic variant. For instance, the three pairs of English consonants [θ]-[ð], [f]-[v], [s]-[z] were variants of one phoneme each in old English, whereas in present day English each of these six consonants is an independent phoneme. Thus L.V. Shcherba claims that it is essential for historical phonetic investigations to trace the development of certain phonemic variants into independent phonemes, as well as the deterioration of some phonemes into phonemic variants.

According to L.V. Shcherba phonemes have a certain amount of independence which can be proved in two ways:

The first proof is the fact that a phoneme is capable of expressing a meaning by itself. For instance, [ʃ] in many languages commands silence. Exclamations like [əu] [ɑ:] with appropriate intonation serve to express different emotions. Formal words sometimes consist of one phonemes (ex. conjunctions and prepositions in Russian "и" [и], "к" [к], the indefinite article in English "a" [æ] the personal pronoun of the first person singular in English "I" [ai].

The second proof is the fact that elements of semantic perceptions are often associated with elements of sound perceptions. For example, the non-palatalized [л] in

many Russian verbs such as “хотел”, “смотрел”, etc. is associated with the idea of the Past Tense.

In the second period of his work L.V. Shcherba revised his phoneme conception and worked out a materialistic theory of phoneme. He stated that in actual speech we utter a much greater variety of sounds than we are aware of; in every language these sounds are united in a comparatively small number of sound types. Thus phonemes can be defined as sound types, limited in number which are capable of distinguishing the meaning and the form of words, thus serving the purpose of social intercourse. The various sounds that we actually utter and which are the individual representing the universal are phonemic variants. He was the first who regarded the phoneme as a real independent distinctive unit which manifests itself in the form of its variants.

L.R. Zinder, the follower of L.V. Shcherba, developed his theory of phonemic independence. He advanced the following considerations to prove that a phoneme has an independent existence:

1. A phoneme is a phonetic unit, as being expressed in actual speech in the form of a number of variants, it is very complex from the acoustic and the physiological points of view.

2. Everyone is able to recognize phonemes in his mother tongue.

3. We recognize sounds of our mother tongue in unfamiliar or invented words.

4. We are able to construct borrowed words by means of the phonemes of our mother tongue.

5. We can create in our mother tongue the new words which are not connected morphologically with already existing words (ex. Russian abbreviations “зач”, “ГМ” etc.). Even if we do not know the meaning of such words, we repeat them and recognize the phonemes.

6. Everyone can analyze into phonemes any words of his mother tongue, taken separately, without any context, which is done everyday when we repeat new words, names of unfamiliar objects or of people.

7. A word is analyzed phonemically without comparing it with other words or with other forms of the same word that is to say without finding oppositions for it.

The Moscow school of linguistics is presented by two basic approaches to the phoneme.

The first is morphological approach. Its adherent is R.J. Avanesov, who developed Baudouin de Courtenay’s phoneme theory of the early period. He made a thorough analysis of this conception and criticized it for lacking precision, and introduced two notions: 1) phonemic variations; 2) phonemic variants. Variations are the concrete representations of phonemes in “weak” positions, which are distinguished from phonemes, in “strong” positions (ex. vowels in stressed/unstressed positions, consonants followed/not followed by vowels). Variants include all the alternation series that can be found within the same morpheme.

But such a complicated conception didn’t add precision to the morphological phoneme theory and on the contrary made it very obscure.

The second is cybernetic approach. Its originator is S.K. Showmyan, who was formerly an adherent of the morphological phoneme theory, but has revised his views

under the influence of L. Hjelmslev. According to Showman's opinion, the phoneme can not be perceived by means of direct observation, as it is in the so called "Black Box" (the term borrowed from the science of cybernetics, which is why this approach to the phoneme is called cybernetic) and requires a special conceptual apparatus in order to be cognized.

Showman has created a two-level theory of phonology and distinguished between two branches of phonology: 1) theoretical phonology; 2) general phonology. Theoretical phonology is a new science which works out a conceptual apparatus for the study of the nature of phonological reality. General phonology studies the phonological systems of concrete languages.

But theoretical phonology actually is epistemology (from Greek "epistēmē" – "knowledge" – a theory of the method or grounds of knowledge which may be applied to any science.

Besides the assumption that phonemes cannot be observed or perceived by our senses is mistaken, because phonemes can be perceived and are daily perceived by members of the same linguistic communities. So the cybernetic approach to the phoneme is rather abstract and obscure.

3. Foreign schools of linguistics and their contribution to the phoneme theory

The first exponent of the phoneme theory in Western Europe was the Swiss scholar Ferdinand de Saussure who actually was the first to use the term "phoneme" and defined it as the sum of acoustic impressions and articulatory movements. Besides, he was the originator of many ideas of general linguistics such as: 1) separation of speech from language; 2) view upon language as a system of signs expressing ideas and compared to any other system of signs used by man; 3) overestimation of the synchronic analysis of language. These ideas were adapted by the representatives of foreign schools and served as theoretical basis for the phoneme theories, generated by them.

The Prague school of linguistics was founded in 1926 and ceased to exist by the beginning of the fifties. The period of its creativity is between 1929 and 1939. In its thesis "Travaux du Cercle Linguistique de Prague" the phonological views of N.S. Trubetzkoy were first published.

The main points of Trubetzkoy's theory are: 1) the separation of phonology from phonetics; 2) the theory of phonological oppositions; 3) the theory of the arch-phoneme.

Trubetzkoy became acquainted with the phoneme theory through the works of Baudouin de Courtenay and Shcherba, while he was studying at the University of Moscow. But his views deviate greatly from those of Russian scholars. Thus, L.V. Shcherba considered phonology to be the branch of phonetics, but Trubetzkoy developed de Saussure's principle of the separation of speech from language and proclaimed a new science – phonology as distinct from phonetics.

According to Trubetzkoy, phonetics is a biological science which investigates all physiological and physical features of speech sounds (their material side), that is to say, it should concern itself with the sounds of a language as they are pronounced and as

they are heard, without paying any attention to their function in the language. Phonology is a linguistic science, which should concern itself with the distinctive features of speech sounds, that is to say, with those features which are connected with meaning and serve communicative purposes.

Trubetzkoy draws a strict borderline between a phonetician and a phonologist as well. A phonetician should study sounds without taking into consideration the meaning of what is said; a phonologist should take into account only those sound features which have a definite function in a language.

But it is impossible to oppose phonetics and phonology as independent sciences, as phonology is a branch of phonetics which is reflected in the subject-matter of the latter. Phonology is a convenient term to indicate that section of phonetics in which the linguistic functions of speech sounds are discussed. But since the sound matter of language is a complex unity of four aspects (articulatory, acoustic, auditory and linguistic), it is necessary to emphasize the inseparable interconnection of all the branches of phonetics, which have common object of investigation, though viewed from different points.

Trubetzkoy gives the following definitions to the speech sound and the phoneme: The speech sound is a unity of both relevant and irrelevant features. The phoneme is a unity of phonologically relevant features of a sound. It can only perform its distinctive function if it is opposed to another phoneme in the same position. Such an opposition is called distinctive, or phonological. Trubetzkoy emphasized the fact that the inventory of the phonemes of a language is practically a correlation of its system of phonological oppositions and created a very interesting but rather complicated classification of phonological oppositions. His theory of oppositions found its application in grammar where the majority of morphological categories can be presented as oppositions (ex. opposition of singular and plural in the grammatical category of number, opposition of present, past and future in the grammatical category of tense etc.).

Trubetzkoy's theory of the arch-phoneme was based on Baudouin de Courtenay's morphological phoneme theory, in particular the synchronical alternation of sounds in a morpheme. Trubetzkoy looked upon this phenomenon from the point of view of his opposition theory, and regarded it as the neutralization of the opposition. Two phonemes can be neutralized because they have common qualities which do not occur in other phonemes. Thus in Russian the opposition [п]-[б] is neutralized in the final position of words (грипп [п] – гриб [п]) because [п], [б] are the only labial plosives in the language, no other sounds share similar set of features. The phoneme in the position of neutralization is the arch-phoneme, which is defined as a unity of relevant features common to two phonemes. But arch-phoneme excludes the feature which distinguishes them. So arch-phoneme of [п - б] consists of the features: bilabial and plosive, but excludes voicing which separates them. For transcription purposes the symbol of capital [П] is used to represent the arch-phoneme of [п - б].

The London school of linguistics is headed by Daniel Jones who was acquainted with the phoneme theory of L.V. Shcherba and his mentalistic definition of the phoneme, but he found it inconvenient for practical purposes and offered a couple of his own definitions:

“A phoneme is a family of sounds in a given language which are related in character and are used in such a way that no one member ever occurs in a word in the same phonetic context as any other member.” Thus Jones emphasizes the mutual exclusiveness of different members of the same phoneme.

“A phoneme may be described roughly as a family of sounds consisting of an important sound of the language (i.e. the most frequently used member of the family) together with other related sounds which take its place in particular sound-sequences or under particular conditions of length or stress.” (Ex. The family of sounds [t] (or the phoneme [t]) is represented by the following members, used in different phonetic contexts: slightly rounded (tool), post-alveolar (try), labialised (twice), dental (at the), lateral (little) nasal (kitten) etc. The family of sounds [i:] (or the phoneme [i:] is represented by different members in the word-final position, before a voiced consonant and before a voiceless consonant (see, seed, seat).

Later Jones expounded his new theory which may be called atomistic. He broke up the phoneme into atoms and considered different features of phoneme as independent phenomena. He distinguished phones (different qualities of the same phoneme), cronemes (different degrees of length), tones (different pitch variations of the phoneme in tone languages), strones (different degrees of stress). Phones are combined into phonemes that are distinctive in a language (for instance, voiced and voiceless phonemes in English). Chronemes are combined into chronemes (long and short chronemes in English). In the same way tones are combined into tonemes in tone languages (even and rising tonemes in oriental languages), strones are combined into stronemes (primary and weak stronemes).

But the atomistic conception of the phoneme is not very convincing. The separate features of a phoneme should not be treated as independent phenomena. Length or tone have no importance without other sound features, they do not exist by themselves. They exist only in phonemes, as their characteristic features, and all these characteristic features taken together make up a phoneme which is linguistically distinctive. Length by itself is an abstraction, a long phoneme is a linguistic reality and must be distinguished from a short phoneme.

According to Jones the problem of phonemes is connected with philosophy, so that a linguist can not cope with it; it is also impossible to give an adequate definition of the phoneme, since the term “language” is vague. So there are elements of agnosticism in this theory. This fact contradicts the practical application of the phoneme at which Jones aims; that is to use it in teaching languages, in creating phonetic transcription.

The American school of linguistics is called descriptive, as under the influence of de Saussure’s ideas its representatives treated all the phenomena of language in their present condition without any connection with the history of the language in question. American descriptivism is based on behaviourism (from English “behaviour”). The essence of behaviorism is the acknowledgement of the fact that the linguistic processes of the mind as such are quite simply unobservable and our only information about the mind is derived from the behaviour of the individual. According to the ideas of behaviourism, speech is a special form of behaviour, and the process of communication is a

chain of stimuli and reactions, so language may be compared to any system of codes, such as the Morse code or traffic signs, which coordinates the human behaviour and serves as a connector between the interlocutors' nervous systems (a heard word is a stimulus, a spoken word is a reaction to it).

One of the representatives of the American school of linguistics is Leonard Bloomfield who developed the theory of four main levels of the language: 1) phonemic; 2) morphemic; 3) lexical; 4) syntactic.

The units of these levels are, correspondingly, phonemes, morphemes, words and sentences. The elements of each level can be combined with the elements of the same level. Thus phonemes can be combined with phonemes, morphemes can be combined with morphemes etc. But such combinations produce the units of the next level. Bloomfield believed that the description of a language should begin with the simplest phonemic level. In the course of this analysis all the phonemes of a given language should be determined and all possible combinations of phonemes should be stated.

Bloomfield defined the phoneme as a minimum unit (bunch or bundle) of distinctive features.

Another representative of the American school of linguistics is William Twaddel who is rather contradictory in his views, as on one hand, he defines a phoneme as an abstractional fiction, but at the same time he introduces the term "microphoneme", which is equivalent to Bloomfield's distinctive feature, and the term "macrophoneme" which is defined as the sum total of microphonemes and this is equivalent to Bloomfield's phoneme.

The Copenhagen school of linguistics is represented by L. Hjelmslev who, as well as Trubetzkoy, claimed an utter estrangement between phonetics and phonology. But his phoneme theory is much more obscure and the approach to the phoneme is more abstractional. If the representatives of the Prague and the American schools of linguistics separated phonologically irrelevant, or non-distinctive, features from phonemes, Hjelmslev excluded both relevant and irrelevant features from phonemes, considering them to be independent of all the acoustic and physiological properties associated with them, that is of speech sounds. In other words, he treated the phoneme as an abstract unit and his ideas were reflected in the works of the Russian scholar Showmyan. At the same time, after de Saussure he regarded a language as a system of signs, a code like any other code that is used by a human community.

Thus, the existence of various approaches to the phoneme and the attempts of many Russian and foreign linguists to create an adequate phoneme theory prove that though the phoneme is the minimum language unit it is a very complicated phenomenon which has several interconnected and interrelated aspects.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. Main trends in the Phoneme Theory:
 - a) mentalistic or psychological view;
 - b) functional view;
 - c) abstract view;
 - d) physical view;
 - e) populational view.
2. The Kazan School of linguistics. I.A. Baudouin de Courtenay:
 - a) the morphological approach to the phoneme;
 - b) the psychological approach to the phoneme.
3. The St. Petersburg (Leningrad) School of linguistics. L.V. Shcherba:
 - a) the pre-Revolutionary period in Shcherba's work;
 - b) the post Revolutionary period in Shcherba's work;
 - c) the development of Shcherba's views by L.R. Zinder.
4. The Moscow School of linguistics:
 - a) the morphological approach to the phoneme. R.I. Avanesov;
 - b) the cybernetic approach to the phoneme. S.K. Showmyan.
5. Ferdinand de Saussure and his influence on foreign schools of linguistics.
6. The Prague School of linguistics. N.S. Trubetzkoy:
 - a) the separation of phonology from phonetics;
 - b) the theory of phonological oppositions;
 - c) the theory of the arch phoneme.
7. The London School of linguistics. D. Jones.
8. The American School of linguistics. L. Bloomfield, W. Twaddel.
9. The Copenhagen School of linguistics. L. Hjelmslev.

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. The phoneme is a unit of an idiolect (D. Jones, K. Pike).
2. The phoneme is a unit of a dialect (L. Bloomfield).
3. The phoneme is a unit of a multidialect (G. Trager, H. Smith).
4. The phoneme is a unit of a "supralect" (J.A. Perry).

MATCH THE DEFINITION OF THE PHONEME WITH ITS ORIGINATOR AND COMMENT ON IT

Pay attention to the following points: which approaches to the phoneme are reflected, which aspects of speech sounds are revealed, which definition resembles another one etc.

1. A phoneme is a family of sounds in a given language, which are related in character and are used in such a way that no one member ever occurs in a word in the same phonetic context as any other member.
2. The phoneme is a unity of phonologically relevant features.

3. The phoneme is a complex perception of the articulatory movements and of the muscular sensations connected with them together with the resulting acoustic impressions, all of which react on mind simultaneously.
4. The phoneme is a minimum unit of distinctive features.
5. The phonemes are sound types, limited in number which are capable of distinguishing the meaning and the form of words, thus serving the purpose of social intercourse.
6. The phoneme is the sum of acoustic impressions and of articulatory movements, of that which is pronounced both mutually dependent.
7. The phoneme is something that produces alternation.
8. A phoneme may be described roughly as the family of sounds consisting of an important sound of the language (i.e. the most frequently used member of the family) together with other related sounds that take its place in particular sound-sequences or under particular conditions of length or stress.
9. The phoneme is the shortest generic phonetical perception in a given language capable of being associated with semantic perceptions, of distinguishing words, and of being easily isolated from a word.

a) J.A. Baudouin de Courtenay; b) L.V. Shcherba; c) L.R. Zinder; d) R.I. Avanesov; e) Ferdinand de Saussure; f) N.S. Trubetzkoy; g) D. Jones; h) L. Bloomfield; i) L. Hjelmslev

(Mind that there can be several definitions belonging to one and the same Linguist as well as the names of phoneticians whose definitions are not mentioned)

FILL THE FOLLOWING TABLE WITH THE REQUIRED CONTENTS USING THE MATERIAL FROM THE LECTURES AND TEXTBOOKS

Name of the school, its representative, facts of biography	Essence of the phoneme theory	Examples	Definition of the phoneme	Criticism (positive and negative points)

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TOPIC 2

PHONEME AS THE UNIT OF THE PHONOLOGICAL LEVEL

1. The characteristics of the phoneme as a unity of three aspects

The existence of various schools of linguistics and different approaches to the phoneme theory proves that it is difficult to give a definition of the phoneme which is quite satisfactory from all points of view. The reason of it is the fact that the phoneme is a dialectal unity of three aspects: 1) material, real and objective; 2) abstractional and generalized; and 3) functional, which determine one another and are thus interdependent. They can be separated from one another only for purposes of analysis and description.

The phoneme is a *material, real* and *objective* unit because it really exists in actual speech in the material form of speech sounds which have definite articulatory and acoustic features, independent of the will of individual members of a given language community.

The phoneme is a *functional* unit because in speech it serves to perform three functions: constitutive, recognitive and distinctive, as sounds constitute, help to recognize and distinguish morphemes, words and sentences. (Ex. bath – path; He was hurt badly – He was heard badly).

The phoneme is an *abstractional* and *generalized* unit as it is an abstraction from and a generalization of a number of speech sounds, which are its variants. This abstraction and generalization has been unconsciously made by and unconsciously exists in the mind of each member of a language community. No matter how different the articulation of variants may be, they function as the same linguistic unit.

Thus, the definition of the phoneme which reflects all the three aspects is the following: The phoneme is a minimal abstract linguistic unit realized in speech in the form of speech sounds opposable to other phonemes of the same language to distinguish the meaning of morphemes and words.

2. The phonemic variant (allophone). The classification of variants

Variants of the phoneme or allophones are sounds which occur in different environments, they are entirely predictable according to the phonetic environment, they are not opposed to one another and can not differentiate meaning. Allophones have one or more articulatory and therefore acoustic features in common and at the same time differ from each other in some degree and belong to the same phoneme.

There are two main types of allophones:

1) principle or typical allophones which do not undergo any distinguishable changes in the chain of speech;

2) subsidiary allophones which have quite predictable changes in the articulation due to the influence of the neighbouring sounds in different phonetic situations.

Ex. The phoneme [d] when not affected by the articulation of the preceding or following sounds is a plosive, forelingual, apical, alveolar, voiced, occlusive. This is how it sounds in isolation or in the intervocalic position when it retains its typical arti-

culatory features (leader). In this case [d] is the principal allophone. But there are the following articulatory modifications of the phoneme [d] in various phonetic contexts.

[d] is slightly palatalized before front vowels and the sonorant [j] (deal, day, did you);

[d] is pronounced without any plosion before another stop consonant (bed time, bad pain, good dog);

[d] is pronounced with the nasal plosion before the nasal consonants [n] and [m] (sudden, admit, could not, could meet);

[d] is pronounced with the lateral plosion before the lateral sonorant [l] (middle, badly, bad light);

[d] followed by [r] becomes post alveolar (dry, dream);

[d] followed by interdental [θ], [ð] becomes dental (good thing, lead the way);

[d] followed by the labial [w] becomes labialised (dwell);

[d] in the word-final position is devoiced (road, raised, old).

These modifications cause the appearance of slightly palatalized, non-plosive, nasal, lateral, post-alveolar, dental, devoiced variants of the phoneme [d] which are subsidiary.

Subsidiary variants of a phoneme are subdivided into combinatory and positional. Combinatory allophones appear due to the influence of neighbouring speech sounds (as a result of assimilation or accommodation) and to the specific way in which adjacent sounds are joined together. Positional allophones are used in different positions (word-final, initial, stressed, unstressed) traditionally according to the orthoepic norm of the language. (Ex. [l] is clear in the initial position, dark in the final: lip – pill; the variants of any vowel are longer in the word-final position than before a consonant and are longer before a voiced consonant than before a voiceless one). But the boundary between combinatory and positional variants is not clear-cut.

Thus, although allophones of the same phoneme possess similar articulatory features they may frequently show considerable phonetic difference.

3. Relevant and irrelevant features of allophones. The invariant

The articulatory features which do not serve to distinguish meaning are called non-distinctive, irrelevant or redundant. Thus, it is impossible to oppose a plosive [d] to a non-plosive one in the same phonetic context to distinguish meanings. If an allophone of the phoneme is replaced by another allophone of the same phoneme the pronunciation error is phonetic.

The articulatory features which serve to distinguish meaning are called distinctive or relevant. The change of relevant features affects the meaning. Thus, all the allophones of the phoneme [d] are occlusive, forelingual, voiced. If occlusive articulation is changed for constrictive one [d] will be replaced by [z] (ex. breed – breeze). If forelingual articulation is changed for the backlingual one [d] is placed by [g] (ex. dear – gear). If voiced articulation is changed for the voiceless one [d] is replaced by [t] (ex. foot – food). All the above mentioned changes in articulation bring about changes in meaning, so occlusive, forelingual and voiced characteristics of the phoneme [d] are re-

levant, or distinctive. And if an allophone of the phoneme is replaced by an allophone of a different phoneme the pronunciation error is phonological.

The functionally relevant bundle of articulatory features is called the invariant of the phoneme, which is generalized in the mind of the speaker. As all the allophones of the same phoneme have some articulatory features in common, all of them possess the same invariant. Simultaneously each allophone possesses quite particular phonetic features which may not be traced in the articulation of other allophones of the same phoneme.

4. Distribution of phonemes. Phonemic oppositions

Each phoneme manifests itself in a certain pattern of distribution – all the positions or combinations in which it occurs. There are three types of distribution:

1) free variation is the simplest distribution of a single phoneme, pronounced differently (ex. initial [k] pronounced with different degrees of aspiration).

2) complementary distribution – when one phoneme manifests itself in the form of different allophones, which occur in different positions and never occur in the same phonetic context. It explains why allophones of the same phoneme can't differentiate meaning (ex. try, stable, twice etc.).

3) contrastive distribution – when allophones of different phonemes occur in the same phonetic context (ex. pit – bit – sit – kit – wit).

Contrastive distribution is the basis for phonological, or distinctive oppositions. The opposition of phonemes in the same phonetic environment differentiates the meaning of morphemes and words (ex. try – dry). A phoneme can only perform its distinctive function if it is opposed to another phoneme or zero phoneme in the same position. The phonemes of a language form a system of oppositions. According to the number of distinctive articulatory features, underlying the opposition, the latter can be single, double and triple (or multiple).

If members of the opposition differ in one feature the opposition is single. Ex. pen – Ben ([p] – [b] common features – occlusive, labial, differentiating features – voiced/voiceless).

If members of the opposition differ in two features the opposition is double. Ex. pen – den ([p] – [d] common feature – occlusive, differentiating features – labial/lingual, voiceless/voiced).

If members of the opposition differ in three features the opposition is triple. Ex. pen – then ([p] – [ð] differentiating features – occlusive/constrictive, labial/dental, voiceless/voiced).

5. Allophones and phones

The number of sound types or phonemes in each language is smaller than the number of sounds actually pronounced. Allophones are predicted by this or that phonetic environment and their number is limited by the cases of assimilation, accommodation and reduction existing in the language. But what is realized in speech are phones which do not correspond exactly to the allophones predicted by phonetic environment, as they are modified by phonostylistic, dialectal and individual factors.

