Приложение 4

к образовательной программе

РАБОЧАЯ ПРОГРАММА ДИСЦИПЛИНЫ

ФТД.01 Деловой английский язык
(индекс, наименование дисциплины в соответствии с учебным планом)

38.03.05Бизнес-информатика
(код, наименование направления подготовки/специальности)

Бизнес-аналитика
(наименование образовательной программы)

очная
(форма обучения)

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Рабочая программа дисциплины «Деловой английский язык» одобрена на заседании кафедры иностранных языков Северо-Западного института управления

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СОДЕРЖАНИЕ

1. Перечень планируемых результатов обучения по дисциплине, соотнесенных с планируемыми результатами освоения образовательной программы

Дисциплина ФТД.01 «Деловой английский язык»обеспечивает формирование у обучающихся следующих универсальных, общепрофессиональных и профессиональных компетенций*:

ОТФ/ТФ и реквизиты ПС *(при наличии)***	**Код компетенции ****	**Наименование Компетенции ****	**Код индикатора достижения компетенций ****	**Наименование индикатора достижения компетенций ****	**Образовательный результат****
	УК ОС-4	Способен осуществлять коммуникацию, в том числе деловую, в устной и письменной формах на государственном и иностранном(ых) языках	УК ОС-4.1	Владеет системой норм родного языка и нормами иностранного (ых) языка(ов); способен логически и грамматически верно строить устную и письменную речь.	УК-4.1. З-1.***Знает*** знание системы современного русского и иностранного языков; УК-4.1. З-2.***Знает***норм русской грамматики и грамматики иностранного языка, орфографических норм, норм пунктуации. УК-4.1.У-1.***Умеет***составлять грамматически верных предложений, соответствующих базовому уровню владения иностранным языком; УК-4.1.У-2.***Умеет***создавать устные и письменные, монологические и диалогические речевые произведения научных и

					деловых жанров с учетом целей, задач, условий общения, соответствующих базовому уровню владения языком
			УК ОС-4.2	Грамотно строит коммуникацию, исходя из целей и ситуации; использует коммуникативно приемлемые стиль общения, вербальные и невербальные средства взаимодействия с партнёрами	УК-4.2. З-1.***Знает*** основные лексические единицы, характерные для устной и письменной деловой коммуникации; УК-4.2. З-2.***Знает***правила и основных составляющих устного и письменного делового этикета. УК-4.2.У-1.***Умеет***создание устных и письменных, монологических и диалогических речевых произведений научных и деловых жанров с учетом целей, задач, условий общения, включая научное и деловое общение в среде Интернет.
			УК ОС-4.3	Свободно воспринимает, анализирует и критически оценивает устную и письменную деловую информацию на родном и иностранном(	УК-4.3. З-1.***Знает*** виды и особенности письменных текстов, устных выступлений; УК-4.3. З-2.***Знает***наиболее употребительная лексика общего языка и базовую терминологию

				-ых) языке(-ах)	своей профессиональной области. УК-4.3.У-1.***Умеет***свободно общаться и читать оригинальную монографическую и периодическую литературу на иностранном языке по профессиональной тематике и статьи из газет и журналов, издаваемых на иностранных языках и в сети Интернет; УК-4.3.У-2.***Умеет***воспринимать и обрабатывать в соответствии с поставленной целью различной информации, полученной из печатных, аудиовизуальных, аудитивных источников в рамках общественно-политической, профессиональной и социокультурной сфер общения.

** Дисциплина может формировать компетенцию полностью или частично.*
***Должно соответствовать Приложению 1 к образовательной программе*

2. Объем и место дисциплины в структуре образовательной программы

Дисциплина ФТД.01 «Деловой английский язык» составляет 4 зачетных единиц, т.е. 144 академических часа.

На контактную работу с преподавателем по очной форме выделено 56ак.часов: лекция 8ак.часов, практические занятия 48ак.часов, на самостоятельную работу обучающихся выделено 86 часов для очной ф/о.

Дисциплина реализуется с применением дистанционных образовательных технологий (далее – ДОТ).

Изучение дисциплины приходится на 5-8 семестры 3-4 курсов для студентов очной ф/о.

Методологически «Деловой английский язык» опирается на необходимый объем теоретических знаний, а также на умения и навыки, приобретенные ранее в курсе «Иностранный язык».

Форма промежуточной аттестации: зачет (5-7 семестр), зачет с оценкой (8 семестр).