Stylistic variations of pronunciation are determined by different styles of pronunciation (literary and colloquial). Dialectal variations occur due to dialectal differences in pronunciation. Individual variations are determined by individual peculiarities of speech. Since the number of phonostylistic, dialectal and especially individual variations is innumerable, no speech sounds are absolutely alike.

Phonemic distinction is important for lexical and grammatical meaning. Phonetic distinction is the source or social information about the speaker, such as the locality, he lives in, regional origin, social status, age, emotional state.

Thus, phonemes are complicated language phenomena which have material, real, objective, abstractional, generalized and functional characteristics. They are realized in speech in the form of either principal or subsidiary positional and combinatory allophone, possessing common and specific features and modified by stylistic, dialectal and individual peculiarities of speech.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The definition and characteristics of the phoneme as a unity of three aspects.
2. The phonemic variant (allophone). The classification of variants.
3. Relevant and irrelevant features of phonemic variants. The invariant.
4. Distribution of phonemes. Phonemic oppositions.
5. Allophones and phones.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE OF THE PHONEME THEORY IN TEACHING

COMMENT ON THE FOLLOWING TERMS

Phoneme, phonemic variant (allophone), principle variant, subsidiary variant, positional allophone, combinatory allophone, relevant articulatory features, irrelevant articulatory features, invariant, phonological opposition, distribution of the phoneme, complementary distribution, contrastive distribution, free variation, phone, stylistic variation, dialectal variation, individual variation.

DO YOU THINK THAT THE SUGGESTED DEFINITION OF THE PHONEME IS EXHAUSTIVE? MAKE UP THE DEFINITION OF YOUR OWN

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. A phoneme is a dialectal unity of material, abstractional and functional aspects.
2. The boundary line between combinatory and positional allophones is not clear cut.
3. If an allophone of the phoneme is replaced by another allophone of the same phoneme the pronunciation error is phonetic. If an allophone of the phoneme is replaced by an allophone of a different phoneme the pronunciation error is phonological.

4. Phonemic distinction is important for lexical and grammatical meaning. Social information about the speaker comes from phonetic distinction.

PRACTICAL TASKS

1. Single out the phonemes which are contrasted in the following pairs of words:

pack — back	keen — coin	sent — send	lay — lie
degree — decree	curt — coat	art — out	do — zoo
birch — bird	vice — rice	pin — thin	pot — part
make — shake	near — hear	cab — curb	pull — pearl
deep — dip	mouse — mouth	daily — daisy	week — work.

2. Match the words below to obtain minimal pairs

catch, pip, cheap, sap, he, jail, lap, pair, say, sink, rip, fail, lass, Sam, mink, cap, tear, she, lay, heap, match, cart, wart, caught, don, what, cod, card, down, cot, cord.

TOPIC 3

ENGLISH VOWELS AND CONSONANTS IN THE PHONOLOGICAL SYSTEM

1. The main principles of vowel and consonant formation. The articulatory and auditory difference between vowel and consonant phonemes

There are two major classes of sounds traditionally distinguished by phoneticians in any language. They are termed consonants and vowels. The distinction between them is based mainly on auditory effect. Consonants are known to have voice and noise combined, while vowels are sounds consisting of voice only. From the articulatory point of view the difference is due to the work of speech organs. Vowels are formed by means of periodic vibrations of the vocal cords in the larynx. The resulting sound waves are transmitted to resonance chamber - the supra-laryngeal cavities (the pharynx and the mouth cavity), where vowels receive their characteristic timbre. The quality of vowels depends on the shape and size of the resonance chamber which is made to vary, depending on the different positions of the tongue in the mouth cavity, on any slight al-

ternations in the position of the back walls of the pharynx, in the position of the soft palate and of the lips, which form the outlet of the resonance chamber. In vowel articulation no obstruction is made and the muscular tension is spread all over the speech organs. The force of exhalation is rather weak for it is expended when the air stream passes through the larynx and causes the vocal cords to vibrate. In case of consonants various obstructions are made in one of the supra-laryngeal cavities. So consonants are characterized by so-called close articulation, that is by a complete, partial or intermittent blockage of the air-passage by an organ or organs. The closure is made in such a way that the air-stream is blocked or hindered or otherwise gives rise to audible friction which acoustically results in noise. In consonant articulation the muscular tension is concentrated at the point of obstruction and a stronger air stream is required. According to the degree of noise consonants are divided into noise and sonorant. Sonorants are sounds intermediate between consonants and vowels because they have features common to both, that is why some sonorants are called semivowels. In the production of sonorants the obstruction is complete or incomplete but not narrow enough to produce noise. In other words, the air passage between the two organs of speech is much wider than in the production of noise consonants. In sonorants articulation muscular tension is concentrated in the place of obstruction, but the exhaling force is rather weak.

Summing up the articulatory difference between vowels, noise consonants and sonorants, one can single out three criteria: the presence or absence of obstruction to the air-stream; the concentrated or diffused character of muscular tension; the force of exhalation.

2. General principles of the classification of English vowel and consonant phonemes

English vowels are classified according to the following principles: 1) position of the lips; 2) position of the tongue; 3) length; 4) degree of tenseness; 5) the character of the end; 6) stability of articulation.

1. According to the position of the lips vowels are divided into rounded [o, o:, u, u:] and unrounded – all the rest. The main effects of lip rounding on the shape of the mouth are to enlarge the oral cavity, to diminish the size of the opening of the oral cavity.

2. Vowels are classified according to the horizontal and vertical movement of the tongue.

According to the horizontal movement of the tongue English vowels are divided into front, front-retracted, central, back and back-advanced. Front vowels are articulated when the bulk of the tongue moves forward and its front part is raised highest towards the hard palate. They are [i:, e, æ]. Front-retracted vowels are articulated with the front but a bit retracted position of the tongue. It is [ɪ]. Central vowels are articulated with the tongue almost flat and its central part raised to the juncture between the hard and soft palate. They are [ɜ:, ə, ʌ]. Back vowels are articulated when the bulk of the tongue moves backward in the mouth cavity and its back part is raised highest to the soft palate. They are [o, o:, u:]. Back-advanced vowels are articulated with the back but a bit advanced position of the tongue. They are [u, ʌ:].

According to the vertical movement of the tongue English vowels are divided into high (close), mid and low (open). Each of these classes is subdivided into narrow and broad subtypes. High vowels are articulated with the bulk of the tongue raised high to the roof of the mouth, but not so high as to produce an audible friction. In pronouncing high narrow vowels [i:, u:] the bulk of the tongue is raised higher than in pronouncing high broad ones [i, u]. Mid vowels are articulated with neither high nor low position of the tongue that is why they are also called half-close or half-open. Mid narrow vowel is [ə], mid broad vowels are [e, o:, ɜ:]. Low vowels are articulated with the bulk of the tongue in the low position in the mouth. In pronouncing low broad vowels [æ, ɑ:, ɔ:] the bulk of the tongue is lowered more than in pronouncing low narrow vowel [ʌ].

3. According to the length English vowels are divided into long [i:, u:, o:, ɑ:, ɜ:] and short [i, u, o, æ, e, ə, ʌ].

4. According to the degree of tenseness English vowels are divided into tense and lax. Tense vowels are articulated when the muscles of the lips, tongue, cheeks and the back walls of the pharynx are tense. Lax vowels are articulated with all these organs relatively relaxed. All long vowels are tense while all short vowels are lax.

5. English vowels in stressed position can be checked and unchecked (free). The checked vowels are pronounced without any lessening of the force of utterance towards the end. They occur in close syllables and are abruptly interrupted by the following voiceless consonant. The unchecked vowels occur terminally or before a voiced consonant. The vowel [ə] does not occur in the stressed position so it is not regarded inside these classes.

6. According to the stability of articulation English vowels are divided into monophthongs, or simple vowels and diphthongs, or complex vowels. Monophthongs are articulated with more or less stable lip, tongue and walls position. They are [i, i:, u, u:, o, o:, e, ə, ʌ, ɑ:, æ, ɜ:]. Diphthongs are articulated in such a way that organs of speech start from one position and then glide to another position. So diphthongs consist of two elements: a nucleus and a glide. The first element of a diphthong is more loud and distinct, the formation of the second element of a diphthong is not accomplished. They are [ai, oi, ei, au, əu, eə, uə, iə]. Diphthongs are unisyllabic, that is its parts can not belong to different syllables. Their length should not exceed the length of a single phoneme. They can not be divided morphologically. There is an opinion that one element of a diphthong is accented while the other is not. A diphthong may be falling – when the nucleus is stronger than a glide, rising – when the glide is stronger than a nucleus, and level – when both elements are equal. English diphthongs are falling with the glide toward [i, u, ə]. According to the articulatory character of the second element, diphthongs [ai, oi, ei, au, əu] are called closing, while diphthongs [eə, uə, iə] are called centring.

English consonants are classified according to the following principles: 1) work of the vocal cords and the force of exhalation; 2) active organ of speech and the place of obstruction; 3) manner of the noise production and the type of obstruction; 4) position of the soft palate.

1. According to the work of the vocal cords and the force of exhalation English consonants are subdivided into voiced and voiceless. Voiced consonants are produced with the vocal cords brought together and vibrating. They are [b, d, g, v, z, ð, ʒ, dʒ, l,

m, n, j, w, r, ŋ]. Voiceless consonants are produced with the vocal cords taken apart and not vibrating. They are [p, t, k, f, s, θ, ʃ, tʃ, h]. The force of exhalation and the degree of muscular tension are greater in the production of voiceless consonants.

2. According to the position of the active organ of speech against the place of obstruction English consonants are classified into labial, lingual and glottal.

Labial consonants are subdivided into bilabial and labiodental. Bilabial consonants are articulated with both lips. They are [p, b, w, m]. Labiodental consonants are articulated with the lower lip against the edge of the upper teeth. They are [f, v].

Lingual consonants are subdivided into forelingual, mediolingual and backlingual.

Forelingual consonants are articulated with the tip or the blade of the tongue. According to the place of obstruction English forelingual consonants are subdivided into interdental, alveolar, post-alveolar and palato-alveolar. Interdental consonants are articulated with the tip of the tongue projected between the teeth. They are [ð, θ]. Alveolar consonants are articulated with the tip of the tongue against the upper teeth ridge. They are [t, d, s, z, l, n]. Post alveolar consonants are articulated with the tip or the blade of the tongue against the back part of the teeth ridge. In English it is [r]. Palato-alveolar consonants are articulated with the tip or the blade of the tongue against the teeth ridge, the front part of the tongue raised towards the hard palate. They have two places of articulation. They are [ʃ, ʒ, dʒ, tʃ].

Mediolingual consonants are articulated with the front part of the tongue raised high to the hard palate. In English it is [j].

Backlingual consonants are articulated with the back part of the tongue raised towards the soft palate. They are [k, g, ŋ].

Glottal (pharyngeal) consonants are articulated in the glottis. In English it is [h].

3. According to the type of obstruction consonants are divided into occlusive, constrictive and occlusive-constrictive or affricates. Occlusive consonants are articulated with the air on its way out breaking up a complete obstruction. In English occlusive consonants are subdivided into plosives [p, t, k, b, d, g] which are articulated with distinct and quick separation of the obstruction and sonorants [m, n, ŋ]. Constrictive consonants are articulated with incomplete obstruction through which the air comes out. In English constrictive consonants are subdivided into fricatives [s, f, z, ð, θ, ʃ, v, ʒ, h] which are articulated with the air passage narrowed to such an extent that the air passing through it produces friction, and sonorants [w, r, j, l] which are articulated with the air passage wide enough to make the cavity function as a resonator. Occlusive-constrictive consonants are articulated with the complete obstruction gradually and uninterruptedly opening into narrowing. In English they are [tʃ, dʒ].

4. According to the position of the soft palate consonants are subdivided into oral and nasal. Nasal consonants are articulated with the blocked passage for the flow of air through the mouth cavity which is effected by lowering of the soft palate. They are [m, n, ŋ]. All the rest consonants are oral. Oral consonants are articulated with the raised soft-palate, thus the air goes out through the mouth cavity.

3. Phonological oppositions in the system of English vowel and consonant phonemes

Classificatory principles of English vowel and consonant phonemes provide the basis for establishing the distinctive oppositions.

<i>Distinctive oppositions of English consonants</i>		
<i>Classificatory principles and sub-classes of phonemes</i>	<i>Types of oppositions</i>	<i>Examples</i>
1. Work of the vocal cords: - voiced [b, d, g, v, z, ð, ʒ, dʒ, l, m, n, j, w, r, ŋ]; - voiceless [p, t, k, f, s, θ, ʃ, tʃ, h].	voiced – voiceless The English consonants [l, m, n, j, w, r, ŋ, h] do not enter this opposition.	gum – come dear – tear bat – pat jin – chin thy – thigh
2. Position of the soft palate: - nasal [m, n, ŋ]; - oral (all the rest).	oral – nasal	pit – pin seek – seen sick – sing
3. Active organ of speech and the place of articulation: a) labial: - bilabial [p, b, w, m]; - labio-dental [f, v]; b) lingual: - forelingual [ð, θ, t, d, s, z, n, l, ʃ, ʒ, dʒ, tʃ]; - mediolingual [j]; - backlingual [k, g, ŋ]; c) glottal [h].	labial – lingual lingual – glottal labial – glottal bilabial – labio-dental forelingual – mediolingual forelingual – backlingual mediolingual – backlingual	pain – cane this – hiss foam – home wear – fair jet – yet thing – king yes – guess
4. Manner of the production of noise: a) occlusive: - plosive [p, t, k, b, d, g] - sonorant [m, n, ŋ]; b) constrictive: - fricative [s, f, z, ð, θ, ʃ, v, ʒ, h]; - sonorant [w, r, j, l]; c) occlusive-constrictive (affricates) [tʃ, dʒ].	occlusive – constrictive affricate – constrictive affricate – occlusive occlusive: plosive – sonorant constrictive: fricative – sonorant	bat – that fair – chair chin – pin pine – mine same – lame

Distinctive oppositions of English vowels

<i>Classificatory principles and subclasses of phonemes</i>	<i>Types of oppositions</i>	<i>Examples</i>
1. Position of the lips: - rounded [o, o:, u, u:]; - unrounded (all the rest).	rounded – unrounded	pot – pat
2. Stability of articulation: - monophthongs [i, i:, u, u:, o, o:, e, ə, ʌ, ɑ:, æ, ɜ:]; - diphthongs [ai, oi, ei, au, əu, εə, uə, iə].	monophthong – diphthong	bit – bait but – bite debt – doubt bird – beard
3. Degree of tenseness, character of the end and length: - tense, free and long [i:, u:, o:, ɑ:, ɜ:]; - lax, checked and short [i, u, o, æ, e, ə, ʌ].	tense lax free — checked long short	peel – pill
4. Position of the tongue: a) horizontal: - front [i:, e, æ]; - front-retracted [ɪ]; - central [ɜ:, ə, ʌ]; - back-advanced [u, ɑ:]; - back [o, o:, u:]; b) vertical: – high: - narrow [i:, u:]; - broad [ɪ, u]; – mid: - narrow [ə]; - broad [e, o:, ɜ:]; – low: - narrow [ʌ]; - broad [æ, ɑ:, o:].	front – central back – central front – back front – front-retracted back – back-advanced high – mid low – mid high – low high narrow – high broad mid narrow – mid broad low narrow – low broad	cab – curb pull – pearl read – rod bet – bit card – cord week – work lack – lurk big – bag pool – pull foreword – forward bad – bard

4. Positional and combinative changes of vowels and consonants in connected speech

Subsidiary variants of English phonemes appear due to the positional and combinative modifications of vowels and consonants in connected speech.

Thus, no matter whether a vowel is originally long or short, the length of its variants differ depends on whether it is pronounced with the rising, falling or falling-rising tone, whether it occurs in a word-final position, before a voiced or voiceless consonant, in a polysyllabic or monosyllabic word, in a stressed or unstressed position.

The appearance of variants of vowel phonemes is also determined by the process of reduction, or weakening of a sound in unstressed position. In English there are certain words which have two forms of pronunciation: strong, (or full form) and weak (or reduced form). These words include form words (articles, prepositions, modal and auxiliary verbs, conjunctions, particles), personal, possessive and relative pronouns. There are three degrees of reduction:

1) quantitative reduction – when the length of the vowel is reduced and the subsidiary variant of the same phoneme takes its place (ex. the apple [ð̩. æpl]).

2) qualitative reduction – when the quality of a vowel changes and the allophone of one phoneme is replaced by the allophone of another phoneme (ex. the pen [ð̩ə pen]).

3) zero reduction – when the vowel is omitted, or, in other words, when the zero variant of the phoneme is used (ex. D'you live in London).

The appearance of variants of vowels is determined by the process of accommodation – adaptation of vowels to adjacent consonants. For instance, a fully back variant of a phoneme [u:] is replaced by its slightly fronted variant under the influence of the preceding mediolingual consonant [j] (beauty, music). A vowel phoneme is represented by its slightly open variant before the dark [ɫ] (bell, tell).

The appearance of variants of consonants is determined by the process of assimilation when the articulation of one sound influences the articulation of a neighbouring sound making it similar or even identical to itself. The consonant that influences a neighbouring one is called the assimilating. The consonant which is under the influence of a neighbouring one is called the assimilated.

The process of assimilation has three degrees:

1) complete - when the articulation of the assimilated consonant fully coincides with the assimilating one, in other words, when the allophone of one consonant is replaced by the allophone of a neighbouring consonant: (ex. horse-shoe [ho:ʃu:]

2) partial – when the assimilated consonant still has some of its main phonemic features, in other words, when the subsidiary variant of the same phoneme appears (ex. twins, place, cry).

3) intermediate - when the assimilated consonant changes into a different phoneme which does not coincide with the assimilating one, in other words, when the allophone of one consonant is replaced by the allophone of some other consonant (ex. goose [gu:s] + berry = gooseberry [gu:zbəri]; news [nju:z] + paper = newspaper [nju:speɪpə].

According to the direction assimilation may be:

1) progressive - when the assimilated consonant is influenced by the preceding one (ex. speak);

2) regressive - when the assimilated consonant is influenced by the following one (ex. little);

3) reciprocal, or double - when the consonants influence each other (ex. twilight).

Due to the cases of assimilation the following subsidiary variants of consonants appear:

Dental variants of the alveolar consonants [l, n, t, d, s, z] appear under the influence of interdental consonants [θ, ð] (ex. tenth, at the table, read this).

Non-plosive variants of stop consonants [p, t, k, b, d, g] appear when two plosives occur together or when plosives are followed by affricates [dʒ, tʃ] (ex. sit down, black chair).

Nasally exploded variants of the stop consonants [p, b, t, d, k, g] appear before the nasal sonorants [m, n] (ex. garden, help me).

Laterally exploded variants of the consonants [p, b, t, d, k, g] appear before the lateral sonorant [l] (ex. that lesson, middle).

Labialized variants of consonants appear before labialized consonant [w] of the same word. (ex. dwell)

Partially devoiced variants of the sonorants appear after syllable-initial voiceless consonants (ex. try, clean).

Unaspirated variants of the aspirated phonemes [p, t, k] appear before an unstressed vowel and after [s] (ex. speak, skate, style).

Post-alveolar variants of the alveolar consonants [t, d, n, l] appear before post alveolar consonant [r] (ex. try, Henry, already).

Alveolar variant of the post-alveolar consonant [r] appear after interdental consonants [θ, ð] (ex. three, with Russian).

The appearance of variants of consonants is also determined by the process of accommodation of consonants to the adjacent vowels. The consonant [l], for instance, has two variants in English: clear variant [l], which occurs before vowels and [j] (ex. lesson [lesn], value [vælju:]), and dark variant [ɫ], which occurs before consonants and in word-final position (ex. children [tʃɪldrən], bell [beɫ]). An unrounded variant of a consonant is replaced by its rounded variant under the influence of the following rounded vowel [o, o:, u, u:] (ex. too [tu:], call [ko:l]).

5. Differences in the articulation basis of English and Russian vowel and consonant phonemes and their peculiarities

Speech sounds belonging to the most general types are found in all languages. This general typological community of speech sounds existing in different languages is due to the typologically and functionally identical structure of the speech organs of people, belonging to different races and nationalities. And yet, despite the typological community of speech sounds in different languages, not a single sound of one language is absolutely identical spectrally with a typologically identical sound of another language. One of the principal causes of spectral differences in typologically identical sounds of different languages is the difference in the articulation basis.

The articulation basis of a language may be defined as the sum total of general tendencies in the movements and positions of the speech organs, both during the speech and in neutral position, characteristic of all the native speakers of that language. The articulation basis of one language may differ from that of another in the general tendencies its native speakers have in the way they move and hold their lips and tongues both in speech and in silence, in the way they coordinate the work of the obstruc-tor and vibrator mechanisms etc.

The peculiarities of the sound system of a language are caused by those of its articulation basis and should not be confused with the latter. The most general and characteristic points of difference between the articulation basis of English and that of Russian in the matter of lip and tongue positions is the general tendency toward retracted positions in English and toward advanced position in Russian. Accordingly, lip protrusion does not normally occur in English speech, whereas it is common in Russian. The result is that the formation of the English rounded vowels is not accompanied by lip protrusion, as the case is in English.

Besides, in the articulation of the English vowels the bulk of the tongue occupies more positions than in the production of the Russian vowels. When the bulk of the tongue moves in the horizontal direction it may occupy five positions in English (fully front, front-retracted, central, fully back and back-advanced). Each of the three vertical positions of the tongue (high, mid, low) in English is subdivided into a narrow and broad variety. Such variety of the bulk of the tongue positions is not observed in the production of the Russian vowel sounds. In Russian there are only three horizontal positions (front, central and back) and three vertical positions (high, mid, low) do not have narrow and broad varieties. The articulatory peculiarities in the pronunciation of English vowels constitute the basis for the formation of diphthongs when the position of the tongue changes within the articulation of one and the same vowel. There are no diphthongs in the Russian vowel system.

In the English vowel system length is phonologically relevant feature, and according to it the English vowels are subdivided into long and short, while in the Russian vowel system length is a phonologically irrelevant feature.

According to the character of their end some of the English vowels are checked others are free while all Russian vowels are free.

Russian vowels are not differentiated according to their tenseness as this feature is determined by the length and the character of the end of the vowel. All Russian vowels are more tense in a stressed position than in an unstressed one. In English the long vowels are tense, the short ones are lax.

In general there are 6 vowel phonemes in Russian and 20 in English, and all English vowels have no counterparts in Russian.

As it has already been mentioned, in English the tongue in neutral position lies somewhat farther back than in Russian. At the same time in English the tip of the tongue has a general tendency to move towards the teeth-ridge, whereas in Russian the blade of the tongue tends to move towards the upper front teeth. The result is that fore-lingual consonants [t, d, s, z, l, n] are alveolar and apical in English and dental and dorsal in Russian.

Palatalization, or soft colouring of consonants is not a phonemic feature of English phonemes [ʃ, ʒ, dʒ, tʃ], whereas it is a phonemic feature in Russian which has 16 pairs of palatalized and non-palatalized consonant phonemes.

The English voiceless consonants [p, t, k, f, s, ʃ, tʃ] are pronounced more energetically than the similar Russian consonants. The English voiced consonants [b, d, g, v, z, ð, ʒ] are not replaced by the corresponding voiceless consonants in the word-final position and before voiceless consonants as the similar Russian consonants.

The English voiceless plosives [p, t, k] are pronounced with aspiration when followed by a stressed vowel and not preceded by [s], whereas similar Russian consonants are pronounced without aspiration.

The English consonants [j, ʒ] are short, the similar Russian consonants are long. There are no long consonant phonemes in English at all.

In English word-final sonorants [m, n, l, ŋ] are lengthened before a pause, especially when they are preceded by a short vowel whereas the similar Russian consonants are short in the same position.

In general there are 24 consonant phonemes in English and 36 in Russian.

Consonant phonemes in English which have no counterparts in Russian are the following: the bilabial constrictive sonorant [w], the interdental fricatives [θ, ð], the voiced affricate [dʒ], the post alveolar constrictive sonorant [r], the backlingual nasal sonorant [ŋ], the glottal fricative [h].

Consonant phonemes in Russian which have no counterparts in English are the following: the palatalized consonants [п', б', т', д', к', г', м', н', ф', в', с, з', р'], the voiceless affricate [ц], the rolled alveolar sonorant [р], the backlingual voiceless fricative [x].

Thus, English vowel and consonant phonemes are distinguished according to various principles classification modified in connected speech due to accommodation, assimilation, reduction. Vowels and consonants perform their distinctive function if they are opposed to each other in the same phonetic context. Such oppositions are called distinctive and they are based on the classificatory principles of English vowel and consonant phonemes. The difference in the articulation between English and Russian vowels and consonants is caused by the work of organs of speech and connected not only with the quantity but also with the quality of vowels and consonants in both languages.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The main principles of vowel and consonant formation. The articulatory and auditory difference between vowel and consonant phonemes.
2. General principles of the classification of English vowel phonemes:
 - a) the stability of articulation;
 - b) the position of the tongue;
 - c) the position of the lips;
 - d) length of the vowel;
 - e) tenseness of the vowel;
 - f) the character of the end of the vowel.
3. Phonological oppositions in the system of English vowel phonemes.
4. Positional and combinative changes of vowels in connected speech.

5. Differences in the articulation basis of English and Russian vowel phonemes.
6. General principles of the classification of English consonant phonemes:
 - a) work of the vocal cords and the force of exhalation;
 - b) active organs of speech and the place of obstruction;
 - c) manner of noise production and the type of obstruction;
 - d) position of the soft palate.
7. Phonological oppositions in the system of English consonant phonemes.
8. Positional and combinative changes of consonants in connected speech.
9. Differences in the articulation basis of English and Russian consonant phonemes.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE ABOUT THE SYSTEM OF ENGLISH PHONEMES, THEIR ARTICULATORY PECULIARITIES, SPEECH MODIFICATIONS IN TEACHING.

COMMENT ON THE FOLLOWING TERMS

1. Vowel, monophthong, diphthong, nucleus, glide front vowel, front-retracted vowel, central vowel, back vowel, back-advanced vowel, high vowel, mid vowel, low vowel, long vowel, short vowel, tense vowel, lax vowel, checked vowel, free vowel.
2. Consonant, noise consonant, sonorant, voiced consonant, voiceless consonant, occlusive consonant, constrictive consonant, aspirated consonant, plosive consonant, fricative consonant, affricate, lateral sonorant, medial sonorant, nasal consonant, glottal consonant, labial consonant, bilabial consonant, labio-dental consonant, lingual consonant, forelingual consonant, mediolingual consonant, backlingual consonant, apical consonant, cacuminal consonant, alveolar consonant, post alveolar consonant.
3. Reduction, qualitative reduction, quantitative reduction, zero reduction, assimilation, complete assimilation, partial assimilation, intermediate assimilation, progressive assimilation, regressive assimilation, reciprocal (double) assimilation, accommodation, elision.

PRACTICAL TASKS

1. State distinctive features that make these oppositions phonologically relevant:

- | | | | |
|---------------|-----------------|---------------|-----------------|
| cap — cab | supper — suffer | till — chill | thigh — shy |
| rub — rum | latter — ladder | park — part | murder — merger |
| save — shave | bad — ban | coal — goal | raider — razor |
| share — chair | log — long | thick — sick. | |

2. Sort out the oppositions under the following headings

labial vs. forelingual	labial vs. mediolingual	labial vs. backlingual	forelingual vs. mediolingual	forelingual vs. backlingual

pat — cat; leap — leak; wield — yield; seem — seen; tame — came; less — yes; rudder — rugger; drew — due; supper — succour; wail — Yale; coming — cunning; sinner — singer; bitter — bicker; clue — cue; bad — bag; sung — young; bat — back; dear — gear; rung — young.

3. State which of the pairs illustrate the following oppositions

occlusive vs. constrictive	constrictive vs. occlusive-constrictive	noise vs. sonorants

pine — fine; fair — chair; boat — moat; seek — seen; kick — king; work — jerk; bee — thee; deed — need; thine — wine; vain — lane; came — lame; fame — same; sick — sing.

4. State what principles of vowel classification these pairs of words illustrate:

cod — cord kettle — cattle firm — form fool — full

add — aid law — low sit — seat pull — pill

very — vary pen — pain.

5. State what movements of the tongue make the vowel phonemes in these words different:

bed — bird — bud — bard

bid — bird — bud

lack — lurk — luck — lark

lid — led — lad

hat — hurt — hut — heart

big — beg — bag

6. Characterize principle variants of the phonemes below and their subsidiary variants in the following words.

[t]	
stop talking	
try	
written	
little	
twice	
eighth	
that day	
tall	
clean	
railway	
filthy	
look	
mill	
all right	

[u:]	
music	
too — tool — tooth	
cool	
soon — sooner	
stupid — stupidity	

TEST

A. CHOOSE THE ODD VARIANT.

1. The following notions were introduced by J.A. Baudouin de Courtenay:
a) homogenes; b) divergents; c) correlates; d) croneme.
2. The main points of N.S. Trubetzkoy's research work are:
a) the separation of phonology from phonetics;
b) the theory of phonological opposition;
c) the theory of phonemic independence;
d) the theory of the arch phoneme;
3. The following scientists represent Russian schools of linguistics:
a) J.A. Baudouin de Courtenay; c) N.S. Trubetzkoy;
b) L.V. Scerba; d) L.R. Zinder.
4. The following scholars belong to the American school of linguistics:
a) L. Bloomfield; b) D. Jones; c) W. Twaddel; d) H. Sweet.
5. The statement that the phoneme really exists in actual speech in the material form of speech sounds which have definite articulatory and acoustic features, independent of the will of individual members of a given language community reflects that:
a) the phoneme is a material unit; c) the phoneme is an objective unit;
b) the phoneme is a real unit; d) the phoneme is an abstractional unit.
6. There are the following types of distribution:
a) multiple; b) complementary; c) contrastive; d) free variation.
7. The following terms are used to denote types of phonemic variants:
a) principle; b) combinatory; c) positional; d) secondary.
8. The articulatory features which form the invariant of the phoneme may be called:
a) relevant; b) redundant; c) distinctive; d) phonological
9. There are the following principles of the classification of English consonants:
a) according to the character of their end;
b) according to the work of the vocal cords;
c) according to the active organ of speech and the place of obstruction;
d) according to the position of the soft palate.
10. There are the following degrees of reduction:
a) qualitative; b) quantitative; c) intermediate; d) zero.

11. The general principles of vowel articulation are:

- a) they are based on voice which is modified in the supra laryngeal cavities;
- b) the muscular tension is concentrated in the place of obstruction;
- c) the air stream passes through the supra-laryngeal cavities freely;
- d) the breath force is rather weak for it is expended when the air stream passes through the larynx and causes the vocal cords to vibrate.

12. There are the following degrees of assimilation:

- a) complete;
- b) partial;
- c) reciprocal;
- d) intermediate;

B. I. MATCH THE LINGUIST WITH THE PHONOLOGICAL SCHOOL HE REPRESENTS.

1. The Kazan school of linguistics	a) N.S. Trubetzkoy
2. The Leningrad school of linguistics	b) D. Jones
3. The Moscow school of linguistics	c) L. Hyelmslev
4. The Prague school of linguistics	d) J.A. Baudouin de Courtenay
5. The London school of linguistics	e) L.V. Shcherba
6. The American school of linguistics	f) R.I. Avanesov
7. The Copenhagen school of linguistics	g) L. Bloomfield

B. II. MATCH THE TYPE OF CONSONANT WITH THE PECULIARITIES OF ITS ARTICULATION

1. Bilabial consonants	are articulated	a) with the tip of the tongue against the upper teeth ridge
2. Labiodental consonants		b) with the front part of the tongue raised high to the hard palate
3. Interdental consonants		c) with the tip or the blade of the tongue against the teeth ridge, the front part of the tongue raised towards the hard palate
4. Alveolar consonants		d) with the lower lip against the edge of the upper teeth
5. Post-alveolar consonants		e) with the back part of the tongue raised towards the soft palate
6. Palato-alveolar consonants		f) in the glottis
7. Velar consonants		g) with both lips
8. Mediolingual consonants		h) with the tip or the blade of the tongue against the back part of the teeth ridge
9. Pharyngeal consonants		i) with the tip of the tongue projected between the teeth

C. AGREE OR DISAGREE WITH THE STATEMENTS AND CORRECT THE FALSE ONES.

1. The first period of J.A. Baudouin de Courtenay's research work is called psychological.
2. According to N.S. Trubetzkoy a phonetician should study sounds without taking into consideration the meaning of what is said.
3. S.K. Showmyan's approach to the phoneme is called cybernetic.
4. The phoneme theory of the London school of linguistics is based on the ideas of behaviorism.
5. L. Bloomfield defined the phoneme as a bundle of distinctive features.
6. J.A. Baudouin de Courtenay analyzed the phoneme from the point of view of the morphemic structure of words and sound interchange.
7. L.V. Shcherba considered the phoneme a real unit.
8. The number of actually pronounced speech sounds is much greater than the number of phonemes.
9. Individual variations of pronunciation are determined by different styles of pronunciation.
10. Allophones of one phoneme can occur in one and the same phonetic context and can differentiate meaning.
11. A phoneme can perform its distinctive function if it is opposed to another phoneme in different phonetic environments.
12. If an allophone of one phoneme is changed for an allophone of another phoneme the mistake is phonetic.
13. The cases of assimilation serve the basis for the phonological oppositions.
14. Voiced consonants are produced with the vocal cords taken apart and not vibrating.
15. If the articulation of one phoneme is influenced by the articulation of the preceding phoneme the assimilation is regressive.
16. Intermediate assimilation is the degree of assimilation when the articulated phoneme still has some of its main phonetic features.
17. Sonorant is the consonant phoneme in production of which voice prevails over noise.
18. Palatalization is a phonologically relevant feature of Russian consonants.
19. In the articulation of Russian vowels the bulk of the tongue occupies more positions than in the production of English vowels.
20. There are more consonant phonemes in Russian than in English.

D. FILL IN THE GAPS WITH THE APPROPRIATE WORDS OR WORD COMBINATIONS.

1. The phoneme is an abstractional language unit as it is an **a)**... of and a **b)**... from a number of **c)**... .. which are its variants.
2. The phoneme is a **a)**... unit because in speech it serves to perform three functions such as **b)**..., **c)**... and **d)**... .

3. The phoneme is a material, real and objective **a)**... because it really exists in **b)**...
... in the **c)**... form of **d)**... ... which have definite **e)**... and **f)**... features, independent of the **g)**... of individual members of a given language community.
4. The functionally **a)**... bundle of **b)**... ... is called the **c)**... of the phoneme which is **d)**... in the mind of the speaker.

E. CHOOSE THE CORRECT VARIANT.

1. Which of the linguists investigated synchronic and diachronic alternations of sounds within a morpheme?
 a) L. Bloomfield; b) Bonet; c) J.A. Baudouin de Courtenay.
2. Who defined the phoneme as a unity of phonologically relevant features?
 a) L. Bloomfield; b) L.V. Shcherba; c) N.S. Trubetzkoy.
3. During the second period of his research work J.A. Baudouin de Courtenay:
 a) analyzed phonemes from the morphological point of view;
 b) analyzed phonemes from the psychological point of view;
 c) analyzed phonemes from the functional point of view.
4. The American school of linguistics was concerned with the study of the phonetic structure of a language:
 a) in comparison to other languages;
 b) in its present condition without any connection with its history;
 c) in its historical development.
5. Who was the first to advance the idea of the distinctive function of the phoneme?
 a) N.S. Trubetzkoy; b) L. Bloomfield; c) L.V. Shcherba.
6. Which approach to the phoneme is represented by Sommerfelt?
 a) mentalistic; b) functional; c) populational.
7. According to N.S. Trubetzkoy the phoneme in the position of neutralization is called:
 a) variant; b) chroneme; c) arch-phoneme.
8. Which of the linguists put forward the atomistic conception of the phoneme?
 a) D. Jones; b) L. Hyelmslev; c) W. Twaddel.
9. The functionally relevant bundle of articulatory features is called:
 a) the invariant; b) the distribution; c) the allophone.

- 10.** If allophones of different phonemes occur in the same phonetic context such type of distribution is called:
a) free variation; b) contrastive; c) complementary.
- 11.** The articulatory features which serve to distinguish meaning are called:
a) principle; b) typical; c) relevant.
- 12.** The allophones which appear due to the influence of neighbouring speech sounds are called:
a) principle; b) combinatory; c) relevant.
- 13.** Allophones of the phoneme:
a) are not predictable;
b) are predictable by the types of distribution;
c) are predictable by the cases of assimilation and accommodation.
- 14.** Allophones of the same phoneme:
a) have some articulatory features in common;
b) have no articulatory features in common;
c) have all articulatory features in common.
- 15.** Which of the following cases of assimilation is progressive?
a) nasal plosion; b) labialization; c) loss of aspiration.
- 16.** The lax element of English diphthongs is called:
a) the tail; b) the glide; c) the nucleus.
- 17.** The consonant in the articulation of which the complete closure gradually and uninterruptedly opens into a narrowing is called:
a) occlusive; b) occlusive-constrictive; c) constrictive.
- 18.** Length of vowels in English is:
a) phonemic feature;
b) phonetic feature;
c) both phonemic and phonetic feature.
- 19.** All English diphthongs are:
a) falling; b) rising; c) level.
- 20.** English vowels are divided into front, front-retracted, back, back-advanced and central:
a) according to the position of the tongue;
b) according to the active organ of speech;
c) according to the character of their end.

21. Nasal consonant is the sonorant articulated:

- a) with the blocked passage for the flow of air through the mouth cavity, achieved by lifting the soft palate;
- b) with the blocked passage for the flow of air through the mouth cavity, achieved by lowering the soft palate;
- c) with the blocked passage for the flow of air through the mouth cavity, achieved by lowering the hard palate.

F. ARRANGE THE WORDS AND WORD COMBINATIONS IN THE PROPER ORDER TO DEFINE THE PHONETIC PHENOMENA.

1. **The phonemes are....** a) ...which are capable of... b) ... sound types,... c) ...distinguishing the meaning... d) ... thus serving the purpose of... e) ...limited in number... f) ...social intercourse. g) ... and the form of words,...
2. **A phoneme is ...** a) ...in a given language, ... b) ...as any other member. c) ...which are related in character... d) ...in the same phonetic context... e) ...no one member ever occurs... f) ...a family of sounds... g) ...in a word... h) ...and are used in such a way that...

G. GUESS THE NAME OF THE LINGUIST.

1. This linguist was the founder of the phoneme theory and analyzed the phoneme from the point of view of the morphemic structure of words and sound interchange within which he distinguished synchronic and diachronic types of alternation. Later on he tried psychological approach to the phoneme regarding the latter as a complex perception of the articulatory movements and of the muscular sensations connected with them together with the resulting acoustic impressions, all of which react on mind simultaneously. Though his views were not widely spread and were rather obscure he had some followers who developed both of his theories.
2. This linguist began his research work investigating the phoneme from the morphological point of view but later changed his opinion fundamentally under the influence of the Copenhagen school of linguistics. He considered the phoneme to be an abstraction which can not be observed or perceived and distinguished between general phonology which studies the structure of a concrete language and theoretical phonology which produces for the former the conceptual apparatus. In his theory he used terms borrowed from cybernetics which makes his approach original but rather obscure.

GROUP PROJECT

Correlation of different definitions and theories of the phoneme

UNIT III SUPRASEGMENTAL PHONETICS

TOPIC 1 THE SYLLABIC STRUCTURE OF ENGLISH

1. The definition and general characteristics of a syllable

It is generally known that speech is a continuum. The segmentation of the speech continuum into discreet sounds and the allocation of the latter to phonemic categories is the result of the linguistic analysis. According to the immediate auditory impression of linguistically untrained users, pronounced sound sequences are acoustically broken up into smaller units which are articulated with alternately increasing and diminishing energy. Such minimal units of sounding speech are called syllables. Thus, syllables may be defined as the smallest pronounceable units into which sounds tend to group themselves and which in their turn are joined into meaningful language units that are morphemes, words, phrases and sentences. Each of these units is characterized by a certain syllabic structure and consequently has two aspects: syllable formation and syllable division which form a dialectal unity.

The syllable is a complicated phenomenon and like the phoneme it can be analyzed from the acoustic, auditory, articulatory and functional points of view. Acoustically and auditorily a syllable is characterized by the force of utterance, or accent, pitch of the voice, sonority and length, that is by prosodic features. Articulatory characteristics of a syllable are connected with the syllabic formation and division. Functional characteristics of a syllable are connected with the constitutive, recognitive and distinctive properties of a syllable.

In English syllable formation is based on the phonological opposition vowel – consonant. Vowels are usually syllabic, while consonants are not, with the exception of the sonorants [l], [m], [n] which become syllabic if they occur in an unstressed final position preceded by a noise consonant.

A syllable may consist of one phoneme or a number of phonemes. The syllabic phoneme forms the peak of prominence (the crest, or the peak of the syllable). One or more consonant phonemes preceding or following the peak of prominence are called slopes. The boundary between two syllables is called the valley of prominence.

As to the number of syllables in the English word it can vary from one to eight. Ex. come [kʌm], city ['si-ti], family ['fæ-mi-li], simplicity [sim-'pli-si-ti], unnaturally [ʌn-'næ-tʃə-rə-li], unsophisticated [ʌn-sə-'fi-sti-kei-tid], incompatibility ['in-kom-pæ-ti-'bi-li-ti], unintelligibility [ʌn-in-te-li dʒi-'bi-li-ti].

2. The principles of syllable classification. Types of syllables

There are several generally accepted classifications of syllables based upon various criteria.

First of all phonetic syllables which are distinguished in the actual pronunciation of words should not be mixed up with orthographic syllables, or syllabographs into which words are divided in writing and print or for the application of the so-called

reading rules. Syllables of phonetic type need not coincide with those of the orthographic type as the latter are closely connected with the morphemic structure of words.

Ex.	phonetic syllables	syllabographs:
ranging	[ræn-dʒɪŋ]	rang-ing
maker	[mei-kə]	mak-er

The further classifications concern phonetic syllables.

The syllable as a whole is the carrier of a dynamic stress – variation in the force of utterance. So syllables can be classified according to the accentual weight as stressed and unstressed.

From the view point of syllabic formation that is to say, whether a syllable begins and ends with a vowel or a consonant sound, syllables are classified as open, closed, covered and uncovered. A syllable which begins with a consonant sound and ends in a vowel sound is called covered and open (ex. now [naʊ]). A syllable which begins with a vowel sound and ends in a consonant sound is called uncovered and closed (ex. on [ɒn]). A syllable which begins and ends in a consonant sound is called covered and closed (ex. man [mæn]). A syllable which begins and ends in a vowel sound is called uncovered and open (ex. awe [o:]).

G.P. Torsuev introduced the following terminology to be applied to the types of syllables mentioned above: initially covered, finally-covered, fully-closed, fully-open.

In some languages syllables are classified from the point of view of their duration (long and short) and from the point of view of their pitch. Thus, in tone languages, where the variation of the pitch of the voice is a distinctive feature, the following types of syllables are distinguished: a) those pronounced with even pitch; b) those pronounced on different pitch level (high-level, mid-level); c) those pronounced with changes of pitch going from one level to another (fall, rise); d) those pronounced with combination of such changes (fall-rise, rise-fall).

3. The main theories of syllable formation and syllable division

There are several theories of syllable formation and syllable division and none of them is shared by all linguists. The *most ancient theory* states that there are as many syllables in a word as there are vowels. This theory is primitive and insufficient since it does not take into consideration consonants which also can form syllables in some languages, neither does it explain the boundary of syllables.

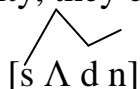
The so-called “*breath-puff*” (*expiratory, chest-pulse, or pressure*) theory is based on the fact that expiration in speech is not a continuous and uninterrupted process as it is in ordinary breathing, but a pulsating one. According to this theory there are as many syllables in a word as there are expiration pulses made during its utterance, because each syllable corresponds to a single expiration. Each vowel sound is pronounced with a fresh expiration, so vowel sounds are always syllabic. The borderline between the syllables is, according to this theory, at the point where a fresh expiratory pulse begins that is the moment of the weakest expiration. The American scholar Stetson tried to prove the validity of the expiratory theory of the syllable by an instrumental investigation of syllable formation and syllable division, the results of which he published in 1951 in his book “Motor Phonetics, a Study of Speech Movements in Action”. He used

a number of instrumental techniques to record the lip, tongue and chest movements and to measure variations in the lung and subglottic air pressure during phonation.

The expiratory theory is strongly criticized by both Russian and foreign linguists. Thus N.I. Zhinkin questions the correctness of the instrumental techniques used by Stetson and doubts the validity of his conclusions which run counter to easily observable facts, because more than ten syllables are easily uttered with a single expiration. G.P. Torsuyev writes that in a phrase a number of words and consequently syllables can be pronounced with a single expiration without breaking it up into pulses. This theory is inconsistent also because of the impossibility of explaining all cases of syllable formation on its basis.

The so-called *relative sonority theory* of the syllable was put forward by O. Jespersen and further developed by other western linguists who often refer to it also as the *“prominence” theory*. By the term “sonority” is meant here the prevalence in a speech sound of musical tone over noise (hence the word “sonorant”). In this theory the term “sonority” is used in the meaning which is conveyed by the precise acoustic term “carrying power”. The latter means the acoustic property of speech sounds which determines the degree of their perceptibility. Thus, sonority theory is based upon the fact that each sound has a different carrying power. Jespersen by means of linguistic experiments proved that the most sonorous sounds are the vowels, the low vowels are more sonorous than the high and the back vowels are more sonorous than the front of corresponding height. Next lower in sonority are semi-vowels [w, j], the frictionless continuants [l, r, m, n, ŋ], the voice fricatives [v, ð, z, ʒ], the voice stops (plosives) [b, d, g], the voiceless fricatives [f, θ, s, ʃ] and least sonorous of all the voiceless stops (plosives) [p, t, k] which apart from their closure and release have no sound at all. The sonority theory states that there are as many syllables in a word as there are peaks of prominence according to the scale of sonority.

Ex. In the word “sudden” the most sonorous is the vowel [ʌ], then goes the nasal sonorant [n], which forms the second peak of prominence, [s] and [d] are sounds of low sonority, they cannot be considered as syllable forming:



So in any sequence the most sonorous sounds tend to form the center of the syllable and the least sonorous – the marginal segments; a syllable contains one peak of sonority (or prominence) separated from other peaks by “valleys” of lower sonority (or prominence).

The sonority theory helps to establish the number of syllables in a word, but fails to explain the actual mechanism of syllable formation and syllable division, because it does not state to which syllable the weak sound at the boundary of two syllables belongs. Besides it is valid only for the artificial conditions under which it was established. But in speech, length, force and pitch are constantly varying, so that the sonority of different speech sounds in actual use varies considerably from the established scale of sonority. Thus in the word “puzzle” [z] can be made much more “sonorous” than [l]. The drawbacks of this theory were admitted by its creator and its adherents D. Jones, A. Gimson.