Доступ к системе дистанционных образовательных технологий осуществляется каждым обучающимся самостоятельно с любого устройства на портале: https://lms.ranepa.ru/. Пароль и логин к личному кабинету / профилю предоставляется студенту в деканате.

Все формы текущего контроля, проводимые в системе дистанционного обучения, оцениваются в системе дистанционного обучения. Доступ к видео и материалам лекций предоставляется в течение всего семестра. Доступ к каждому виду работ и количество попыток на выполнение задания предоставляется на ограниченное время согласно регламенту дисциплины, опубликованному в СДО. Преподаватель оценивает выполненные обучающимся работы не позднее 10 рабочих дней после окончания срока выполнения.

3. Содержание и структура дисциплины

3.1. Структура дисциплины
Очная форма обучения
5 семестр

№ п/п	Наименование тем и (или) разделов	ВСЕГО	Объемдисциплины, ак.час												Форма текущего контроля успеваемости, промежуточной аттестации
			Контактная работа обучающихся с преподавателем по видам учебных занятий									Самостоятельная работа			
			Период теоретического обучения						Период промежуточной аттестации (сессия)						
			Занятия лекционного типа		Занятия семинарского типа		ИК	КСР	КЭ	Кат тэк	Контроль	СРкр	СРэк	СР	
			Л	ВЛ	ЛР	ПЗ									
Тема 1	History of ICT	9	2			3								4	Т
Тема 2	Introduction to ICT System	7				3								4	Т

Тема 3	ICT in the Workplace	7				3							4	Т
Тема 4	Software Development	9				3							6	Т, Э
Промежуточная аттестация		4								4				зачет
Итого 5 семестр		**36**	**2**			**12**				**4**			**18**	

6семестр

№ п/п	**Наименование тем и (или) разделов**		**Объемдисциплины, ак.час**												Форма текущего контроля успеваемости, промежуточной аттестации
		ВСЕГО	**Контактная работа обучающихся с преподавателем по видам учебных занятий**									**Самостоятельная работа**			
			Период теоретического обучения						**Период промежуточной аттестации (сессия)**						
			Занятия лекционного типа		**Занятия семинарского типа**		**ИК**	**КСР**	**КЭ**	**Кат тэк**	**Контро**	**СРкр**	**СРэк**	**СР**	
			Л	**ВЛ**	**ЛР**	**ПЗ**									

											ль				
Тема 1	The Internet	9	2			3								4	Т
Тема 2	Efficiency in computer systems	7				3								4	Т
Тема 3	E-commerce and E-government	7				3								4	Т
Тема 4	Computing and Ethics	9				3								6	Т, Э
Промежуточная аттестация										4					зачет
Итого **6 семестр**		**36**	**2**			**12**				**4**				**18**	

7семестр

№ п/п	**Наименование тем и**		**Объемдисциплины, ак.час**		Форма текущего контроля
		ВСЕГО	**Контактная работа обучающихся**	**Самостоятельная**	

	(или) разделов		с преподавателем по видам учебных занятий									работа			успеваемости, промежуточной аттестации
			Период теоретического обучения						Период промежуточной аттестации (сессия)						
			Занятия лекционного типа		Занятия семинарского типа		ИК	КСР	КЭ	Кат тэк	Контроль	СРкр	СРэк	СР	
			Л	ВЛ	ЛР	ПЗ									
Тема 1	Introduction to programming	12	2			4								6	Т
Тема 2	Coding	8				4								4	Т
Тема 3	Variables	8				4								4	Т
Тема 4	The first steps with Visual C++	8				4								4	Т, Э

Промежуточная аттестация	4								4				зачет
Итого7 семестр	**36**	**2**			**12**				**4**			**18**	

8семестр

№ п/п	**Наименование тем и (или) разделов**		**Объемдисциплины, ак.час**												Форма текущего контроля успеваемости, промежуточной аттестации
		ВСЕГО	**Контактная работа обучающихся с преподавателем по видам учебных занятий**									**Самостоятельная работа**			
			Период теоретического обучения						**Период промежуточной аттестации (сессия)**						
			Занятия лекционного типа		**Занятия семинарского типа**		**ИК**	**КСР**	**КЭ**	**Кат тэк**	**Контроль**	**СРкр**	**СРэк**	**СР**	
			Л	**ВЛ**	**ЛР**	**ПЗ**									
Тема 1	Introduction to fundamental concept	11	2			4								5	Т

	for Business Analysis													
Тема 2	Decision making, data and information	11				6							5	Т
Тема 3	Financial modelling	9				6							3	Т, Э
Промежуточная аттестация									0	9				Зачет с оценкой
Итого **8 семестр**		**36**	**2**			**12**				**9**			**13**	
Итого по дисциплине		**144**	**8**			**48**				**21**			**67**	

Используемые сокращения:

Л – лекции - занятия, предусматривающие преимущественную передачу учебной информации обучающимся педагогическими работниками организации и (или) лицами, привлекаемыми организацией к реализации образовательных программ на иных условиях,).