The *muscular tension theory (articulatory tension, or energy theory)* was put forward by L.V. Shcherba. He explained the phenomenon of syllable formation by muscular tension impulses. The fact that syllables cannot be further subdivided in connected speech proves that in speaking muscular tension impulses follow one another. Each impulse has its strongest point – the peak of prominence and its weakest point – the valley of prominence. Valleys of prominence correspond to points of syllable division. In the center of the syllable there is a syllabic phoneme which is usually a vowel. In pronouncing a syllable the energy of articulation increases within the range of prevocalic consonants and then decreases within the range of postvocalic consonants.

Unfortunately Shcherba has not left any further explanations of his theory of the syllable, with the result that some of its points remain unclear.

This theory has been modified by V.A. Vassiliev who stated that the syllable like any other pronounceable unit can be characterized by three physical parameters: pitch, intensity and length. Within the range of the syllable these parameters vary from minimum on the prevocalic consonants to maximum on the center of the syllable, and then there is another decrease within the postvocalic consonants. So the acoustic properties increase and decrease the tension of articulation and thus form an arc.

The *three types of consonants theory* was also put forward by Shcherba To explain the mechanism of syllable division he distinguished between the three types of consonants, such as initially strong, finally strong and geminate, or double. The difference between these types is in the way they are pronounced. In the initially strong consonants the beginning is more energetic, while the end is weaker. In the finally strong consonants the beginning is weak and the end is more energetic. Geminate (or double) consonants are pronounced in such a way that both the beginning and the end are energetic with a weakening of muscular tension in the middle. Acoustically, they give the impression of two consonants. The more energetic part of a consonant is attached to a vowel, so that initially strong consonants occur at the end of a syllable, while finally strong consonants occur at the beginning of a syllable.

Ex. initially strong consonants: it, us, oath, add;

finally strong consonants: may, tea, new;

geminate (double) consonants: penknife, what time, midday.

In English geminate (double) consonants usually occur at the juncture of words or morphemes. Initially strong consonants follow short vowels, while finally strong consonants follow long vowels or diphthongs. Acoustically, finally strong consonants produce the impression of an intimate blend with a vowel which follows.

Ex.

finally strong

initially strong

not a tall one

not at all

a name

an aim

The use of a finally strong consonant instead of an initially strong one in similar sound sequences strikes the ear of a native as incorrect.

Since in syllable division the character of the end of a consonant is more important than that of its beginning, it is more convenient to use terms “strong-end” (finally strong) and “weak-end” (finally weak) consonants.

The so-called “*loudness theory*” was put forward by N.I. Zhinkin. On the basis of his analysis of the x-ray moving pictures, together with the sound spectrograms and kymograms he has found the organ which is immediately responsible for syllable formation. This organ is the pharyngeal cavity, or rather its walls. Their contraction gradually narrows the pharyngeal passage, which together with the resulting increase in the muscular tension of its walls just at the vocalic peak of the syllable, increases the amplitude of sound waves and correspondingly the actual loudness of this vocalic element to such an extent that it becomes the peak of the syllable.

So according to this theory the syllable can be thought of as the arc (or curve) of loudness which correlates with the arc of articulatory effort since variations in loudness are due to the work of all the speech mechanisms. This arc is weak in the beginning and in the end and strong in the middle.

In terms of the loudness theory there are as many syllables as in a word as there are “arcs of loudness” and the point of syllable division corresponds to the moment when the arc of loudness begins or ends, that is finally strong consonants begin a syllable, finally weak consonants end it.

The loudness theory combines both the level of production and the level of perception of the syllable, due to which the syllable can be defined as a phonetic unit which is pronounced by one articulatory effort, by one muscular contraction, which results auditory in one uninterrupted arc of loudness. But Zhinkin has not investigated the mechanism of the formation of syllables by sonorants and as far as English is concerned, it is not clear, how the pharyngeal contraction theory can account for the formation of syllables by sonorants.

So it is obvious that the syllable is not a simple phenomenon. No phonetician has succeeded so far in giving an exhaustive and adequate explanation of what it is. The difficulties seem to arise from the various possibilities of approach to this unit.

4. Functional characteristics of syllables

Correct syllable formation and syllable division is of great practical importance because syllables perform constitutive, distinctive and recognitive functions.

Constitutive function of the syllable lies in its ability to be a part of a word or a word itself. The syllable forms language units of greater magnitude that is morphemes, words and utterances. The syllable is the unit within which the relations between the distinctive features of the phonemes are revealed. Within a syllable (or a sequence of syllables) prosodic characteristics of speech are realized which form the stress-pattern of a word and the rhythmic and intonation structures of an utterance. So the syllable is a specific minimal structure of both segmental and suprasegmental features.

The other function of the syllable is distinctive. In this respect the syllable is characterized by its ability to differentiate words and word forms. It can be proved by the phonological oppositions based on a difference in syllable division.

Ex.: nitrate [nai-treit] night rate [nait-reit]

The distinction here lies:

a) in the degree of aspiration of [t] which is greater in the first member of the opposition than in the second;

b) in the slightly devoiced articulation of [r] in the first member of the opposition under the influence of the initial [t];

c) in the length of the diphthong [ai] which is shorter in the second member of the opposition, because it is followed by a voiceless consonant.

The differentiation is effected in this case through the opposition strong-end consonant/weak-end consonant resulting in a different position of the point of syllable division. The differentiation is achieved by beginning of fresh articulatory effort at different points.

So, on the one hand, the realization of the phoneme in different positions in a syllable (initial, medial, final) results in different allophones, on the other hand, qualitative and/or quantitative peculiarities of certain allophones of the phoneme indicate the beginning or the end of the syllable.

The difference in syllable division is the basic ground for differentiation of words, word combinations, sentences and the mixed cases.

Ex.: word – word	an aim – a name
	a notion – an ocean
word combination – word combination	an ice house – a nice house
	a black tie – a blacked eye
word – sentence	ice-cream – I scream
word combination – sentence	my skill – Mice kill
sentence – sentence	I saw her eyes – I saw her rise
	I saw the meat – I saw them eat

The recognitive function of the syllable facilitates their identification. It is conditioned by the pronunciation of the speaker. The listener can understand the meaning of the utterance only if he perceives the correct syllabic boundary.

Thus, the existence of various theories of syllable formation and syllable division proves that syllables are complicated phenomena of sounding speech, which can be analyzed from different aspects, have certain structure, perform definite functions and can be classified according to several principles.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The definition and general characteristics of a syllable.
2. Types of syllables:
 - a) the classification of syllables according to their accentual weight;
 - b) the classification of syllables according to their formation;
 - c) the classification of syllables according to their pitch and duration;
 - d) phonetic and orthographic syllables.

3. The principal theories of syllable formation and syllable division:
 - a) the expiration theory;
 - b) the relative sonority theory;
 - c) the muscular tension theory;
 - d) the three types of consonants theory;
 - e) the loudness theory.
4. Functional characteristics of syllables:
 - a) constitutive and recognitive functions;
 - b) distinctive function.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE ABOUT THE SYLLABIC STRUCTURE OF ENGLISH IN TEACHING.

COMMENT ON THE FOLLOWING TERMS

1. Syllable, syllabic phoneme, the peak of prominence (the crest of the syllable), slope, valley of prominence.
2. Fully-open syllable, fully-closed syllable, initially-covered syllable, finally-covered syllable, orthographic syllables (syllabographs).
3. Sonority, initially-strong (finally-weak, weak-end) consonants, finally-strong (strong-end) consonants, geminate (double) consonants, prevocalic consonants, postvocalic consonants.

ANALYZE EACH THEORY OF SYLLABLES FROM THE VIEW POINT OF WHETHER IT TAKES INTO ACCOUNT

- 1) syllable formation, syllable division or both;
- 2) level of production, level of perception of the syllable or both.

Support your opinion by the facts given from the theory.

COMPAIRE THE FOLLOWING DEFINITIONS OF THE SYLLABLE

1. Syllables are the smallest pronounceable units into which sounds tend to group themselves and which in their turn are joined into meaningful language units that are morphemes, words and sentences.
2. The syllable is a phonetic unit which is pronounced by one articulatory effort, by one muscular contraction, which results auditory in one uninterrupted arc of loudness.
3. The syllable is one or more speech sound, forming a single uninterrupted unit of utterance, which may be a word or a commonly recognized subdivision of a word.

Pay attention to the aspects of syllables and other their features which are revealed by these definitions.

DO YOU THINK THAT THE SUGGESTED DEFINITIONS OF THE SYLLABLE ARE EXHAUSTIVE? MAKE UP THE DEFINITION OF YOUR OWN.

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. Syllable formation and syllable division form the dialectal unity.
2. The syllable can be analyzed from four aspects.
3. On the one hand, the realization of the phoneme in different positions in a syllable (initial, medial, final) results in different allophones, on the other hand, qualitative and/or quantitative peculiarities of certain allophones of the phoneme indicate the beginning or the end of the syllable.
4. The syllables are the units within which the relations between the distinctive features of the phonemes are revealed and the stress-pattern of a word as well as the rhythmic and intonation structures of an utterance are realized.
5. The syllable is a specific minimal structure of both segmental and suprasegmental features.

FILL THE FOLLOWING TABLE WITH THE REQUIRED CONTENTS USING THE MATERIAL FROM THE LECTURES AND TEXTBOOKS

Name of the syllable formation (division) theory, its originator	Essence of the theory	Examples	Criticism (positive and negative points)

Name of the syllable formation (division) theory, its originator	Essence of the theory	Examples	Criticism (positive and negative points)

Name of the syllable formation (division) theory, its originator	Essence of the theory	Examples	Criticism (positive and negative points)

PRACTICAL TASKS

1. Arrange these words into four columns according to the type of syllable structure:

closed uncovered	closed covered	open covered	open uncovered

pat, aunt, straw, do, street, or, price, eat, took, I, eight, dry, pea, awe, stamp, art, else, blue.

2. Analyze these words from the viewpoint of phonetic and orthographic syllable division:

	Phonetic syllable division	Orthographic syllable division
worker		
pined		
cheering		
culture		
nation		
disappear		
mistake		

3. Give examples of English words having from 1 to 8 syllables.

1	
2	
3	
4	

5	
6	
7	
8	

4. Identify the sonority of phonemes in the following words according to O. Jespersen's scale, mark the peaks of prominence and state the number of syllables

alone female unfortunate insufficient

machine unimportant yesterday aristocracy

appetite remarkable misunderstand inferiority

window tomato satisfactory.

5. Divide these words into syllables:

people comfortable cottage study kitchen

pantry several upstairs furniture smoke

orchard ground bathroom modern own

electricity January February April August

September October Wednesday Tuesday urgent

Equal bacon shriek dew ought

student.

TOPIC 2

THE ACCENTUAL STRUCTURE OF ENGLISH

1. The definition and general characteristics of word-stress

Inseparable from the syllabic structure of words is their accentual structure (or stress-pattern) because the sequence of syllables in the word is not pronounced identically. If the syllable or syllables of the word are uttered with special prominence they are said to be stressed, or accented. Special prominence should not be mixed up with the inherent prominence of speech sounds, their carrying power which is determined according to the scale of sonority. Special prominence is given to that or this syllable on purpose in order to single it out among the other syllables. The correlation of varying prominence of syllables in a word is the accentual structure of the word, or its stress-pattern.

Actually it is the vowel in a syllable which is made specially prominent and is a carrier of stress. Special prominence of a vowel and thus of the whole syllable is acquired partly by means of a stronger current of air (by a stronger expiration), but mostly by a more energetic articulation energy which produces the impression of loudness. The influence of more energetic expiration upon stress is not so important as the role of articulation, because vowels do not require a stronger current of air in order to be intensified, what they need is an intensification of musical tone, which is achieved through the tenseness of the vocal cords, the walls of the resonance chamber and all the speech organs in general.

So, in any stressed syllable the force of utterance is greater, which is connected with more energetic articulation; the pitch of the voice is higher which is connected with stronger tenseness of the vocal cords and the walls of the resonance chamber; the quantity of the vowel is greater, which means that the vowel becomes longer, the quality of the vowel is different, which means that the vowel sounds very distinct.

There are several definitions of word-stress, all of them are correct, it is difficult to state which of them is more precise as they are focused on different aspects:

1). Word-stress is the singling out of one or more syllables in a word which is accompanied by the change of the force of utterance, pitch of the voice, qualitative and quantitative characteristics of the sound, which is usually a vowel.

2). Word-stress is a complex phenomenon, marked by the variations in force, pitch, quantity and quality.

3). Word-stress is a greater degree of prominence, given to one or more syllables in a word, which singles it out through changes in the pitch and intensity of the voice and results in qualitative and quantitative modifications of sounds in the accented syllable.

Many synonymous terms are used in the description of the nature of stress such as force, power, intensity, prominence, accent, amplitude, loudness.

Prominence is a broader term than stress. It can be inherent, which depends on the sonority of sounds. It can be special which is obtained by the components of word stress. In speech prominence is strengthened by the components of intonation.

According to some sources there is a slight difference between word-accent and word-stress. Word-accent is regarded as a constituent feature of a word pronounced in isolation as a vocabulary item, whereas word-stress deals with the place of accentuation in words and its functions in speech.

The discrepancy in the other terms is due to the fact that there are several aspects on which word-stress can be analyzed. On the productive (or articulatory) level word-stress is connected with the power, or force of articulation. On the acoustic level word-stress is connected with the intensity, or amplitude of the vibrations of the vocal cords. On the receptive (or auditory) level word-stress is associated with greater loudness.

2. Principles of word-stress classification. Types of word-stress

As it has been stated, word-stress is connected with the changes of the force of articulation, pitch, colour and length of a vowel in a stressed syllable. So word-stress is based upon four principles – dynamic, musical, qualitative and quantitative. In different languages one of the factors, constituting word-stress is usually more significant than the others and consequently is said to be phonologically relevant. According to the most important feature of word-stress different types of it are distinguished in different languages.

If special prominence in a stressed syllable is achieved mainly through the intensity of articulation, such type of stress is called dynamic or force-stress.

If special prominence in a stressed syllable is achieved mainly through the change of pitch, or musical tone such accent is called musical or tonic.

If special prominence in a stressed syllable is achieved through the changes in the quality of the vowels, which are longer in the stressed syllable than in the unstressed ones, such type of stress is called quantitative.

If special prominence in a stressed syllable is achieved through the changes in the quality of the vowels which are not obscured in the stressed syllables and are rather obscure in the unstressed ones, such type of stress is called qualitative.

Quantitative and qualitative changes do not form independent phonemically distinctive features, so quantitative and qualitative types of word-stress do not exist separately from dynamic stress. They are conditioned by the latter and play subsidiary role in accentuation of syllables.

Musical or tonic stress is characteristic of the Chinese, Japanese, Korean, Vietnamese and other oriental languages as well as some African languages where it distinguishes words, consisting of the same sounds. For example, in Japanese the sequence [hana], pronounced with even tone, means “nose”, pronounced with higher tone on the first syllable, means “beginning” and pronounced with higher tone on the second, syllable means “flower.”

The Scandinavian languages make use of both dynamic stress and tone stress in more or less equal degree.

Word-stress in other European languages, such as English, French, German, Russian is considered to be predominantly dynamic, with other features present but irrelevant. Thus, change of pitch is significant but the direction of pitch is not, since it doesn't serve for differentiation of words from one another.

According to the position of stress in words, the following types of word-stress are distinguished: 1) fixed word-stress; 2) free word-stress.

In languages with fixed word-stress the main accent invariable falls on a syllable which occupies in all the words of the languages one and the same position in relation to the beginning or end of a word. For instance, in Finnish and Czech word-stress is fixed on the first syllable, in Polish on the one but last syllable. In French the stress falls on the last syllable of the word, pronounced in isolation. Yet when a group of words is uttered, all the words in this group are unstressed, and only the final syllable is stressed, so it led some linguists to the conclusion that French has no word-stress.

In languages with free word-stress (English, Russian, German) the main accent may fall in different words on a syllable in any position in relation to the beginning or end of a word, although the accentual pattern of each word-form remains fixed, in the sense that, its accent is not shifted from one syllable to another in it. So the freedom of stress is not absolute but relative.

Within free word-stress two subtypes are distinguished on morphological ground: a) constant stress; b) shifting stress

A constant stress remains on the same morpheme in different grammatical forms of a word or in different derivatives from one and the same root (ex. wonder, wonderful, wonderfully). In a few inflectional grammatical forms that English words have, the stress is always constant (ex. finish, finishes, finishing, finished).

A shifting stress falls on different morphemes in different grammatical forms of a word or in different derivatives from one and the same root. Shifting of word stress may perform semantic function of differentiating lexical units, parts of speech, grammatical forms (ex. ig'nore – 'ignorant, 'contrast – to con'trast, рука – ру́ки, дома́ – до́ма, чу́дная – чу́днáя, му́ка – мука́).

Free word-stress presupposes almost complete unpredictability in the incidence of the main accent in different words of the language. In Russian for example, there are no rules determining which syllable of a polysyllabic word bears the main stress, so that the stress of each word and grammatical form of a word has to be learnt individually.

Certain types of word-stress are also distinguished according to the degree of special prominence. There are several classifications based on this principle, which differ in a number of stress types.

Thus, A. Gimson, D. Jones believe that a polysyllabic word has as many degrees of stress as there are syllables in it. The strongest syllable is designated by the numeral 1, the second strongest syllable is designated by the figure 2 and so on. The weaker the syllable is the greater is the number.

Ex. examination [³ig-²zæ-⁴mi-¹nei-⁵n];
indivisibility [²in-⁵di-³vi-⁶zi-¹bi-⁷li-⁴ti];
radical [¹ræ-³di-²kl].

However, so many degrees of stress are not required for purpose of mutual intercourse. It is usually quite sufficient to distinguish only three degrees; the majority of British phoneticians share this opinion. The strongest stress is called primary stress, the second strongest stress is called secondary, while all the other degrees of stress are

grouped together under the cover term of weak stress. The syllables bearing either primary or secondary stress are termed stressed (strongly-stressed and weakly-stressed, correspondingly), while syllables with weak stress are called unstressed.

In the phonetic transcription the position of word-stress is indicated by placing the stress mark before the accented syllable, the primary stress mark is raised, the secondary stress mark is lowered, so the stress mark indicates simultaneously the point of syllable division. In explanatory dictionaries, like Webster's, the primary and secondary stresses are indicated correspondingly by a heavy mark and a light mark at the end of the syllable. In Russian linguistic literature the stress marks are placed over the vowel letter.

The American phoneticians distinguish a greater number degrees of word-stress; they use other terms to denote them and other marks to indicate each degree.

Thus, B. Bloch and G. Trager distinguish four contrasting degrees which are numbered from 1 (the strongest) to 4 (the weakest) or called by descriptive names, such as: 1) loud, indicated [ˈ]; 2) reduced loud, indicated [ˆ]; 3) medial, indicated [˘]; 4) weak, which is not indicated.

H. Gleason also distinguishes four degrees but terms them: 1) primary [ˈ]; 2) secondary [ˆ]; 3) tertiary [˘]; 4) weak [˜].

H. Sweet distinguishes the following degrees of word-stress: 1) extra-strong or emphatic [ˈː]; 2) strong [ˈ]; 3) medium or half strong [ˈ̇]; 4) weak [˜].

American phoneticians place the stress-mark above the vowels of the stressed syllable and even indicate the stress in monosyllabic words pronounced in isolation whereas linguists in most other countries take the presence of stress in such cases for granted and do not mark it.

The disadvantage of the American approach to word-stress is that different linguists designate by different terms the same degrees of stress and sometimes even allocate different degrees of stress to one and the same syllable in one and the same word pronounced in isolation. Thus, the difference between the second and the third degrees of stress, that is between secondary and tertiary stresses is very subtle, the criteria of their difference are very vague and the allocation of these two degrees of stress to syllables in particular words is a subjective matter.

The American phoneticians differ not only from each other in their judgments of secondary and tertiary stresses, but also from British linguists. Thus, the stress on the second pretonic syllable in such words as "discrimi'nation", "ani'mation" is tertiary, according to American scholars, but it is considered to be secondary by the British phoneticians. In General American a tertiary stress affects the suffixes -ory, -ary, -ony of nouns, and the suffixes -ate, -ize, -y of verbs which are considered unstressed in British Received Pronunciation (ex. territory, ceremony, dictionary, demonstrate, organize, simplify).

British linguists do not deny the existence of tertiary stress and define secondary stress as pretonic and tertiary stress as posttonic. Besides there is no need to use separate stress marks to indicate each of them: the ordinary lowered stress mark before the primary accent will mean secondary stress, whereas the same mark after the primary accent will mean tertiary stress.

In the Russian word-stress system there are two degrees of word-stress – primary and weak. Some Russian words may have a secondary stress in addition to the primary one, but it is weaker than in English and often is not obligatory.

The above mentioned degrees of word-stress were established for words pronounced in isolation. But if a word is used in a sentence, the factors determining the degree of stress are more numerous, varied and altogether different from the factors, determining the degree of accent in a word pronounced in isolation. The degree of stress which a word receives in a sentence depends on the semantic factor (as semantically more important words are pronounced with greater stress), on the position of logical stress, on the turn of intonation, on the presence or absence of stressed syllables before and/or after it, on the speaker's emotions, on the rhythm of the intonation.

3. Accentuation tendencies of English

Various positions of stress in modern English words are due to different origin of the latter. But the freedom of stress in English words is restricted by certain tendencies which make its incidence rather predictable.

The first and the oldest of the English word accentuation tendencies is known as the *recessive tendency* and the incidence of the main stress in accordance with it is called recessive. The recessive tendency consists in placing the word-stress on the initial syllable. Recessive stress can be of two subtypes:

1) unrestricted recessive stress, falling on the first syllable (ex. 'father, 'mother etc.);

2) restricted recessive stress, falling on the root of words with a prefix, which lost its meaning (ex. be'gin, for'get, a'mong, be'fore etc.).

The recessive tendency is characteristic of all Germanic languages. Throughout the whole historical development of the English language this tendency has always been very strong. Thus, the stress in Anglo-Saxon and Scandinavian polysyllabic derivative words is constant due to the influence of the recessive tendency (ex. 'wonder, 'wonderful, 'wonderfully).

The polysyllabic French words borrowed into English during and after the Norman conquest underwent what is known as accentual assimilation. The stress in them originally fell as in Modern French on the last syllable, but under the strong influence of the recessive tendency it began to shift gradually to the initial syllable (ex. 'colour, 'marriage, 'reason).

The recessive tendency is still felt in Modern English which is especially noticeable in the new borrowings from other languages (ex. 'cosmonaut).

The *rhythmic, or rhythmical tendency* was caused by the presence in English of a great number of short (monosyllabic and disyllabic) words, many of which are formal words. In a sentence they become unstressed, which creates the rhythm, consisting of alternating a stressed syllable with an unstressed one. The stress determined by the rhythmic tendency is called rhythmical which can be of two subtypes:

1) historically or diachronically rhythmical stress;

2) genuinely, or synchronically rhythmical stress.

Historically rhythmical stress is primary and it falls on the third syllable from the end in three- and four-syllabic words (ex. 'cinema, 'family, ar'ticulate).

The influence of the historically rhythmical tendency was gradual. In borrowed polysyllabic words with the word-final position of primary stress due to the rhythmical tendency there appeared a secondary stress on the syllable separated from the word-final primary stress by one unstressed syllable. These words began to be pronounced in isolation on the model of short phrases in which a stressed syllable alternates with an unstressed one. For some period of time such words had two stresses, but gradually the stress on the last syllable began to weaken because it was contrary to the native English recessive tendency, which caused the strengthening of the secondary stress. When the word-final stress had thus gradually disappeared there remained only one stress on the third syllable from the end of the word. It explains the accentual structure of the overwhelming majority of Modern English words.

The accentuation of words ending in the suffix –ion with its variants –sion, -tion, ation is also rhythmical in origin. Originally the suffix –ion consisted of two syllables, of which the last one bore the accent and was preceded by the unstressed [i]; later, the syllable, preceding [i] due to the rhythmical tendency received rhythmical stress. The last syllable gradually lost its stress with the result that only the rhythmical stress remained. At the same time the unstressed [i] was changed to [j] and in those words in which this [j] was preceded by [s] or [z] it merged with the latter, so that the sounds [ʃ] and [ʒ] appeared. This explains the modern pronunciation and the accentual pattern of such words as “nation”, “occasion”, “opinion” etc.

Synchronically rhythmical stress is secondary and it falls on the second pretonic syllable in polysyllabic words, such as “revolution”, “assimilation”, “organization”, “examination”, “pronunciation”, where the primary stress is diachronically rhythmical in nature.

The *retentive tendency* consists in retaining the stress in a derivative on the same syllable on which it falls on the original word, the word from which the derivative is formed. Although the retentive tendency manifests itself also in the retention of the primary stress of the original word (ex. 'similar, a'ssimilate), much more commonly its manifestation consists in retaining the stress of the original word in the form of secondary stress in the derivative word (ex. 'similar, 'simi'larity).

4. Functional characteristics of word-stress

Like all phonetic phenomena, word-stress can be analyzed from a functional point of view as it performs three functions, such as constitutive, distinctive and recognitive.

The constitutive function manifests itself in the fact that every word, even a monosyllabic one, has its accent, which gives a finishing touch to creating the phonetic structure of the word as a language unit. Segmental phonemes are joined together into combinations and form syllables which are organized into the word by its accent. So, on the one hand, word-stress constitutes a word, it organizes the syllables of a word into a language unit which has a definite accentual structure, that is a pattern of relationship among the syllables. On the other hand, sound continuum becomes a phrase when it is divided into units organized by word-stress into words.

The distinctive function of word-stress, or rather of its degrees, makes word-stress a separate suprasegmental phonological unit which is called the word accenteme. The number of word accentemes in a language with free word-stress is determined by the number of the latter's distinctive degrees, The accentual patterns of words or the degrees of word stress form oppositions. In English there are two word-accentemes: primary and weak, corresponding to primary and weak degrees of word-stress.

Ex. 'import – im'port, 'black-bird – 'black 'bird (the opposition of primary and weak accentemes).

So, the distinctive function of word-stress in English helps to differentiate between parts of speech as well as compound words and word combinations.

The recognitive function of word stress consists in the correct accentuation of words, which facilitates their recognition and comprehension. Word-stress enables a person to identify a succession of syllables as a definite accentual pattern of a certain word. Correct accentuation helps the listener to make the process of communication easier. If the accentual pattern of words is distorted, the listener's attention is distracted from the contents of speech to its unusual form, and the normal process of communication is hampered. Misplaced word-stress does not only prevent normal understanding, but also often produces a comic impression.

Thus, word stress is a complicated phonetic phenomenon which is determined by certain accentuation tendencies, is classified according to various principles, performs definite linguistic functions and has different degrees.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The general characteristics of word-stress:
 - a) the nature of word-stress;
 - b) definitions of word-stress;
 - c) terms synonymous to stress.
2. Types of word-stress:
 - a) the classification of word-stress according to its relevant features;
 - b) the classification of word-stress according to its placement in a word;
 - c) the classification of word-stress according to the degree of special prominence.
3. The accentual tendencies of English:
 - a) recessive tendency;
 - b) rhythmic tendency;
 - c) retentive tendency;

4. Functional characteristics of word-stress:
 - a) constitutive function;
 - b) distinctive function;
 - c) recognitive function.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE ABOUT THE ACCENTUAL STRUCTURE OF ENGLISH IN TEACHING

COMMENT ON THE FOLLOWING TERMS

1. Word-stress (word-accent), prominence, inherent prominence, special prominence, accentual structure of a word (stress-pattern), accenteme.
2. Dynamic stress (force-stress), musical (tonic) stress, qualitative stress, quantitative stress, fixed word-stress, free word-stress, constant stress, shifting stress, primary stress, secondary stress, weak stress, tertiary stress, recessive stress, unrestricted recessive stress, restricted recessive stress, rhythmical stress, historically (diachronically) rhythmical stress, synchronically (genuinely) rhythmical stress.
3. Stressed syllable, strongly-stressed syllable, weakly-stressed syllable, unstressed syllable, pretonic syllable, post-tonic syllable.

COMPARE THE FOLLOWING DEFINITIONS OF THE WORD-STRESS

2. Word-stress is the singling out of one or more syllables in a word which is accompanied by the change of the force of utterance, pitch of the voice, qualitative and quantitative characteristics of the sound, which is usually a vowel.
3. Word-stress is a complex phenomenon, marked by the variations in force, pitch, quantity and quality.
4. Word-stress is a greater degree of prominence, given to one or more syllables in a word, which singles it out through changes in the pitch and intensity of the voice and results in qualitative and quantitative modifications of sounds in the accented syllable.

DO YOU THINK THAT THE SUGGESTED DEFINITION OF THE WORD-STRESS IS EXHAUSTIVE? MAKE UP THE DEFINITION OF YOUR OWN

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. If a word is used in a sentence, the factors determining the degree of stress are more numerous, varied and altogether different from the factors, determining the degree of accent in a word pronounced in isolation.
2. Accentuation tendencies of English are interconnected.
3. The accent gives the finishing touch to creating the phonetic structure of the word as a language unit.

PRACTICAL TASKS

1. Put down stress marks on the words below. Consult the dictionary. Translate them into Russian and read according to the stress pattern.

composition	nationalization	anticipation	intersession
overbalance	justification	hospitality	satisfactory
sentimentality	impossibility	idiomatic	artificial
unaccountable	fundamental	representation	characteristic
interrogation	comparable	ascertain	grotesque
antique	employee	career	lemonade
atomic	familiarity	beneficial	efficient
preferable	propriety	active	relative
gratitude	attitudinal	upward	apple-tree
bystander	birthday	pillow-case	sheep dog
school-boy	suitcase	time-table	inkpot
hair-do	housewife	everything	fire-place
broadcast	newcomer	blacksmith.	

2. Mark the accentual elements of these words according to Gimson's accentual patterns:

important excessive relation unimportant
insufficient satisfactory aristocracy consideration
variability identification unreliability industrialization
impenetrability unintelligibility.

3. Put down stress marks in these verbs and nouns. Translate them into Russian:

contrast *n* — contrast *v* forecast *n* — forecast *v* object *n* — object *v*
suspect *n* — suspect *v* protest *n* — protest *v* record *n* — record *v*
increase *n* — increase *v* transport *n* — transport *v*;

**TOPIC 3
ENGLISH INTONATION**

1. The definitions of intonation and the syntagm and their interconnection

Intonation is a complex unity of communicatively relevant variations of non-segmental, or prosodic features of speech which include melody, or the changes of the pitch of the voice, sentence stress, or the greater prominence of some words among other words of the utterance, timbre, or the special colouring of the voice and temporal characteristics. The latter comprise tempo, or relative speed of pronunciation, rhythm, or the regular occurrence of stressed and unstressed syllables, duration and pausation. This complex unity serves to express adequately, on the basis of the proper grammatical structure and lexical composition of the sentence, the speaker's thoughts, volition, emotions, feelings and attitudes towards reality and the contents of the sentence. Each component of intonation has its own peculiarities, but in spoken language they cannot be separated from one another and function as a whole. They are equally important and mutually dependent.

Intonation is a language universal as there are no languages spoken in monotone, that is, without any change of prosodic parameters. Sequences of words, intoned on one note, with the same degree of stress, without any pauses between words and sentences and with the same rhythm and tempo, cannot be used to transmit any information as they are not organized into meaningful groups. At the same time, an isolated word cannot be regarded as a communicative unit performing a definite linguistic function without a special intonation.

Nowadays in linguistic literature the term “prosody” can be found which embraces the prosodic components and substitutes the term “intonation”.

Successive contours of intonation singled out of the speech flow are referred to as syntagms (syntactic approach) sense-groups (semantic approach), breath-groups (extra-linguistic approach), tone (intonation) groups (phonological approach).

The term “breath-group” is employed by some linguists to denote a complete sentence that can conveniently be said with a single breath, or in the case of very long sentences, the longest portions that can conveniently be said with single breaths. A breath-group usually coincides with a sense-group because pauses for breath are normally made at points where pauses are necessary or allowable from the point of view of meaning. But the term “breath-group” is ambiguous because in fluent speech an intake of breath does not necessarily indicate a sense-group; while, if the tempo of speech is slow, a new breath is usually taken after every sense-group. Moreover, words are joined together into groups by sense, and not because they are followed by a new intake of breath. The term “intonation group” reflects only prosodic feature of the group of words, but suggests neither the semantic nor the syntactic functions. The term “sense-groups” calls attention to the fact that such group of words makes sense when put together. It is not suggestive of the syntactic relations within the group, but it goes without saying that a group of words joined syntactically makes sense. The term “syntagm” suggests a syntactic relationship of a group of words, without indicating any semantic relation; yet it is quite clear that what is joined syntactically must make sense. Thus, the terms “sense-group” and “syntagm” are practically equivalent. However, the term “syntagm” is preferable, for it is connected with L. V. Shcherba’s syntagm theory that has exercised a great influence on several branches of linguistics, and has many followers among Russian linguists. According to this theory the syntagm is understood as the syntactic and semantic relations of words which are expressed phonetically. So a syntagm can be defined as the shortest possible unit of speech from the point of view of meaning, grammatical structure and intonation. Consequently, there are three main criteria to be used in dividing sentences into syntagms: semantic, grammatical and phonetic.

The syntagm is an indispensable feature of intonation. Syntagms are distinguished in connected speech by definite intonation patterns; no syntagms exist without certain intonation patterns, at the same time, no intonation patterns are possible without syntagms. Syntagms play a very important role in a language; they are responsible for the syntactic structure of the sentences we utter, as well as for the information they carry.

2. General characteristics of a syntagm and elements of its intonation pattern

Each syntagm is characterized by a certain intonation structure, consisting of one or more syllables, each of them having a certain pitch and bearing a larger or smaller degree of prominence. Abstracted characteristics of intonation structures may be called intonation patterns which form the prosodic system of English. Intonation patterns consist of the following elements: the pre-head, the head (body or scale), the nucleus and the tail.

The *pre-head* forms the initial part of the intonation pattern consisting of unstressed syllables preceding the first stressed one. According to the changes in the voice pitch the pre-head may be: low, rising and high. A low pre-head consists of unstressed syllables pronounced at a low pitch. If unstressed syllables gradually ascend to the pitch of the first stressed syllable they form a rising pre-head. A high pre-head consists of unstressed syllables pronounced on a high level. The low pre-head is used so frequently that it may be considered common in unemphatic speech. Its main function is to mark the comparative unimportance of initial unstressed syllables. The high pre-head is very emotional, it is characteristic of emphatic speech and gives a bright, lively, encouraging character to the utterance.

The head (body, or scale) is the part of the intonation pattern including all the stressed and unstressed syllables up to the last stressed one. R. Kingdon differentiates between “the head” (the first stressed syllable in a syntagm) and “the body” (stressed syllables of a syntagm without the first and the last). According to the general pitch direction the head may be: descending, ascending and level. According to the direction of pitch movement within and between syllables, descending and ascending scales can be: stepping, falling (rising), sliding and scandent. The head beginning on a high pitch and then gradually descending in “steps”, each consisting of one stressed syllable and all unstressed syllables following it and pronounced on the same level, is called Descending Stepping Head. The pitch movement is realized through pitching each stressed syllable a little lower than the preceding one. The descending stepping head is the commonest type used in English. It usually conveys the impression of the balanced, active mood of the speaker. The head in which all stressed and unstressed syllables gradually descend is called falling. The Descending Sliding Head is formed by a series of “jumps” which may consist of only stressed or stressed and unstressed syllables. Each stressed syllable in this head is pronounced a little higher than the end of the preceding “jump” and each unstressed syllable is pitched a little lower than the preceding one. The use of the sliding head gives some additional prominence to all the stressed words in the utterance. It usually reflects an excited state of mind of the speaker and sometimes a very emotional attitude to the situation. The Descending Scandent Head is formed by a descending succession of syllables pronounced with pitch rises in stressed syllables (if they are not followed by unstressed ones) or on a level pitch while each unstressed syllable is pitched a little higher than the preceding one. It is used for emphasis expressing liveliness and sometimes impatience. The Ascending Stepping, Sliding and Scandent Heads are very much like the Descending Head of the same types, only the general pitch direction is different: the ascending head starts on the lowest pitch and

gradually rises. The ascending head is usually used to show surprise, protest, hurt feelings, etc. If the pitch rises on all stressed and unstressed syllables the head is called rising.

Not all stressed syllables are of equal importance. One of the syllables has the greater prominence than the others and forms the accentual *nucleus*, or focal point of a syntagm. Formally the nucleus may be described as a strongly stressed syllable which is generally the last stressed syllable of a syntagm. It is an obligatory component because it carries one of the basic tones and is always associated with the *communicative centre* of the sentence, the latter being the most important word or group of words in this sentence. So the nucleus marks the focus of information or the part of the pattern to which the speaker especially draws the hearer's attention. The nucleus may coincide with the communicative centre if it is represented by a monosyllabic word or constitute its part in a polysyllabic word. The change of pitch within the last stressed syllable of the syntagm is called a nuclear tone. The nuclear tone is the most important part of the intonation pattern without which the latter cannot exist at all. On the other hand an intonation pattern may consist of one syllable which is its nucleus, while the head, pre-head and tail are optional elements.

The inventory of tonal types given by different scholars is different. According to the classification, accepted for teaching purposes, all English tones may be level, or static (tones of unchanging pitch) and moving, or kinetic (tones of changing pitch), moving tones are divided into simple (changing in one direction) and complex (changing in more than one direction). Level tones can be pitched at high, mid and low level. Moving tones include simple tones, such as: low fall, high fall, low rise, high rise, and complex tones: fall-rise, rise-fall. The falling tones render an idea of finality and completion, the categoric nature of the utterance, its independence of a following utterance and, therefore, its greater semantic weight. The rising tones carry a sense of incompleteness and non-finality (continuation), the non-categoric nature of the utterance, its dependence on a following utterance or the reaction of the listener, its smaller semantic weight.

The Low Fall starts at a medium pitch level or a bit lower and falls to a very low pitch. It expresses finality and indicates a number of attitudes ranging from neutral to grim, cool, detached, phlegmatic attitudes. The High Fall starts at a high pitch and falls to a very low pitch. It also expresses finality but the range of attitudes is different: it indicates liveliness, polite and friendly interest, personal involvement and concern and sometimes a mild surprise. The Low Rise starts low and rises to a medium pitch or a little lower. It expresses non-finality, incompleteness, it is non-categoric and implicatory in character. The High Rise starts at a medium pitch or a little higher and rises to a very high pitch. It is an interrogating and echoing tone. It is used in all kinds of echoes and in questions calling for repetition. The Fall-Rise falls from a high or medium pitch level to the low pitch level and then slowly rises to a little below the mid pitch level. It is a contrastive, implicatory tone, expressing politeness, apology, concern, uncertainty, etc. The Rise-Fall starts in the middle of the voice range, rises to a very high pitch and then falls to a very low pitch. It is final and categoric in character. It expresses both

pleasant and unpleasant attitudes, ranging from irony or sarcasm to admiration and has an intensifying function.

These tones may be made emphatic: they may be given a degree of stress beyond the normal.

The use of this or that nuclear tone determines the duration of the nuclear syllable. A syllable containing a high fall is longer than one with a low fall, whereas a syllable with a falling-rising tone, or a rising-falling-rising tone is much longer than one with any other nuclear tone.

The *tail* forms the final part of the intonation pattern. It includes all unstressed and half-stressed syllables following the nucleus. There are three types of the tail – level, rising (ascending) and falling (descending). The occurrence of this or that type of tail is determined by the kind of the nuclear tone used. The descending tail occurs when the fall of the nuclear tone does not reach the lowest level. The level tail occurs when the preceding fall is complete, or when the nuclear tone is even but on a mid level. The level tail is pronounced on a very low pitch. The ascending tail is observed after the even low-pitched nuclear tone or after a rising nuclear tone. In fact it is the tail which produces the rising effect. Each type of tail is a kind of the continuation of a particular nuclear tone, and the two together constitute a so called terminal tone.

Syntagms are not fixed and unchangeable phenomena; they are formed in the process of speaking, and depend upon many conditions, such as: the meaning of what is being spoken, the construction of sentences, the length of the phrase and the degree of semantic importance or emphasis given to various parts of it, the speed of speaking, as well as the syntactical structure of each particular language as a whole.

A syntagm does not represent one particular syntactic category. It may consist of a number of words or of one word only, even of an interjection. It may correspond to a sentence consisting of a number of words, to a clause, principal or subordinate. A syntagm may contain two clauses. This is usually the case with object clauses. The subject group and the predicate group usually form separate syntagms, especially in slow tempo, and when extended. A syntagm may coincide with one member of a sentence. Homogeneous members also require separate syntagms. A syntagm cannot be composed of more than one complete sentence.

3. The components of intonation

As it has already been mentioned intonation consists of the following components: sentence stress, melody, rhythm, tempo, pausation and *tambre*. Although the components of intonation are closely interrelated and interdependent in expressing its intellectual, emotional and attitudinal (modal) content, and none of them can be isolated or separated from the others in actual speech, it is possible to single out each component for purposes of analysis.

Sentence-stress. In comparing word-stress with sentence-stress, we see that their function is different. The function of word-stress is to mould the words by indicating the strongest syllable in a word. The function of sentence-stress is different and more complicated. Sentence stress organizes the phrase phonetically, helps to make speech articulate, provides the basis for identification and understanding of the contents by

contribution to clear rendering of the meaning. It indicates the end of the syntagm by means of strengthening the last syllable, by a definite pitch-pattern and frequently also by a pause. Sentence-stress is used to indicate the important words in a syntagm (from the point of view of grammar, meaning or the speaker's attitude).

In accordance with these functions of sentence-stress, we may distinguish three types of it: (1) syntagm stress (unemphatic or normal sentence-stress); (2) logical sentence-stress; (3) emphatic sentence-stress. Each type is characterized by different degree of stress.

Syntagm stress is used in unemphatic speech to break up connected speech into syntagms and to indicate the important words in syntagms. Some linguists distinguish between syntagmatic (or primary) stress which singles out only the semantic centre of a syntagm and is usually realized in the last stressed word, and syntactic (or subsidiary) stress which emphasizes all the other notional elements of speech.

Logical stress is used to push into prominence a word or words in a syntagm that are significant from the point of view of meaning or of the speaker's attitude to the subject discussed. It consists in shifting the syntagmatic stress from its normal place in the last stressed syllable to one of the preceding words.

So there are two positions of syntagmatic stress – unmarked, or normal position on the last lexical item of the syntagm, and marked, or special position on an earlier part of the syntagm, when the speaker wants to draw attention to it, usually to contrast it with something already mentioned, or understood in the context. In the first case the nucleus is called the end-focus. In the second case the nucleus is called contrastive-focus.

Ex. "Did your brother study in Moscow?" "No, he was *born* in Moscow."

In a marked position, the syntagmatic stress may be on any word in a syntagm. Even words which are not normally stressed at all can receive nuclear stress for special contrastive purposes.

In exceptional cases, contrastive stress in a word of more than one syllable may shift to a syllable which does not normally have word stress. For example, if you want to make a contrast between the two words normally pronounced *bu'reaucracy* and *'autocracy* you may do so as follows: *'bureaucracy* and *'autocracy*.

Emphatic stress is used to express the speaker's emotions or to suggest to the listener some idea or some shade of meaning which is not expressed in words. Sentence stress is made emphatic by widening the range of pitch of the nucleus, increasing the degree of loudness of the syllable, slowing down the tempo.

Degrees of stress in an utterance correlate with the pitch range system. Nuclear stress is the strongest – it carries the most important information. Non-nuclear stresses are subdivided into full and partial. Full stress occurs only in the head, partial stress occurs also in the pre-head and tail. Words given partial stress do not lose prominence completely, they may retain the whole quality of their vowels.

Sentence-stress and word-stress are mutually dependent. Their relationships consist in the modifications which the accent of a word undergoes when this word is used in a sentence. These modifications are as follows:

The word accent of a monosyllabic word may disappear in a sentence. This is usually the case with form words, in which the loss of stress usually results in their quantitative, qualitative or zero reduction. The word accent of a monosyllabic word may be retained in a sentence without any marked diminution or increase. This is usually the case with words forming the scale of a syntagm in unemphatic speech. The word accent of a monosyllabic word may be increased in different degrees in a sentence. A slight increase is observed when such a word forms the accentual nucleus of a syntagm. The increase may be very great in emphatic and emotional speech. The main word accent of a disyllabic and polysyllabic word never disappears altogether in a sentence. It may only become weaker, i.e. have the force of secondary or even tertiary stress, when such a word has no sentence-stress.

The functions of sentence-stress are accomplished in the English language by means of two main principles: the dynamic (the greater force of utterance) and the musical (changes in the direction of voice pitch), as well as by two subsidiary principles: the qualitative and the quantitative.

The dynamic principle applies also to word-stress; however, sentence-stress makes use of the emphatic degree of stress which is expressed partly by pitch variations, partly by the following methods:

- a) glottal stop (Ex. It was "utterly im'possible! [it wəz "ʔʌtəli im'pɒsɪbl]);
- b) modifications of stress (Ex. "No! "Absolutely 'nothing. "Im"possible!);
- c) specially distinct articulation of words, syllable by syllable (Ex. "Absolutely! ["æbso-"lu:-tli]).

The activity of the musical principle is expressed in the pitch-patterns that are used in final stressed elements of syntagms, and also in the variations of pitch among the stressed elements within the same syntagm.

The quantitative principle, which plays a subsidiary role in English, mostly concerns consonants which are frequently lengthened for the sake of emphasis, especially sonorants (except [w] and [j]). Ex. Marvellous! ['m:ɑ:vləs]; How late you are! [hau "l:eit ju ɑ:]. Even a voiceless consonant may be lengthened: It's filthy! [its "f:ilθi].

As a rule, vowels in English are not subject to emphatic lengthening, especially short vowels. Vowel-lengthening is used freely in Russian for the purpose of creating emphasis. In English, the length of long monophthongs and diphthongs may be increased only when they are final or when followed by voiced consonants; in this position, even in unemphatic speech, vowels are longer. As to short vowels, they are lengthened only in two special cases: under the influence of emphatic tones (for example — the fall-rise) and in singing.