ВЛ – видео лекции.

ЛР – лабораторные работы.

ПЗ – практические занятия (за исключением лабораторных работ).

ИК – индивидуальные консультации.

КСР – контроль самостоятельной работы

КЭ – консультации перед экзаменом

Каттэк – контактная работа на аттестацию в период экзаменационных сессий

Контроль - контактная работа на аттестацию в период экзаменационных сессий для заочной формы обучения
СРкр – самостоятельная работа на подготовку курсовой работы/ курсового проекта.
СРэк – самостоятельная работа на подготовку к экзамену.
СР – самостоятельная работа в семестре на подготовку к учебным занятиям.

3.2. Содержание дисциплины

5 семестр

Тема 1. HistoryofICT. УКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. The first use a computer in business.
2. When and where the first computers came from. The first inventor of the office computer.
3. What the computer worked like in 1960s.
4. Who and when invented the word processing.

Тема 2. Introduction to ICT System УКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. ICT systems and their usage. Types of ICT systems.
2. Information systems, control systems, communication systems.
3. Input, output and system diagrams. Garbage in, garbage out (GIGO).
4. An ICT system diagram.

Тема 3. ICTintheWorkplaceУКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. The role of ICT in business.
2. The impact of ICT on work. Teleworking and outsourcing.
3. The impact of ICT on education. Internet and Intranet.
4. Virtual conference. Virtual environment. Virtual-meetings software.

Тема 4. SoftwareDevelopmentУКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. The definition and difference between software and hardware.
2. Three main models used in software development planning. Waterfall, iterative and prototyping model.
3. The open source software: advantages and disadvantages.
4. Website development.

6 семестр

Тема 1. TheInternetУКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. The on-going development of the Internet.
2. The ways of transferring data over the Internet.
3. The changes in the amount of traffic for different protocols.
4. The phenomenon of Web 2.0.

Тема 2. Efficiency in computer systems УКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. Factors which should be taken into account in making computer systems efficient.
2. Influence of reliability, security, speed, support requirements and overall cost to the efficiency of computers.
3. Different types of reliability in a system in the Internet.
4. Development of computer systems.

Тема 3. E-commerce and E-government УКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. E-commerce and its main characteristics.
2. Activities which relate to e-commerce.
3. Different models of e-commerce work.
4. The barriers to adoption of e-commerce.
5. E-government and its main characteristics.

Тема 4. Computing and Ethics УКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. Ethical principles of computer professionals.
2. The importance of the ability to justify decisions.
3. The role of law and regulation as sources of justification.
4. The role of principles as a means of justifying decision-making.

7 семестр

Тема 1. Introduction to programmingУКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:
1. What does it mean to program?
2. Algorithm
3. JSP
4. Sequence-Selection-Iteration

Тема 2. CodingУКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. The unified modeling language (UML)
2. Source code
3. Development tools for C++
4. Compilingandlinking

Тема 3. VariablesУКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. Declaring variables
2. Initiating variables
3. Assignment of values
4. An entry program

Тема 4. The first steps with Visual C++УКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. Start page – Visual C++
2. Create a new project
3. Win 32 Console application
4. Project – Add new item

8 семестр

Тема 1.Introduction to fundamental concept for Business AnalysisУКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. Getting to grips with the basics
2. Working through the basics
3. If statement, else if
4. Comparison operators
5. The switch statement

Тема 2. Decision making, data and informationУКОС-4.1, 4.2, 4.3

Вопросыдляобсуждения:

1. Decision making
2. Data and Information

3. Sources of Data
4. Collecting Data
5. Sampling
6. Information requirements for effective decision making

Тема 3. FinancialmodelingУКОС-4.1, 4.2, 4.3

Вопросы для обсуждения:

1. Costs, revenue, profit and contribution
2. Using a graph to illustrate financial models
3. Non-linear relationships
4. Applications of interest rate calculation

4. Типы оценочных материалов, показатели и критерии оценивания

1.1. Оценочные материалы по дисциплине ФТД.01 «Деловой английский язык»входят в состав оценочных материалов по образовательной программе. Совокупность оценочных материалов по всем дисциплинам (модулям)образовательной программы составляет фонд оценочных средств (далее – ФОС).ФОС используется при проведении текущего контроля успеваемости и промежуточной аттестации обучающихся с целью оценивания достижения обучающимися планируемых результатов обучения.

4.2. ФОС разработан как комплекс проверочных заданий различного типа и уровня сложности, включает критерии и шкалы оценивания, а также «ключи» правильных ответов. ФОСформируется как отдельный документ и хранится в электронном виде, доступ к ФОС предоставлен ограниченному кругу лиц.

4.3. Для самостоятельной работы обучающихся при подготовке к текущему контролю успеваемости и промежуточной аттестации в рабочих программах дисциплин размещены типовые проверочные задания, которые можно условно разделить на задания закрытого, комбинированного и открытого типов (тест, эссе и т.п.).

Задания закрытого типа — это тестовые задания, в которых каждый вопрос сопровождается готовыми вариантами ответов, из которых необходимо выбрать один или несколько правильных.

Задания комбинированного типа – это тестовые задания, в которых каждый вопрос сопровождается готовыми вариантами ответов, из которых необходимо выбрать один или несколько правильных и обосновать свой выбор.

Задания открытого типа — это задания, в которых на каждый вопрос должен быть предложен развернутый обоснованный ответ.

В зависимости от типа задания рекомендованы определенная последовательность выполнения и система оценивания выполнения заданий.

4.4. Типы заданий, сценарии выполнения, критерии оценивания

ТИП ЗАДАНИЯ	ИНСТРУКЦИЯ	СЦЕНАРИИ ВЫПОЛНЕНИЯ	КРИТЕРИИ ОЦЕНИВАНИЯ
Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных	Прочитайте текст, выберите правильный ответ	1.Внимательно прочитать текст задания и понять, что в качестве ответа ожидается только один из предложенных вариантов. 2. Внимательно прочитать предложенные вариант-ты ответа. 3. Выбрать один верный ответ. 4. Записать только номер (или букву) выбранного варианта ответа (например, 3 или В).	Ответ считается верным, если правильно указана цифра или буква
Задание закрытого типа на установление соответствия	Прочитайте текст и установите соответствие	1.Внимательно прочитать текст задания и понять, что в качестве ответа ожидаются пары элементов. 2. Внимательно прочитать оба списка: список 1 – вопросы, утверждения, факты, понятия и т.д.; список 2 – утверждения, свойства объектов и т.д. 3. Сопоставить элементы списка 1 с элементами списка 2, сформировать пары элементов. 4. Записать попарно буквы и цифры (в зависимости от задания) вариантов ответа (например, А1 или Б4).	Ответ считается верным, если правильно указаны цифры или буквы
Задание закрытого типа с выбором нескольких	Прочитайте текст, выберите правильные ответы	1.Внимательно прочитать текст задания и понять, что в качестве ответа ожидается несколько правильных ответов из предложенных вариантов.	Ответ считается верным, если правильно установлены все соответствия (позиции из

правильных ответов из нескольких вариантов предложенных		2. Внимательно прочитать предложенные вариант-ты ответа. 3. Выбрать несколько правильных ответов. 4. Записать только номера (или буквы) выбранного варианта ответа (например, 1 4 или А Г).	одного столбца верно сопоставлены с позициями другого)
Задание закрытого типа на установление последовательности	Прочитайте текст и установите последовательность	1. Внимательно прочитать текст задания и понять, что в качестве ответа ожидается последовательность элементов. 2. Внимательно прочитать предложенные варианты ответа. 3. Построить верную последовательность из предложенных элементов. 4. Записать буквы/цифры (в зависимости от задания) вариантов ответа в нужной последовательности (например, БВА или 135).	Ответ считается верным, если правильно указана вся последовательность цифр
Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора	Прочитайте текст, выберите правильный ответ и запишите аргументы, обосновывающие выбор ответа	1.Внимательно прочитать текст задания и понять, что в качестве ответа ожидается только один из предложенных вариантов. 2. Внимательно прочитать предложенные варианты ответа. 3. Выбрать один верный ответ. 4. Записать только номер (или букву) выбранного варианта ответа.	Ответ считается верным, если правильно указана цифра или буква и приведены корректные аргументы, используемые при выборе ответа