The presence of the qualitative principle is based not only on the fact that words may have no sentence-stress, but also upon the fact that the quality of the vowel may change. The word "many" has the vowel [e] in the first stressed syllable; but the quality of the vowel changes if the word receives no sentence-stress, and the vowel [e] of the first syllable is reduced to [ə]. Ex. How many pennies are there in a shilling? ['hau mæni 'peniz ɑ: ðər in ə 'ʃɪlɪŋ]

In unemphatic speech there is a certain uniformity in the distribution of sentence-stress in a syntagm. Of course, these principles vary in different languages. In an Eng-

lish syntagm, stress mostly marks groups of words and less frequently – words. These so called “stress groups” give to an English syntagm, and, consequently, to English speech in general, a peculiar rhythmical pattern. Thus, an English syntagm consists of a number of “stress-groups”; a “stress-group”, in its turn, consists of a number of unstressed syllables which are grouped around a stressed one.

It is possible to formulate general rules for the distribution of stress in unemphatic English sentences. The stressed elements are those which are more essential in rendering the meaning, namely: the nouns, adjectives, notional verbs, auxiliary and modal verbs in negative contracted forms, when introducing a question, substituting a notional verb; adverbs, numerals, demonstrative, negative, reciprocal, interrogative and emphasizing pronouns, indefinite pronouns *somebody, someone, something, anybody, anyone, anything*, used as subject; possessive pronouns in absolute form; interjections, two-word prepositions and conjunctions, particles *only, also, too, even, just*.

The following words are usually not stressed in unemphatic sentences: articles, one-word prepositions and conjunctions, personal, relative, reflexive pronouns, indefinite pronouns *somebody, someone, something, anybody, anyone, anything*, used as object, possessive pronouns in the conjoint form, particles *there, to*, auxiliary, semi-auxiliary and modal verbs. Their number in English is great and they form clusters, grouping themselves around the stressed notional words in a syntagm.

A word that has just been used is not stressed. In exclamatory sentences such words as *what, how*, etc. are not stressed, if an “emphatic” word follows. (Ex. What 'crowds of people! How 'beautiful!).

Melody. Each syllable of the speech chain has a special pitch colouring. Some of the syllables have significant moves of tone up and down. Pitch movements are inseparably accompanied with variations in loudness. It can be explained by the fact that on the acoustic level pitch correlates with the fundamental frequency of the vibration of the vocal cords; loudness correlates with the amplitude of vibrations. The pitch parameters include the distinct variations in the direction of pitch, pitch level, pitch range and pitch angle, or rate.

Pitch range is the interval between two pitch levels or two differently-pitched syllables or parts of a syllable. The pitch range of a whole syntagm is the interval between the highest-pitched and the lowest-pitched syllables. Variations in pitch range occur within the normal range of the human voice, i.e. within its upper and lower limits. The whole range may be normal, which is used in unemphatic delivery, wide and narrow which are brought into use in emphatic speech. These ranges, even in the case of an individual speaker, are not fixed, either absolutely or relatively to one another. They may, according to circumstances, be shifted slightly up or down, or expanded or contracted to a moderate degree.

Within the normal range of the speaking voice, i.e. within the interval between its lower and upper limits in unemphatic speech, most phoneticians distinguish three pitch levels: low, mid (or medium), and high. These pitch levels are, of course, relative, not absolute: a man's voice produces the three in a lower register than a woman's. There exist not only the obvious differences in the pitches used by men and women respectively, but also the smaller though noticeable differences between individuals of the

same sex. In emphatic and emotional speech an extra high and an extra low pitch levels may be distinguished in addition to the three unemphatic pitch levels. The pitch level of a whole syntagm is determined by the pitch of its highest-pitched syllable which, in unemphatic speech, is usually the first stressed syllable of the syntagm.

Pitch ranges should not be confused with pitch levels, although the two are closely interdependent. For instance, the pitch range between two syllables or two parts of a syllable is narrow when the first of them is pronounced on a high level and the second on a mid level or the first on a mid level and the second on a low level. But the pitch range is wide, when the first syllable is pronounced on a high level and the second on a low one. The more the height of the pitch contrasts within the intonation pattern the more emphatic the syntagm sounds.

The significant change in pitch direction takes place in the nucleus where the pitch goes distinctly up or down. In terms of pitch ranges the high-falling tone is a tone with a wide pitch range (from high to low), whereas a low-falling tone has a narrow pitch range (from mid to low).

In English there are also cases when no audible nuclear tone movement precedes a syntagm boundary. In such a circumstance one may consider it to be the level nuclear tone. The tone of a nucleus determines the pitch of the rest of the intonation pattern following it which is called the tail. Thus after a falling tone, the rest of the intonation pattern is at a low pitch. After a rising tone the rest of the intonation pattern moves in an upward pitch direction. The nucleus and the tail form what is called terminal tone. The pre-nuclear part, consisting of the pre-head and the head can take a variety of pitch patterns. Variation within the pre-nucleus does not usually affect the grammatical meaning of the utterance, though it often conveys meanings associated with attitude or phonetic styles. The pitch of the pre-nuclear part may gradually descend or ascend to the nucleus or stay more or less on the same level. The pitch pattern of a syntagm is formed by the combination of the pitch movements in the nucleus and in the pre-nuclear part within a pitch range of different pitch levels.

The changes of pitch are not haphazard variations. The rules of such changes are highly organized. No matter how variable the individual variations of this prosodic component are they tend to become formalized or standardized, so that all speakers of the language use them in similar ways under similar circumstances.

Rhythm is a very general term. From the materialistic point of view rhythm is one of the means of matter organization. The rhythmical arrangement of different phenomena of objective reality is presented in the form of periodicity in time and space, or tendency towards proportion and symmetry. We find it everywhere in life. In nature rhythm is observed in the successions of seasons, days and nights, the changes of the moon phases, high and low tide. The work of all kinds of machinery is rhythmical. We very well feel and appreciate the artistic rhythm in music, dance and other fields of art. Rhythm as a linguistic notion is realized in lexical, syntactical and prosodic means and mostly in their combinations. For instance, sound or word repetition, syntactical parallelism, intensification and others are perceived as rhythmical on the lexical, syntactical and prosodic levels. Most of human activities appear to be rhythmical - swimming, running, skiing, knitting and other muscular movements. The most evident illustration

of rhythm in the physiology of living beings is the heart beating and breathing. Speech production is naturally closely connected with the process of breathing. So speech activity as well as any other human activity is conditioned by physiological factors among others and is characterized by rhythm. A more detailed definition of speech rhythm is “the regular alternation of acceleration and slowing down, of relaxation and intensification, of length and brevity, of similar and dissimilar elements within a speech event”.

The basic unit of the rhythmical structure of an utterance is called stress group, accentual group, pause group, breath group or rhythmic group. The term “pause group” underlines that this unit contains a group of words between two pauses. The term “breath group” emphasizes the physiological factors that this unit can be uttered within a single breath. The term “rhythmic group” is used by most of the linguists as it implies more than a stressed group or breath group. It is a speech segment which contains a stressed syllable with or without unstressed syllables attached to it. The most frequent type of a rhythmic group includes 2-4 syllables, one of them stressed, others unstressed. Most rhythmic groups are simultaneously sense units. A rhythmic group may comprise a whole phrase, like “*I can't do it*” or just one word: “*Unfortunately...*” or even a one-syllable word: “*Well...*”; “*Now...*”. So a syllable is sometimes taken for a minimal rhythmic unit.

The stressed syllable is the prosodic nucleus or peak of prominence. The initial unstressed syllables preceding the nucleus of the rhythmic group are called proclitics, those following it are called enclitics. In qualifying the unstressed syllables located between the stressed ones there are two main alternative views among the phoneticians. According to the so-called semantic viewpoint the unstressed syllables tend to be drawn towards the stressed syllable of the same word or to the lexical unit according to their semantic connection, concord with other words. According to the other viewpoint the unstressed syllables in between the stressed ones tend to join the preceding stressed syllable. It is the so-called enclitic tendency. The enclitic tendency is more typical of the English language, where, as a rule, only initial unstressed syllables cling to the following stressed syllable; non-initial unstressed syllables cling to the preceding stressed syllables, though in the speech flow it is sometimes difficult to define the borders of rhythmic groups. The speech tempo and style often regulate the division into rhythmic groups. The enclitic tendency is more characteristic of informal speech whereas the semantic tendency prevails in accurate, more explicit speech.

The more organized the speech is the more rhythmical it appears, poetry being the most extreme example of this. Prose read aloud or delivered in the form of a lecture is more rhythmic than colloquial speech. On the other hand rhythm is also individual - a fluent speaker may sound more rhythmical than a person searching for the right word and refining the structure of his phrase while actually pronouncing it. There are some obvious differences between the rhythmic patterns of various speech realizations. For instance, rhythm organization of a dispassionate monologue will vary greatly from that of a familiar conversation.

But regularity in a speech chain is not realized in its exact isochronous form. Absolutely regular speech produces the effect of monotony. It means that the intervals between the stressed syllables are not physically equal. Some “strokes” may often be

missing or mistimed. Whenever short rhythmic groups are mixed with longer ones the speaker minimizes the differences by means of changes in his rate of delivery. Any number of unstressed syllables occurring between the stressed ones are actually compressed to allow the next stressed syllable to come on the regular beat. In other words the length of the intervals is perceived by the listener as equal despite the changing number of unstressed syllables between the peaks of the rhythmic groups.

Linguists divide languages into two groups: syllable-timed languages like French, Spanish, and stress-timed languages, such as English, German, Russian. In a syllable-timed language the speaker gives an approximately equal amount of time to each syllable, whether the syllable is stressed or unstressed and this produces the effect of even rather staccato rhythm. In a stress-timed language the rhythm is based on a larger unit than syllable. Though the amount of time given on each syllable varies considerably, the total time of uttering each rhythmic unit is practically unchanged. The stressed syllables of a rhythmic unit form peaks of prominence. They tend to be pronounced at regular intervals no matter how many unstressed syllables are located between every two stressed ones. Thus the distribution of time within the rhythmic unit is unequal. The regularity is provided by the strong "beats".

The markedly regular stress-timed pulses of speech seem to create strict, abrupt and spiky effect of English rhythm. Russian rhythm is perceived as more flexible, liquid and smooth. The analytical character of English explains the presence of a considerable number of monosyllabic form words which are normally unstressed in a stretch of English speech. To bring the meaning of the utterance to the listener the stressed syllables of the notional words are given more prominence by the speaker and unstressed monosyllabic form words are left very weak. Speech rhythm has the immediate influence on vowel reduction and elision. Prepositions, conjunctions as well as auxiliary and modal verbs, personal and possessive pronouns are usually unstressed and pronounced with reduced or even elided vowels to secure equal intervals between the stressed syllables. Under the influence of rhythm words which are normally pronounced with two equally strong stresses may lose one of them, or may have their word stress realized differently.

The sphere of rhythm functioning is actually very wide. Rhythm is complicated language system, comprising well-organized elements of different sizes in which smaller rhythmic units are joined into more complex ones: a rhythmical group → an intonation group → a phrase (a line in poetry) → a phonopassage. Thus, the rhythmic structure of speech continuum is a hierarchy of rhythmical units of different levels. The regular recurrence of the stressed syllables at relatively isochronous intervals is perceived as rhythmicity. Rhythmic groups blend together into syntagms which reveal the similarity of a number of prosodic features. Thus, a syntagm includes from 1 to 4 stressed syllables and usually lasts 1-2 seconds. The tone and loudness vary from maximum at the beginning of a syntagm to minimum at the end. A syntagm is characterized by the lengthening of the first rhythmic group and of the last rhythmic group in comparison with other ones, the descending character of the melody and a short pause after it. The similarity of the prosodic organization of the syntagm makes it a rhythmic unit. A phrase often coincides either with a syntagm or even with the phonopassage. In both

those cases a phrase is perceived as a rhythmic unit having all the parameters of either a syntagm, or a phonopassage. The recurrence of similar and equal text segments makes them rhythmic units. So that rhythmicity marks every text segment. The rhythmic effect of the text units is obtained by the prosodic parameters, the pitch of the voice, its level and range, loudness, duration, pausation and other phenomena of a stretch of speech. The rhythm constituents vary not only in different rhythm units but also in different speech realizations, different linguistic activities. Rhythmically organized speech is easily perceived. From the psycholinguistic point of view the accuracy of the temporal similarity in rhythm has a definite effect on the human being. The regularity in rhythm seems to be in harmony with his biological rhythms.

Rhythm serves to connect elements in speech: smaller units are organized into larger ones, larger units include smaller ones. So rhythm unites text segments into a whole and at the same time cuts the discourse into elements. This integrative and delimitative function of rhythm illustrates the dialectical unity of the contrary manifestations of rhythm. Besides, rhythm is a very effective means of speech expressiveness, conveying different degrees of emotional effect on the listener (Ex. 'Will you 'stop that 'dreadful 'noise.).

Tempo of speech can be normal, slow and fast. The parts of the utterance which are particularly important sound slower. Unimportant parts are commonly pronounced at a greater speed than normal. Each syntagm of the sentence is pronounced at approximately the same period of time, unstressed syllables are pronounced more rapidly: the greater the number of unstressed syllables, the quicker they are pronounced. Proclitics are pronounced faster than enclitics.

Pausation is closely connected with the other components of intonation. Pause is a stop of phonation for a short period of time before starting again. Any stretch of speech can be split into smaller portions, i.e. phonetic wholes (chains of oral speech which is semantically and intonationally complete), phrases, syntagms by means of pauses.

Functionally, there may be distinguished syntactic, or temporal pauses, emphatic, hesitation and breathing pauses. Syntactic pauses serve for segmentation of speech continuum into units and are considered an additional means of unifying and delimiting syntagms or sentences by showing relations between them. They play the semantic and syntactic role.

Syntactic pauses are subdivided into:

- a) short optional pauses which may be used to separate syntagms within a phrase;
- b) longer obligatory pauses which normally manifest the end of the phrase;
- c) very long pauses, which are approximately twice as long as the first type, are used to separate phonetic wholes.

The length of syntactic pauses varies and depends on the degree of semantic importance, completeness and connection of the syntagm with the following one. The more important the syntagm is, the longer the pause after it. The length of pauses is also connected with the rate of speech. It is relative to the tempo and rhythmicity norms of an individual. Sometimes pauses may even disappear in fast speech and the delimiting

function is performed by the nuclear tone alone. The length of the “end-of-utterance” pauses is controlled by the person who is about to speak.

Emphatic pauses serve to make especially prominent certain parts the utterance, to attach special importance to the word, which follows it. Hesitation pauses serve as signals of doubt, suspense and are mainly used in spontaneous speech to gain some time to think over what to say next. They may be unfilled and filled, corresponding to silent and voice pauses. The latter have the quality of the central vowels [ə, ɜ:] or [m, ɜ:m]. Emphatic and hesitation pauses are made within syntagms as well. They are an additional means of expressing the speaker’s emotions thus performing attitudinal function.

Tambre expresses various emotions, attitudes and moods of the speaker, such as joy, anger, sadness, indignation, etc. Tambre should not be equated with the voice quality only, which is the permanently present person-identifying background, it is a more general concept, applicable to the inherent resonances of any sound. Tambre is studied along the lines of quality: *whisper, breathy, creak, husky, falsetto, resonant*, and qualification: *laugh, giggle, tremulousness, sob, cry*.

4. Unemphatic and emphatic intonation

Intonation can be emphatic and unemphatic. Unemphatic speech in English is characterized by the following principal peculiarities:

- a) sentence-stress is distributed equally among the notional words in a syntagm; the stressed syllables occur at more or less regular intervals of time, while the unstressed ones are uttered in the remaining intervals;
- b) a pitch distribution in a syntagm forms a regular descending scale, that is to say, all the stressed syllables are pronounced in such a way that the first one is the highest, while each successive syllable is lower in pitch than the preceding one; each of them is pronounced on the same level without any pitch variations;
- c) the pitch of the initial unstressed syllables is lower than that of the first stressed syllable; it may either be level or slightly rising; all the other unstressed syllables are usually a little lower than the preceding stressed syllable and are either level or, more often, gradually descending to the pitch of the next stressed syllable;
- d) the last stressed syllable (and the unstressed ones that follow it) have one of the two principal intonation contours (low-rising or low falling). These comprise the minimum of English intonation; theoretically, it is possible to use no emphasis and yet make oneself understood.

Emphasis may be defined as a special increase of effort on the part of the speaker. Cases of emphasis are classified under two general headings: emphasis for intensity and emphasis for contrast. Intensity emphasis is very often connected with the usage of words expressing measurable qualities, such as adjectives (ex. huge, enormous, lovely, tremendous, wonderful, marvellous, appalling, awful, tiny, absurd, killing, brilliant, deafening etc.), adverbs (ex. particularly, extremely, hopelessly etc.), plural nouns (ex. quantities, masses, heaps, tons, hundreds etc.), verbs (ex. rush, squeeze, hate etc.). Other words of this type can be intensified by other methods; for instance, by using the adverb *very*. (Ex. How 'very ri'diculous.)

Emphasis for contrast is not connected with the use of special words; any word may be emphasized. (Ex. "*You must do it your*"self! This sentence, with intensification, means: "*No one is going to do it for you.*")

Emphasis manifest itself in a more energetic articulation of sounds; in the use of the strong forms of words instead of the weak forms; in an increase of sentence-stress; in various pitch-patterns. Emphasis may be of different degrees. A slight intensification of meaning may be produced by the modifications in the sphere of sentence-stress, but in more emphatic forms of speech special modifications of melody are involved.

Emphatic speech has the following important features:

- a) the descending scale may be either completely absent or it may be partially destroyed;
- b) the characteristic tones are not necessarily confined to the end of the syntagm;
- c) the tones themselves differ from the unemphatic ones; there is a greater variety of pitch variations. Among them are the use of a falling instead of a rising tone, the use of the high falling or the fall-rising pitch-pattern;
- d) the range of intonation in a syntagm may be widened or narrowed.

Breaking the descending scale is achieved by pushing up the pitch of an important word, and then continuing the descending scale from that point. This pitch rise is called "special (or accidental) Rise" and the head in which it is used is called the Up-broken Descending Head. A special rise giving some more prominence to the word pronounced in this way, is higher than the preceding syllable but not as high as the first stressed syllable.

In syntagms with homogeneous members a rise is generally used. Such enumeration is called simple and it is distinguished from emphatic (or dramatic enumeration), where the use of the falling tone, instead of a rising one, makes the utterance more expressive.

There are many ways of widening the range of intonation. One of them is connected with breaking the descending scale: the syntagm is started at a certain pitch from which the descending scale begins, until, on an important word, the pitch is raised and a new descending scale begins. Another way is a fall from a rather high pitch after the descending scale reaches a certain point. The fall usually begins from a higher pitch than the initial pitch of the syntagm. Widening the intonation range is also realized when the syntagm begins at a higher level and the intervals in the pitch of stressed syllables are made greater, so that the descending scale is practically destroyed due to the fact that there are only one or more important words, while all the other syllables are unstressed.

If the important words are emphasized by means of a fall-rise; all the other syllables are usually unstressed and as a rule, the descending scale is also usually absent. The fall-rise may occur within the same syllable, or it may be spread over a number of syllables. Sometimes one of the stressed syllables may be pronounced higher than the preceding one after which the downstepping pitch movement is resumed.

Widening the range of intonation serves to express unrestrained feelings and to produce an effect of general liveliness or cheerfulness. Narrowing the range of intona-

tion serves to emphasize suppressed or painful emotions and expresses no cheerfulness or liveliness on the part of the speaker.

5. Functional characteristics of intonation

Intonation is a powerful means of human intercommunication. One of the aims of communication is the exchange of information between people. The meaning of an English utterance, i.e. the information it conveys to a listener, derives not only from the grammatical structure, the lexical composition and the sound pattern. It also derives from variations of intonation, i.e. of its prosodic parameters.

There is no general agreement about either the number or the headings of the functions of intonation. No matter how many functions are named, all of them may be summed up under a more general heading, that is the function of communication, although each individual component of intonation performs this function in its own way.

The communicative function of intonation is realized in various ways.

The chain of words is not regarded as speech unless it is pronounced with a definite intonation pattern. At the same time, an isolated word cannot acquire communicative value without a special intonation, as for instance an answer to a question (*Merry.*); as a question (*Merry?*); as an exclamation (*Merry!*) or as some other communicative unit with a definite linguistic function.

Intonation serves to organize connected speech phonetically, thus making it intelligible. On the one hand, intonation performs delimiting function by breaking speech continuum into smaller units, i.e. phonetic passages, phrases and syntagms, on the other hand, it performs integrating function by uniting these smaller constituents into a complete text. Tying the parts of utterance together, intonation also establishes relations between them by showing what things belong more closely together than others, where the divisions come, what is subordinate to what. Having organized syntagms within a sentence or a whole sentence, intonation simultaneously distinguishes them from other syntagms or sentences embodied in different intonation-patterns.

Intonation serves to endow phrases or their significant segments with declarative, interrogative, imperative or exclamatory meanings, or with shades of these meanings. In other words, it determines the communicative types of sentences, which are differentiated in speech according to the aim of utterance from the point of view of communication.

Intonation serves to structure the content information of a textual unit into new and given. Given information is something which the speaker assumes the hearer possesses or is able to acquire from the context. New information is something which the speaker does not assume the hearer knows about already. It is obviously what is most important in a message, it receives the information focus in the nucleus, whereas given information does not.

Ex. We 'went to the ↘cinema yesterday. (the new information is the place of the yesterday's visit).

We 'went to the 'cinema ↘yesterday. (the new information is the time of the visit to the cinema).

By putting the stress on one particular word, the speaker shows, first, that he is treating that word as the carrier of new information, and, second, that the information of the other, non-emphasized, words in the syntagm, is not new but can be retrieved from the verbal context (something that has already been mentioned), as well as from the situational context (something given by the situation outside language or some aspect of shared knowledge which the addressee is thought to be aware of). For example, if a few different persons are expected to come, the phrase “*The doctor has come*” is pronounced with the nucleus on the word “*doctor*” though no speech context preceded it.

The decision as to whether some information is retrievable or not has to be made by the speaker on the basis of what he thinks the addressee can take for granted from the situation. The speaker must, in framing the utterance, make many assumptions, and he does this rapidly and to a large degree unconsciously. He then arranges his syntagms and assigns nuclear stresses accordingly. But in any particular situation, the speaker’s assumptions run the risk of being wrong; what he takes to be retrievable information may not in fact be retrievable for the addressee. In this case there is a breakdown of communication, and the listener will probably seek clarification.

Ex. (A. and B. are passing the tennis courts)

A. There *isn’t* anyone playing.

B. Who said there *was*?

A. Nobody.

Degrees of information are relevant not only to the position of sentence stress but also to the choice of the nuclear tone. We tend to use a falling tone of wide range of pitch combined with a greater degree of loudness, that is emphatic stress, to give emphasis to the main information in a phrase. To give subsidiary or less important information, i.e. information which is more predictable from the context or situation, the rising or level nuclear tone is used.

Intonation serves to convey the speaker’s feelings, emotions and attitude to the situation he is placed in and he often uses it to influence the attitudes and behaviour of the listener. The speaker must be particularly careful about the attitudes and emotions he expresses since the listener is frequently more interested in the speaker’s attitude or feeling than in his words - that is whether he speaks nicely or nastily. The special question “*Why?*”, for instance, pronounced with the low-falling tone sounds rather detached, sometimes even hostile. When pronounced with the low-rising tone it is sympathetic, friendly, interested. It is not only the type of the nucleus that is important for expressing feelings and emotions, but also the pitch of the utterance preceding the nucleus: pre-head and head. For example, being pronounced with the high pre-head, “*Hello!*” sounds more friendly than when pronounced with the low pre-head.

Emotive meanings are intended, over and above the meanings conveyed by the lexical items and the grammatical structure. The meaning of what we say depends more on intonation than on the words we use. Most phrases and parts of them may be pronounced with several different intonation patterns according to the situation, according to the speaker’s momentary feeling or attitude to the subject matter. For example, the sentence: “*Thanks for helping me last night!*” can be given more than one meaning. The

difference between a sincere intention and a sarcastic one would be conveyed by the intonation. Any sentence in various contexts may receive any of a dozen other patterns, conveying various modal meanings. Even the simplest word, such as “yes” for instance, can render different attitudes if intoned differently, such as “*That is so.*”, “*Of course it is so.*”, “*Is it really so?*”, “*That may be so.*” The expression “*All right*” may mean consent and threat, depending upon the intonation used in it.

It is still impossible to classify, in any practical analysis of intonation, all the fine shades of feeling and attitude which can be conveyed by slight changes in pitch, by lengthening or shortening tones, by increasing or decreasing the loudness of the voice, by changing its quality, and in various other ways. On the other hand it is quite possible to make a broad classification of intonation patterns which are so different in their nature that they materially change the meaning of utterance to which they are applied, and to make different pitches and degrees of loudness in each of them.

Intonation serves to differentiate the meaning of syntagms and sentences of the same grammatical structure and the same lexical composition, which is the distinctive or phonological function of intonation. Distinctive function of intonation is realized in the opposition of the same word sequences which differ in certain parameters of their intonation pattern. Thus, in the following example the intonation patterns of the first syntagms are opposed.

If 'Mary ↗ comes | 'let me 'know at ↘ once. (No one else but Mary is expected to come)

If ↘ Mary ↗ comes | 'let me 'know at ↘ once. (A few people are expected to come, but it is Mary who interests the speaker)

The most powerful phonological unit is the tone. The opposition of types (or directions) of tone and/or their distribution together with syntagmatic division of the utterance, distinguishes communicative types of sentences, syntactic units, the attitudes and emotions expressed by the speaker and even the actual meaning of the same sequence of words.

Ex. Isn't she ↗ pretty? (a question) Isn't she ↘ pretty? (an exclamation)

Ex. 'This is my 'niece, ↘ Lucy. (Apposition)

'This is my ↘ niece, Lucy. (Direct address)

If the phrase “*I don't want you to read anything*” has the low-falling terminal tone on the word “*anything*”, it means that for this or other reason the person should avoid reading. If the same word sequence is pronounced with the falling-rising tone on the same word, the phrase means that the person must have a careful choice in reading.

Have you seen him?

'Not ↘ once. (= never, not a single time).

'Not ↗ once (= many a time).

The sentence “*My sister who lives in the South has just arrived*” may mean two different things. In writing the difference may be marked by punctuation. In oral speech it is marked by syntagmatic division. The division into three intonation groups means that one of my sisters, who lives in the South has just arrived. The

division into three intonation groups means that my only sister who lives in the South has just arrived.

One of the travellers, | says Mr. Michael ↗ Collins, | was ↗ calm, | almost indif-ferent, throughout. || (One of the travellers states that Mr. Collins was quite self-possessed throughout the accident)

One of the travellers ↗ says, | Mr. Michael Collins was ↗ calm, | almost indiffe-rent, throughout. || (Mr. Collins States that one of the travellers was quite self-possessed throughout the accident)

↘ Why! | I should like to ↘ see her! || (The speaker is eager to see smb.)

Why I should like to ↗ see her?! || (The speaker doesn't want to see smb.)

Have you got ↗ brothers | or ↘ sisters? (an alternative question) Have you got 'brothers or ↗ sisters? (a general question)

Intonation serves to perform neutralizing or compensative function. Usually the speaker's intonation is in balance with the words and structures he chooses. If he says something nice, his intonation usually reflects the same characteristic. However, there are cases when intonation is in contradiction with the syntactic structure or the lexical content of the utterance neutralizing and compensating them, as it happens, for in-stance, in the phrase "*Will you be quiet!*" whose imperative structure is neutralized by a rising tone, or in the phrase "*Phone him at, once, please!*", where the politeness, con-veyed by the word "please", is neutralized by imperative intonation.

Lack of balance between intonation and word content, or intonation and the grammatical structure of the utterance may serve special speech effects. A highly force-ful or exciting statement said with a very matter-of-fact intonation may, by its lack of balance, produce a type of irony; if one says something very complimentary, but with an intonation of contempt, the result is an insult.

Intonation serves to characterize a particular style or variety of oral speech which may be called the stylistic function.

Mistakes in the use of intonation are very similar to those in the use of phonemes and their allophones and may be of two kinds: tonemic and non-tonemic, or allotonic. A tonemic mistake consists in the use of a tone which is used in the language in ques-tion, but in different circumstances. This may lead to misunderstandings and possible embarrassment. For example, "*Thank you*" may be said in English with a falling tone, which makes it sound genuinely grateful, and with a rising tone, which makes it sound rather casual. A non-tonemic, or allotonic, mistake consists in the use of a tone which is non-existent in the language in question. An example is the use of the Russian rising tone instead of the English rise which produces a foreign accent and may make under-standing difficult. In the case of tonemic mistakes the distinctive function of intonation is violated, whereas non-tonemic, or allotonic, mistakes violate the recognitive function of intonation, but mistakes of both types give rise to difficulties in communication.

Thus, intonation as a phonetic phenomenon and a syntagm as a phonetic unit of speech are closely connected as components of intonation are realized within the ele-ments of a syntagm thus performing various communicative functions.

ASSIGNMENT

DISCUSS THE FOLLOWING QUESTIONS

1. The definition of intonation. The components of intonation:
 - a) sentence-stress, types of sentence-stress;
 - b) melody;
 - c) pausation and tamber;
 - d) rhythm and tempo.
2. The definition and general characteristics of the syntagm. Terms synonymous to syntagm.
3. The elements of the intonation structure of a syntagm.
 - a) the prehead, types of preheads;
 - b) the head, types of heads;
 - c) the nucleus, the main nuclear tones, the nucleus and the communicative centre of a syntagm;
 - d) the tail, types of tails.
4. Unemphatic and emphatic intonation.
5. Functional characteristics of intonation.
 - a) delimiting and integrating functions;
 - b) informative function;
 - c) attitudinal and emotive functions;
 - d) neutralizing and stylistic functions;
 - e) distinctive function.

SPEAK ABOUT THE APPLICATION OF THE KNOWLEDGE ABOUT THE INTONATION STRUCTURE OF ENGLISH IN TEACHING.

COMMENT ON THE FOLLOWING TERMS

1. Intonation, pitch (speech melody), pitch direction, pitch level, pitch range, pitch angle (rate), sentence stress, syntagm stress (unemphatic stress, normal sentence-stress); syntagmatic stress (primary sentence-stress), syntactic stress (subsidiary sentence-stress), logical stress, emphatic stress, unmarked (normal) position of syntagmatic stress, marked (special) position of syntagmatic stress, the end-focused nucleus, the contrastive-focused nucleus, full stress, partial stress, tambre, tempo, rhythm, stress group (accentual group, pause group, breath group, rhythmic group), prosodic nucleus, proclitics, enclitics, pausation, syntactic (temporal) pauses, emphatic pauses, hesitation pauses, breathing pauses, unfilled pauses, filled pauses.
2. Syntagm (intonation group, sense-group, breath-group), intonation pattern, pre-head, low pre-head, high pre-head, rising pre-head, head (body, scale), ascending scale, descending scale, level head, stepping head, falling head, sliding head, scandent head, rising head, special (accidental) Rise, Upbroken Descending Head, nucleus,

focal point of a syntagm, communicative center, level tone, moving tone, simple tone, complex tone, Low-Fall, Low-Rise, High-Fall, High-Rise, Fall-Rise, Rise-Fall, High-Level, Mid-Level, Low-Level, tail, level tail, rising (ascending), falling (descending) tail, terminal tone.

EXPLAIN WHAT IS MEANT BY THE FOLLOWING STATEMENTS

1. Each component of intonation has its own peculiarities, but in spoken language they cannot be separated from one another and function as a whole. They are equally important and mutually dependent.
2. Without a special intonation an isolated word cannot be regarded as a communicative unit performing a definite linguistic function.
3. No syntagms exist without certain intonation patterns, at the same time, no intonation patterns are possible without syntagms.
4. The changes of pitch are not haphazard variations.
5. Rhythm a complicated language system, comprising well-organized elements of different sizes in which smaller rhythmic units are joined into more complex ones.
6. The meaning of an English utterance derives not only from the grammatical structure, the lexical composition but also from variations of intonation.

PRACTICAL TASKS

1. Transcribe and intone the sentences below.

- a) "Good bye, Mark," she said shaking hands with him.

b) He said: "Miss Thorpe, if you rent a flat in this district, you'll get tired of noise as there is much traffic here."

c) In spring we often go to the country and spend much time in the open air, you know.

Mr. Smith is going to the theatre tonight, but April, his daughter will probably stay at home.

d) Well, if it is not too much trouble, Paul, lend me your notebook, please.

e) “To the left of the fireplace you can see the table where he used to sit and write his stories,” the guide went on telling us.

f) Of course, you haven’t learned this small text, Jane, have you?

2. Answer the questions and explain the difference between the statements from the viewpoint of their intonation structure.

1. Which is more flattering to Mrs. Grant?
 - a) Mrs. Grant is a pretty generous woman.
 - b) Mrs. Grant is a pretty, generous woman.

2. In which case is Mr. Rogers likely to be bawled out?
 - a) Mr. Rogers, the secretary is two hours late.
 - b) Mr. Rogers, the secretary, is two hours late.

3. Which suggests that keeping you cool is profitable?
 - a) He remained calm, cool, and collected.
 - b) He remained calm, cool – and collected.

4. In which case you are sure that “somatic” and “bodily” mean the same?
 - a) Radioactive materials that cause somatic, or bodily, damage are to be limited in their use.
 - b) Radioactive materials that cause somatic, or bodily damage are to be limited in their use.

5. Which expresses sincere regret?
 - a) I’m sorry you can’t come with us.
 - b) I’m sorry. You can’t come with us.

6. Which indicates that there were only two passengers in the car?
 - a) The two passengers who were seriously hurt were taken to a nearby hospital.
 - b) The two passengers, who were seriously hurt, were taken to a nearby hospital.

TEST

A. CHOOSE THE ODD VARIANT.

1. The following scientists worked on the theories of syllable formation and division:
a) E. Sievers; b) N.I. Zhinkin; c) Stetson; d) L.V. Shcherba.
2. The syllabic structure includes the following components:
a) the scale; c) the valley of prominence;
b) the peak of prominence; d) the slopes.
3. There are the following theories of syllable formation:
a) the expiratory theory; c) the loudness theory;
b) the relative sonority theory; d) the opposition theory.
4. Word stress performs the following linguistic functions:
a) constitutive; b) auditory; c) recognitive; d) distinctive.
5. The tonic stress is characteristic of the following languages:
a) Chinese; b) Japanese; c) French; d) Vietnamese.
6. According to the degree of special prominence the following types of word stress are singled out
a) primary; b) constant; c) secondary; d) weak.
7. The following accentuation tendencies influence the position of word stress in the English language:
a) recessive; b) shifting; c) rhythmical; d) retentive;
8. The intonation pattern includes the following components:
a) the head; c) the nucleus;
b) the valley of prominence; d) the tail
9. There are the following types of sentence stress:
a) syntactic; b) syntagmatic; c) secondary; d) logical
10. There are the following types of descending head:
a) stepping; b) falling; c) sliding; d) level;
11. There are the following components of intonation:
a) rhythm; b) rhyme; c) pausation; d) tempo.
12. The syntagm is also called:
a) breath group; b) sense group; c) word group; d) tone group.

13. The basic unit of the rhythmical structure of an utterance is called:
 a) stress group; b) pause group; c) rhythmic group; d) sense group.
14. There are the following types of pauses:
 a) syntactic; b) syntagmatic; c) hesitation; d) emphatic.

B. ARRANGE THE WORDS AND WORD COMBINATIONS IN THE PROPER ORDER TO DEFINE THE PHONETIC PHENOMENA.

1. **The syllable is ...** a) ...which results auditory in... b) ...one articulatory effort,... c) ...one uninterrupted arc... d) ...a phonetic unit... e) ... of loudness. f) ...by one muscular contraction,... g) ...which is pronounced by...
2. **Word-stress is** a) ...pitch,... b) ...marked by... c) ...quantity... d) ...the variations in... e) ...complex... f) ...force... g) ...phenomenon,... h) ...and quality. i) ...a...

C. AGREE OR DISAGREE WITH THE STATEMENTS AND CORRECT THE FALSE ONES.

1. All sonorants in the English language are syllabic.
2. The relative sonority theory of syllable formation states to which syllable the weak sound at the boundary of two syllables belongs.
3. The loudness theory of syllable formation explains the formation of syllables by sonorants.
4. Phonetic syllables do not correspond to the morphemic structure of words.
5. The expiratory theory of syllable formation combines both the level of production and the level of perception.
6. Covered and closed syllables begin in a vowel and end in a consonant.
7. The loudness theory of syllable formation states that there are as many syllables in a word as there are peaks of prominence according to the scale of sonority.
8. American linguists distinguish four degrees of word stress.
9. Traditionally in the English language two degrees of word stress – primary and weak are distinguished.
10. The syllable with weak stress is called weakly-stressed.
11. British linguists regard secondary stress as pre-tonic and tertiary stress as post-tonic.
12. The English language is characterized by the fixed word stress.
13. The tonic type of word stress is not characteristic of the English language.
14. In the English language there are two distinctive degrees of word stress – primary and weak.
15. Initial unstressed syllables of a syntagma are called the pre-head.
16. The high-falling nuclear tone starts at a high pitch level and falls to a very low pitch.
17. The low level nuclear tone belongs to the tones of moving type.
18. A low tail occurs after the falling nuclear tone.

19. The descending stepping head begins on a high pitch level and then gradually descends on stressed syllables with all following unstressed syllables pronounced on the same level.
20. The high rising nuclear tone is a complex type.
21. The low-rising nuclear tone starts at a medium pitch level or a little higher and rises to a very high pitch.

D. FILL IN THE GAPS WITH THE APPROPRIATE WORDS OR WORD COMBINATIONS.

- In pronouncing a syllable the energy of articulation **a)**... within the range of **b)**... consonants until it reaches its climax – the most energetically articulated phoneme which is usually a **c)**... . It is called the **d)**... of **e)**... . One or more **f)**... consonants pronounced with **g)**... force may follow the **h)**... phoneme. The weakest point of articulation is called the **i)**... of **j)**... . It corresponds to the point of **k)**... . . The **l)**... properties of the syllable such as **m)**..., **n)**... and **o)**... increase and decrease with the tension of articulation.
- Word stress is a greater degree of **a)**... given to one or more **b)**... in a word, which singles it out through changes in the **c)**... and **d)**... of the **e)**... and results in **f)**... and **g)**... modifications of **h)**... in the accented syllable.
- The correlation of varying prominence of **a)**... in a word is called its **b)**... . . Special prominence is mainly achieved by more energetic **c)**... which produces the impression of **d)**... .
- The **a)**... . . of speech melody, sentence stress, speech tempo, timbre and rhythm is called **b)**... . Speech melody is the variations in the **c)**... of the **d)**... in connected speech. Sentence stress is the greater **e)**... of one or more **f)**... among other **g)**... in the same sentence. Tempo is the **h)**... . . with which **i)**... are pronounced in connected speech. Timbre is a **j)**... . . of the voice which shows the speaker's **k)**... . Rhythm is a regular recurrence of **l)**... and **m)**... . . within more or less equal intervals of time.
- The last **a)**... . . in the intonation pattern is called the **b)**... . It is an **c)**... component because it carries one of the basic **d)**... and is always associated with the **e)**... . . of the sentence, the latter being the most important **f)**... or group of words in this sentence. It may coincide with the communicative center if it is represented by a **g)**... word.

E. CHOOSE THE CORRECT VARIANT.

- The muscular tension theory of syllable formation was put forward by:
 - Shcherba;
 - Stetson;
 - Zhinkin.
- Which theory of syllable formation was proved by Stetson with the help of the instrumental technique?
 - the muscular tension theory;
 - the loudness theory;
 - the expiratory theory.

3. Which type of consonant begins a syllable?
a) finally strong; b) finally weak; c) geminate.
4. A syllable which begins in a consonant and ends in a vowel is called:
a) initially covered; b) uncovered and open; c) uncovered and closed.
5. According to the breath-puff theory of syllable formation:
a) there are as many syllables in a word as there are expiration pulses;
b) there are as many syllables in a word as there are arcs of loudness;
c) there are as many syllables in a word as there are peaks of prominence according to the scale of sonority.
6. Which theory of syllable formation states that the energy of articulation increases within the range of prevocalic consonants and decreases within the range of postvocalic consonants?
a) expiratory theory;
b) muscular tension theory;
c) relative sonority theory.
7. The peak of the syllable is:
a) the boundary between two syllables;
b) the most energetically articulated phoneme;
c) the arc of loudness.
8. The English language is characterized by:
a) free word-stress; b) fixed word-stress; c) no stress.
9. Which accentuation tendency consists in placing the word stress on the initial syllable?
a) recessive; b) retentive; c) rhythmical.
10. The stress which falls on different morphemes in different grammatical forms of a word or in different derivatives from one and the same root is called:
a) free; b) constant; c) shifting.
11. Which type of stress falls on the third syllable from the end in polysyllabic words?
a) synchronically rhythmical;
b) historically rhythmical;
c) recessive.
12. The type of stress falling on the root of words with a prefix which has lost its meaning is called:
a) retentive; b) unrestricted recessive; c) restricted recessive.

13.The synchronically rhythmical stress falls on:

- a) the first stressed syllable;
- b) the third syllable from the end in polysyllabic words;
- c) the second pre-tonic syllable in the polysyllabic word.

14.The accenteme is:

- a) the correlation of varying prominence of syllables in a word;
- b) the distinctive degree of word stress;
- c) the accentuation tendency.

15.The stressed and unstressed syllables beginning with the first stressed syllable up to the last stressed syllable are called:

- a) the pre-head;
- b) the head;
- c) the tail.

16.Which of the nuclear tones starts in the middle of the voice range, rises to a very high pitch and then falls to a very low pitch?

- a) the High-Rise;
- b) the Fall-Rise;
- c) the Rise-Fall.

17.The obligatory element of intonation pattern which is present any syntagma is:

- a) the head;
- b) the pre-head;
- c) the nucleus.

18.Which function of intonation is connected with determining the communicative type of a sentence?

- a) distinctive;
- b) sentence-delimiting;
- c) sentence-forming;

19.The high-rising nuclear tone:

- a) falls from a high or medium pitch level to the low pitch level and then slowly rises to a little below the mid pitch level;
- b) starts at a medium pitch level or a little higher and rises to a very high pitch;
- c) starts in the middle of the voice range, rises to a very high pitch and then falls to a very low pitch.

20.The rhythmical structure of English intonation is achieved by:

- a) recurrence of stressed and unstressed syllables;
- b) recurrence of long and short pauses;
- c) recurrence of falling and rising tones.

GROUP PROJECT

Suprasegmental phonetic means as a system of correlations.

FINAL TEST

A. CHOOSE THE ODD VARIANT.

1. Phonetics is connected with the following non-linguistic sciences:
 a) biology; b) history; c) physics; d) chemistry.

2. Phonetics is connected with stylistics through:
 a) the components of intonation; c) alliteration;
 b) sound alternation; d) onomatopoeia.

3. The methods of direct observation comprise the following modes of phonetic analysis:
 a) by ear; b) by sight; c) by substitution; d) by muscular sensation.

4. There are the following principles of the classification of English vowels:
 a) according to the work of the vocal cords;
 b) according to the movement of the tongue;
 c) according to the length;
 d) according to the stability of articulation.

5. The following cases of assimilation are regressive:
 a) nasal plosion; c) labialization;
 b) lateral plosion; d) loss of aspiration.

6. The following classes of consonants are distinguished according to the active organ of speech:
 a) labial; b) lingual; c) nasal; d) glottal.

7. The following classes of vowels are distinguished according to the horizontal movement of the tongue:
 a) front retracted; b) back advanced; c) central; d) low narrow.

8. Historical phonetics is connected with:
 a) Psychology; c) General history;
 b) Archeology; d) History of the people whose language is studied;

9. The following devices are used to investigate the articulation of speech organs in production of various sounds:
 a) artificial palate; b) X-ray; c) Laryngoscope; d) Oscillograph.

10. Speech sounds have the following acoustic parameters:
 a) pitch; b) tambre; c) duration; d) pausation.

B. MATCH THE EXPERIMENTAL METHOD OF PHONETIC INVESTIGATION WITH THE SPHERE OF ITS APPLICATION.

1. Palatography	a) gives the general characteristics of a speech sound
2. X-ray photography and cinematography	b) observes the work of the vocal cords
3. Oscillography	c) measures the fundamental tone of the vocal cords
4. Laryngoscopy	d) records qualitative variations of sounds
5. Spectrography	e) traces the position and movement of speech organs
6. Kymography	f) determines the interaction of tongue and palate in production of speech sounds
7. Intonography	g) determines length, pitch and intensity of speech sounds

C. ARRANGE THE WORDS AND WORD COMBINATIONS IN THE PROPER ORDER TO DEFINE THE PHONETIC PHENOMENA.

- The phoneme is ...** a) ...and of the muscular sensations... b) ...connected with them... c) ...simultaneously. d) ...a complex perception of... e) ...together with... f) ...all of which react... g) ...the resulting acoustic impressions... h) ...the articulatory movements,... i) ...on mind...
- The syllable is ...** a) ...commonly recognized... b) ...which may be a word... c) ...one or more... d) ...subdivision of... e) ...of utterance,... f) ...a word. g) ...forming a single uninterrupted unit... h) ...or... i) ...speech sound,... j) ...a...
- Word-stress is ...** a) ...qualitative and quantitative... b) ... which is accompanied by... c) ...the singling out of... d) ... pitch of the voice,... e) ...which is usually a vowel. f) ...one or more syllables... g) ...characteristics of the sound,... h) ...the change of the force of utterance,... i) ... in a word...

D. AGREE OR DISAGREE WITH THE STATEMENTS AND CORRECT THE FALSE ONES.

- Phonetics is a branch of phonology.
- Comparative phonetics studies the successive changes in the system of a given language at different stages of its development.
- The sound matter of language is a complex unity of three aspects – articulatory, acoustic and auditory.
- The methods of direct observation aim at determining in what way phonetic phenomena are used in a language to create a certain meaning.

5. According to L. Bloomfield the analysis of the phonological level should be the final stage of the description of a language.
6. W. Twaddel called the phoneme «a family of sounds».
7. L.R. Zinder developed the theory of phonemic independence.
8. N.S. Trubetzkoy defined the phoneme as a unity of both relevant and irrelevant features.
9. The number of phonemes in each language is much greater than the number of sounds actually pronounced.
10. Allophones of different phonemes can differentiate meaning.
11. Contrastive distribution is the type of distribution when one phoneme manifests itself in the form of different allophones which never occur in the same phonetic context.
12. Labiodental consonants are articulated with the upper lip against the edge of the lower teeth.
13. Short vowels in English are lax.
14. There are more vowel phonemes in English than in Russian.
15. The American scientist Stetson tried to prove the validity of the muscular tension theory of syllable formation by recording the lip, tongue and chest movements and measuring variations in the lung and subglottic air pressure.
16. Initially covered syllables begin in a consonant and end in a vowel.
17. Phonetic syllables do not always coincide with orthographic ones.
18. The loudness theory of syllable formation was put forward by Otto Jespersen.
19. In the English language there are two distinctive degrees of word stress – primary and secondary.
20. The English language is characterized by the free word stress.
21. Restricted recessive stress falls on the third syllable from the end in three- and four-syllabic words.
22. Quantitative and qualitative aspects of word stress do not exist separately from the dynamic aspect.
23. The obligatory element of intonation pattern, which is present in any syntagma is called the head.
24. The Rise-Fall is a complex moving tone.
25. The Fall-Rise starts in the middle of the voice range, rises to a very high pitch and then falls to a very low pitch.
26. The sentence-delimiting function of intonation is connected with determining the communicative type of a sentence.
27. The pitch component of intonation consists in the special colouring of a person's voice which shows the speaker's emotions.
28. The tempo of speech is the regular recurrence of stressed syllables at more or less equal intervals of time.
29. Regional variants of standard are restricted to relatively small localities and used by uneducated people.
30. Conservative RP is adopted by the BBC.

E. FILL IN THE GAPS WITH THE APPROPRIATE WORDS OR WORD COMBINATIONS.

1. Special phonetics is concerned with the study of the phonetic structure of a **a)**... .. It is subdivided into **b)**... .., which traces the successive **c)**... in the phonetic **d)**... of a given language at different **e)**... of its **f)**..., and **g)**... .., which is concerned with the **h)**... system of a given language at a **i)**... period.
2. The phoneme is a minimal **a)**... linguistic unit realized in speech in the form of **b)**... .. opposable to other **c)**... of the same language to **d)**... the meaning of morphemes and words.
3. Variants of the phoneme or allophones are **a)**... which occur in **b)**... .. they are entirely **c)**... according to phonetic **d)**..., they are not **e)**... to one another and can not **f)**... meaning.
4. Allophones have one or more **a)**... and **b)**... .. in common and at the same time **c)**... from each other in some **d)**... and belong to one and the same **e)**....
5. Syllables are the smallest pronounceable **a)**... into which **b)**... tend to group themselves and which in their turn are **c)**... into **d)**... .. that are morphemes, words and sentences.

F. CHOOSE THE CORRECT VARIANT.

1. The psychological approach to the phoneme regards it as:
 - a) the minimal sound unit by which the meaning may be differentiated;
 - b) the abstract unit essentially independent of the acoustic and physiological properties associated with it;
 - c) an ideal mental image at which the speaker aims.
2. The first period of J.A. Baudouin de Courtenay's work is called:
 - a) morphemic;
 - b) psychological;
 - c) morphological.
3. Which of the linguists separated phonology from phonetics and considered it to be an independent science?
 - a) S.K. Showmyan
 - b) N.S. Trubetzkoy
 - c) L. Hyelmslev
4. S.K. Showmyan's conception of the phoneme is called cybernetic because:
 - a) he used cybernetic methods of investigation;
 - b) he borrowed cybernetic terms;
 - c) his view were rather obscure.
5. Which of the linguists paid his attention to the fact that phonemic variants may develop into new phonemes and a phoneme may become a phonemic variant?
 - a) L.V. Shcherba;
 - b) J.A. Baudouin de Courtenay;
 - c) L.R. Zinder.

- 6.** L.V. Shcherba defined the phoneme as:
- a) a complex perception of the articulatory movements and of the muscular sensations connected with them together with the resulting acoustic impressions, all of which react on mind simultaneously;
 - b) the shortest generic phonetical perception in a given language capable of being associated with semantic perceptions, of distinguishing words, and of being easily isolated from a word;
 - c) the sum of acoustic impressions and of articulatory movements, of that which is pronounced both mutually dependent.
- 7.** Which theory served the basis for Trubetzkoy's theory of the arch-phoneme?
- a) the theory of phonemic independence;
 - b) the theory of phonological oppositions;
 - c) the morphological phoneme theory.
- 8.** According to the Moscow school of linguistics variations are:
- a) alternation series that can be found within the same morpheme;
 - b) phonemes in the position of neutralization;
 - c) the concrete representations of phonemes in weak positions.
- 9.** According to J.A. Baudouin de Courtenay sounds that are different in character and the different qualities of which represent historical phoneme alternations are called:
- a) correlates;
 - b) homogenes;
 - c) divergents.
- 10.** Whose definition of the phoneme emphasized the mutual exclusiveness of phonemic variants?
- a) D. Jones's;
 - b) L.V. Shcherba's;
 - c) N.S. Trubetzkoy's.
- 11.** From the auditory point of view a speech sound is:
- a) a complex of definite finely coordinated and differentiated movements and positions of various speech organs;
 - b) a sound wave which appears due to the disturbance of the air stream by the movements of speech organs;
 - c) a spoken message which is perceived by the listener's hearing organs and transmitted through the nervous system to the brain.
- 12.** Which branch of phonetics studies all the sound-producing possibilities of the human organs of speech and the ways they are used for purposes of human communication?
- a) general;
 - b) comparative;
 - c) special.
- 13.** Which organ of speech is responsible for syllable formation according to the loudness theory?
- a) vocal cords;
 - b) pharyngeal cavity;
 - c) soft palate.

14.The invariant is:

- a)** a minimal abstract linguistic unit realized in speech in the form of speech sounds;
- b)** the functionally relevant bundle of articulatory features;
- c)** the sound which occurs in different environments.

15.The occlusive consonant is pronounced:

- a)** with incomplete obstruction through which the air passes;
- b)** with the complete obstruction gradually opening into a narrowing;
- c)** with breaking up the complete obstruction by the air stream;

16.Which theory of syllable formation is based upon the fact that each sound has a different carrying power?

- a)** the relative sonority theory;
- b)** the muscular tension theory;
- c)** the loudness theory.

17.According to the three-type-of-consonant theory of syllable formation initially strong consonants occur:

- a)** at the beginning of the syllable;
- b)** at the end of the syllable;
- c)** at the juncture of words.

18.The syllable with the weak stress is called:

- a)** unstressed;
- b)** weakly-stressed;
- c)** strongly-stressed;

19.The correlation of varying prominence of syllables in a word is called:

- a)** the stress;
- b)** the accenteme;
- c)** the stress-pattern.

20.Special prominence in the stressed syllable is achieved through:

- a)** the lowering of the soft palate;
- b)** the more energetic articulation;
- c)** the lip rounding.

21.The stress which falls on a syllable which occupies in all the words of the language one and the same position in relation to the beginning or end of a word is called:

- a)** constant;
- b)** fixed;
- c)** free.

22.Canadian pronunciation standard is based on:

- a)** the RP;
- b)** the GA;
- c)** both the RP and GA.

23.The intervocalic [t] in GA is:

- a)** voiced;
- b)** voiceless;
- c)** omitted.

24. Which variant of American pronunciation is the least regional in character and called General American?

- a) the Western type of pronunciation;
- b) the Eastern type of pronunciation;
- c) the Southern type of pronunciation.

25. Diphthongization of monophthongs and monophthongization of diphthongs is characteristic of:

- a) the Western type of American pronunciation;
- b) the Eastern type of American pronunciation;
- c) the Southern type of American pronunciation.

G. I. GUESS THE PHONETIC PHENOMENON.

1. It is a complicated phenomenon within which the relations between the distinctive features of phonemes are revealed and the stress pattern of a word as well as the rhythmic and intonation structure of an utterance is realized. It may consist of one phoneme or a number of phonemes and has articulatory, acoustic, auditory and functional aspects. It can be a part of a word or a word itself. It is a unit of both segmental and supra-segmental features.
2. This is a complex phenomenon marked by the variations in the pitch of the voice, force or utterance, qualitative and quantitative characteristics of the syllabic phoneme. It organizes the syllables of a word into a language unit and in some cases helps to differentiate words, word combinations and sentences. In the English language it is free, has several degrees, and is influenced by recessive, rhythmical and retentive tendencies.
3. It is a supra-segmental phonetic phenomenon which is formed by a complex unity of the variations in the pitch of the voice, the greater prominence of one or more words among other words, the special colouring of voice, regular recurrence of stressed and unstressed syllables within more or less equal intervals of time and the relative speed with which the sentence is pronounced. It performs sentence-forming, sentence-delimiting, distinctive and attitudinal functions.

G. II. GUESS THE NAME OF THE LINGUIST.

1. This linguist had a broad sphere of interests. Working on the phoneme theory he paid his attention on the fact that the phoneme has a certain amount of independence and investigated the development of variants into separate phonemes and the deterioration of phonemes into variants. He was the first who advanced the idea of the distinctive function of phonemes and considered them to be real units. Defining the phonemic variants he emphasizes the relationship and dialectal unity of individual and universal. He was also interested in the process of syllable formation and tried to explain it in connection with the variations of the force of articulation.

ПРОМЕЖУТОЧНАЯ АТТЕСТАЦИЯ

Экзамен по дисциплине «Основы теории первого иностранного языка. Теоретическая фонетика английского языка» включает беседу по двум теоретическим вопросам билета и определение нескольких терминов из различных разделов дисциплины.

Ответы на каждый вопрос оцениваются по пятибалльной системе и выводится общая средняя арифметическая оценка.

При оценке учитываются следующие качественные показатели ответов:

- Глубина (соответствие изученным теоретическим знаниям);
- Осознанность (соответствие требуемым в программе умениям применять полученную информацию);
- Полнота (соответствие объему программы).

При оценке учитывается также число и характер ошибок (существенные или несущественные). Существенные ошибки связаны с недостаточной глубиной и осознанностью ответа, (например, студент не смог применить теоретические знания для объяснения явлений, для установления причинно-следственных связей, сравнения и классификации явлений и т. д.).

Несущественные ошибки определяются неполнотой ответа (например, упущение из вида какого-либо нехарактерного факта, дополнения при описании процесса, явления, закономерности и т.д.). К ним могут быть также отнесены оговорки, допущенные по невнимательности студента.

Отметка «ОТЛИЧНО» ставится в том случае, если: ответ полный и правильный на основании изученных теорий, концепций. Установлены содержательные межпредметные связи; выдвинутые положения аргументированы и иллюстрированы примерами; в освещении различных взглядов и концепций использован аналитический подход, обоснована своя точка зрения; сделаны содержательные выводы; материал изложен в определенной логической последовательности, литературным языком, с использованием современных научных терминов; ответ самостоятельный.

Отметка «ХОРОШО» ставится в том случае, если: ответ полный и правильный. Выдвигаемые теоретические положения подтверждены примерами; в ответе представлены различные подходы к рассматриваемой проблеме, но их обоснование не аргументировано, отсутствует собственная точка зрения; сделаны краткие выводы; материал изложен в определенной логической последовательности, при этом допущены две-три несущественные ошибки (или оговорки), исправленные по требованию экзаменатора.

Отметка «УДОВЛЕТВОРИТЕЛЬНО» ставится в том случае если: в ответе допущена существенная ошибка. Ответ недостаточно, логически выстроен; базовые понятия употреблены правильно, но обнаруживается недостаток раскрытия теории. Выдвигаемые положения недостаточно аргументированы и не подтверждены примерами; не установлены межпредметные связи; ответ носит преимущественно описательный, а не концептуальный характер; научная терминология используется недостаточно.

Отметка «НЕУДОВЛЕТВОРИТЕЛЬНО» ставится в том случае, если при ответе обнаружено непонимание студентом основного содержания теоретического материала или допущен ряд существенных ошибок, которые студент не может исправить при наводящих вопросах экзаменатора. Студент не может дать научное обоснование проблемы; выводы отсутствуют или носят поверхностный характер; преобладает бытовая лексика, наблюдаются значительные неточности в использовании научной терминологии.

Examination questions

1. The subject matter of phonetics. The contribution of Russian and foreign linguists into the development of phonetics as a linguistic science.
2. The connection of phonetics with other branches of linguistics.
3. General and special phonetics and their interconnection. Historical, descriptive and comparative phonetics as branches of special phonetics.
4. Four aspects of speech sounds. Branches of phonetics based on these aspects and their connection with non linguistic sciences.
5. Methods and instruments of phonetic investigation.
6. Main trends in the phoneme theory
7. The Kazan school of linguistics and its contribution to the development of the phoneme theory.
8. The Leningrad school of linguistics and its contribution to the development of the phoneme theory
9. The Moscow school of linguistics and its contribution to the development of the phoneme theory.
10. The Prague school of linguistics and its contribution to the development of the phoneme theory.
11. The London school of linguistics and its contribution to the development of the phoneme theory.
12. The American school of linguistics and its contribution to the development of the phoneme theory.
13. The definition and characteristics of the phoneme as a unity of three aspects.
14. Phonemic variants and their classification Modification of English vowels in connected speech.
15. Phonemic variants and their classification Modification of English consonants in connected speech.
16. Relevant and irrelevant features of phonemic variants. The invariant. Allophones and phones.
17. Distribution of phonemes. Phonemic oppositions.
18. Classificatory principles of English consonants as the basis for the phonological oppositions in the system of English consonant phonemes.
19. Classificatory principles of English vowels as the basis for the phonological oppositions in the system of English vowel phonemes.
20. Differences in articulation basis of English and Russian vowel and consonant phonemes.
21. The definition general characteristics and structure of syllables.
22. The definition of the syllable. General principles of classification of syllables. Types of syllables.
23. The definition of the syllable. Functional characteristics of syllables.
24. The definition of the syllable. The expiratory theory of syllable formation.
25. The definition of the syllable. The relative sonority theory of syllable formation.
26. The definition of the syllable. The muscular tension theory of syllable formation.

27. The definition of the syllable. The three types of consonant theory of syllable division.
28. The definition of the syllable. The loudness theory of syllable formation.
29. The definition and general characteristics of word-stress. Terms synonymous to stress.
30. The definition of word-stress. The classification of word-stress according to its relevant features.
31. The definition of word-stress. The classification of word-stress according to its position.
32. The definition of word-stress. The degrees of word-stress.
33. The definition of word-stress. Accentuation tendencies of English.
34. The definition of word-stress. Functional characteristics of word-stress.
35. The definition of intonation. Voice timbre and temporal characteristics of intonation.
36. The definition of intonation. Speech melody as a component of English intonation.
37. The definition of intonation. Sentence stress as a component of English intonation.
38. The definition of intonation. Rhythm as a component of English intonation.
39. The definition of intonation. Functional characteristics of intonation.
40. The definition of intonation. Unemphatic and emphatic intonation.
41. The definition of a syntagm and its general characteristics.
42. The definition of a syntagm. The head, pre-head, tail as elements of a syntagm.
43. The nucleus of a syntagm. The principle nuclear tones in English.
44. Standard pronunciation of English and its regional variants. Received Pronunciation and non-RP dialects.
45. National variants of English pronunciation. The main types of American pronunciation.
46. The main differences between Received Pronunciation and General American pronunciation.

Examination Terminology

Topic: Phonetics as a branch of linguistics. General phonetics, special phonetics, historical phonetics, descriptive phonetics, articulatory phonetics, acoustic phonetics, auditory phonetics, phonology, comparative phonetics, segmental phonetics, suprasegmental phonetics, sociophonetics, palatography, x-ray photography(cinematography), laryngoscopy, oscillography, spectrography, kymography, intonography, distributional analysis, articulation.

Topic: Phoneme as a unit of the phonological level. Phoneme, phonemic variant, invariant, phone, distribution of the phoneme, complementary distribution, contrastive distribution, phonological opposition, relevant articulatory features, irrelevant articulatory features, free variation.

Topic: English vowel and consonant phonemes in the phonological system. Monophthong, diphthong, sonorant, voiced consonant, voiceless consonant, occlusive consonant, constrictive consonant, affricate, lateral sonorant, nasal consonant, bilabial consonant, labiodental consonant, interdental consonant, alveolar consonant, post-alveolar consonant, palato-alveolar consonant, velar consonant, mediolingual consonant, pharyngeal consonant, reduction, qualitative reduction, quantitative reduction, zero reduction, accommodation, assimilation, complete assimilation, partial assimilation, intermediate assimilation, regressive assimilation, progressive assimilation, reciprocal assimilation.

Topic: The syllabic structure of English. Syllable, syllabic phoneme, fully-open syllable, fully-closed syllable, initially-covered syllable, finally-covered syllable, syllabograph, the valley of prominence, slope.

Topic: The accentual structure of English. Word-stress, stress pattern, accenteme, fixed word-stress, free word-stress, constant stress, shifting stress, unrestricted recessive accentuation tendency, restricted recessive accentuation tendency, historically rhythmical accentuation tendency, synchronically rhythmical accentuation tendency, retentive accentuation tendency.

Topic: English Intonation. Intonation, speech melody, pitch direction, pitch level, pitch range, sentence stress, syntagmatic stress, syntactic stress, logical stress, emphatic stress, tambre, tempo, rhythm, stress group, proclitics, enclitics, syntactic pause, emphatic pause, hesitation pause, syntagm, pre-head, head, nucleus, communicative center, tail.

Topic. The principal types of English pronunciation. Dialectology, dialect, standard, idiolect, orthoepy, received pronunciation, regional variant of standard, social dialect.

РЕКОМЕНДАЦИИ К ВЫПОЛНЕНИЮ И ОФОРМЛЕНИЮ ПРОЕКТНЫХ ЗАДАНИЙ

После каждого из трех тематических разделов пособия предлагаются проектные задания для коллективной работы.

Цель выполнения проектного задания - обеспечивать формирование следующих компетенций:

- **информационные** (владение информационными технологиями, готовность самостоятельно работать с информацией различных источников, искать, анализировать, извлекать, отбирать, организовывать, преобразовывать, сохранять оформлять и передавать ее);
- **общенаучные** (умение творчески применять теоретические положения для решения практических задач, развитие научно-теоретического мышления, понимание всеобщей взаимосвязи явлений и сущности междисциплинарного подхода в исследованиях);
- **когнитивные** (готовность к постоянному повышению образовательного уровня, саморазвитию, самостоятельному приобретению новых знаний, умение делать самостоятельные обобщения и выводы из положений специальной литературы и наблюдений над фактическим языковым материалом);
- **общепрофессиональные**, в том числе:
 - **лингвистические** (теоретически обоснованное осмысление специфики фонетической системы языка, владение общefonетическим понятийным и терминологическим аппаратом; постижение многоаспектности предмета изучения фонетики и комплексного характера методики его исследования);
 - **коммуникативные** (умение делать четкие, подробные устные сообщения по теме проектного задания, точно формулировать свои мысли и обстоятельно излагать свой взгляд и делать соответствующие выводы, не испытывая при этом затруднений с подбором слов и выражений, демонстрируя владение моделями организации текста, средствами связи и объединением его элементов);
 - **прагматические** (умение использовать потенциал языка и выстраивать стратегии для достижения поставленных коммуникативных задач и желаемого воздействия, учитывать стилистические особенности научного дискурса);
- **специальные** (умение гибко и эффективно использовать язык для общения в научной и профессиональной деятельности).

Проект на тему “The connection of phonetics with non-linguistic sciences” позволяет увидеть связь и влияние на развитие фонетики как науки различных нелингвистических дисциплин, а именно: анатомии, физиологии, психологии, акустики, технических наук, истории, статистики, социологии.

Проект на тему “Correlation of different definitions and theories of the phoneme” позволяет проследить становление теории фонемы в лингвистике, выявить влияние отечественных и зарубежных ученых на формирование научных

взглядов друг друга, установить сходства и отличия в различных подходах к определению сущности фонемы.

Проект на тему “Suprasegmental phonetic means as a system of correlations” позволяет увидеть взаимосвязь фонетических средств супrasegmentного уровня, а именно: слога, словесного ударения и просодических компонентов интонации, а также элементов синтагмы в речи.

В работе над групповым проектом предполагаются следующие этапы:

1. Подготовка (определение темы и целей проекта).
2. Планирование (определение источников информации, способов её сбора, анализа, представления результатов, установление процедур и критериев оценки процесса и итогов разработки проекта, распределение заданий и обязанностей между членами команды).
3. Исследование (сбор информации, решение промежуточных задач, основные инструменты: наблюдения, сопоставления).
4. Анализ и обобщение (анализ информации, оформление результатов, формулировка выводов).
5. Представление проекта (форма представления: электронная презентация в программе Microsoft Power Point, устный отчет в виде выступления на семинарском занятии).
6. Подведение итогов (оценка результатов и самого процесса проектной деятельности учащихся).

Электронная презентация должна обладать определенной структурой (титальный слайд, слайд с информацией об авторе и контактной информацией, содержание с кнопками навигации, основные пункты презентации, выводы, список источников, завершающий слайд, содержащий благодарность). При работе над презентацией студентам необходимо учитывать следующие требования: во-первых, соответствие технических условий демонстрации целям презентации; во-вторых, соответствие презентации особенностям целевой аудитории; в-третьих, наличие единого стилевого оформления для всех слайдов, не отвлекающего внимание слушателей от содержания, использование не более трех цветов и не более семи значимых объектов, так как человек не в состоянии запомнить за один раз более семи пунктов; в-четвертых, комбинирование и время восприятия материалов различных типов: текста, графики, видео; в-пятых, правила расположения информационных блоков на слайде в том числе и графической информации, оформления текстовой информации, таблиц, диаграмм, гиперссылок и списка литературы.

При оформлении презентации необходимо учитывать следующие требования: полнота раскрытия темы; структуризация информации; наличие и удобство навигации; отсутствие грамматических, орфографических и речевых ошибок; отсутствие фактических ошибок, достоверность представленной информации; наличие и грамотное оформление обязательных слайдов; обоснованность и рациональность использования средств мультимедиа и анимационных эффектов; при-

менимость презентации для выбранной целевой аудитории; грамотность использования цветового оформления; использование авторских иллюстраций, фонов, фотографий, видеоматериалов; наличие, обоснованность и грамотность использования фонового звука; логичное размещение и комплектование объектов; единый стиль слайдов.

РЕКОМЕНДАЦИИ К НАПИСАНИЮ РЕФЕРАТОВ

Рефераты по дисциплине «Основы теории первого иностранного языка. Теоретическая фонетика английского языка» носят факультативный характер. Их тематика связана с вопросами модулей, предназначенными для самостоятельного изучения, а именно:

Unit I

1. Contemporary changes in Received English Pronunciation.
2. The Standard pronunciation of Scotland, Wales and Northern Ireland.
3. The Cockney dialect and other local non-RP dialects of England.
4. Eastern and Southern types of American pronunciation.
5. Canadian variant of English.
6. Australian variant of English.

Unit II

7. The acoustic properties of speech sounds.
8. The articulatory aspect of phonemes. Organs of speech.

Unit III

9. Problems of phonostylistics.

Структура реферата обязательно включает следующие компоненты: титул, план, введение, основная часть, заключение, библиография.

Титульный лист содержит/ат реквизиты: полное название высшего учебного заведения и кафедры, наименование темы проекта, фамилию, имя и отчество автора работы с указанием курса и группы, должность, ученую степень, фамилию и инициалы научного руководителя.

План должен отражать структуру реферата, т.е. в нем указываются все заголовки, включая введение, заключение и библиографию с обязательным обозначением страницы начала каждой части.

Во введении отмечается, чему посвящен реферат, обосновывается значимость выбранной темы для изучения курса теоретической фонетики английского языка, формулируются цели и задачи работы, излагаются ее структура и краткое содержание каждого раздела.

Основная часть представляет собой развернутое изложение материала по выбранной теме. Здесь в соответствии с поставленными целями и задачи следует выделить параграфы.

Реферат завершается заключением, в котором в форме связного текста обобщаются основные результаты и выводы.

Библиография состоит из нумерованного списка наименований учебной, научной и справочной литературы, используемой при написании реферата. Он должен быть оформлен в алфавитном порядке и в соответствии с требованиями ГОСТа.

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