		5. Записать аргументы, обосновывающие выбор ответа (например, 4 текст обоснования).	
Задание открытого типа с развернутым ответом	Прочитайте текст и запишите развернутый обоснованный ответ	1. Внимательно прочитать текст задания и понять суть вопроса. 2.Продумать логику и полноту ответа. 3.Записать ответ, используя четкие компактные формулировки. 4.В случае расчетной задачи, записать решение и ответ	Ответ считается верным: 1. Отсутствие фактических ошибок. 2. Раскрытие объема используемых понятий (полнота ответа). 3.Обоснованность ответа (наличие аргументов). 4. Логическая последовательность излагаемого материала.

4.5. Общаяшкала оценивания результатов текущего контроля успеваемости и промежуточной аттестации обучающихся с применением БРС

Итоговая балльная оценка	Традиционная система	Бинарная система	ECTS	
			Для традиционной системы	Для бинарной системы
95-100	Отлично	Зачтено	A	P/ Passed
85-94			B	P/ Passed
75-84	Хорошо		C	P/ Passed
65-74			D	P/ Passed
55-64	Удовлетворительно		E	P/ Passed
0-54	Неудовлетворительно	Не зачтено	F	F/Failed

Соотношение баллов за текущий контроль успеваемости и промежуточную аттестацию, а также повторную промежуточную аттестацию:

Максимальная сумма баллов за текущий контроль успеваемости	Максимальная сумма баллов за промежуточную аттестацию	Максимальная итоговая балльная оценка	Максимальная сумма баллов за повторную промежуточную аттестацию
60 баллов	40 баллов	100 баллов	100 баллов

5. Формы аттестации, типовые оценочные материалы для текущего контроля успеваемости обучающихся, критерии и шкалы оценивания по контрольным точкам

5.1. В ходе реализации дисциплиныиспользуются следующие формы текущего контроля успеваемости обучающихся (в том числе, задания к контрольным точкам):Т - тестирование, Э - эссе.

5 семестр

Типовые материалы текущего контроля успеваемости обучающихся к теме 1 Historyof ICT.

Тест.

Question 1: Who is credited with inventing the first programmable computer?
A) Charles Babbage
B) Alan Turing
C) Ada Lovelace
D) John von Neumann

Question 2: What was the primary purpose of ENIAC, one of the earliest electronic computers?
A) Weather forecasting
B) Cryptography
C) Artillery firing tables calculation
D) Space exploration planning
Question 3: Which company introduced the first commercially successful personal computer in 1981?
A) Apple
B) IBM
C) Microsoft
D) Dell
Question 4: The term “World Wide Web” was coined by which scientist?
A) Tim Berners-Lee
B) Vinton Cerf
C) Robert Kahn
D) Steve Jobs
Question 5: In what year did ARPANET, a precursor to the modern internet, send its first message?
A) 1969
B) 1975
C) 1983
D) 1990
Question 6: What programming language was originally developed for creating web pages?
A) JavaScript
B) HTML
C) Python
D) PHP
Question 7: Which technology allowed early computers to store data using magnetic tapes?
A) Floppy disks
B) Hard drives
C) Magnetic tape storage
D) Optical discs
Question 8: When was the first transistor invented?
A) 1947
B) 1955
C) 1960
D) 1970
Question 9: Who founded Google Inc., now known as Alphabet Inc.?

A) Larry Page and Sergey Brin
B) Bill Gates and Paul Allen
C) Mark Zuckerberg and Eduardo Saverin
D) Jeff Bezos and Andy Jassy
Question 10: What does TCP/IP stand for?
A) Transmission Control Protocol / Internet Protocol
B) Transport Control Process / Interface Program
C) Telecommunication Processing Code / Interchange Program
D) Technical Connection Procedures / Internal Programming
Answer: A) Transmission Control Protocol / Internet Protocol

Типовые материалы текущего контроля успеваемости обучающихся к теме 2 IntroductiontoICTSystem.

Тест.

Question 1: What does ICT stand for?
A) Integrated Computer Technologies
B) Interactive Communications Tools
C) Information and Communication Technology
D) Intelligent Computing Techniques
Question 2: Which component of an ICT system processes input into useful output?
A) Hardware
B) Software
C) Network
D) Data Storage
Question 3: What type of software allows users to perform specific tasks like word processing or spreadsheet calculations?
A) Operating System
B) Application Software
C) Utility Programs
D) System Software
Question 4: Which device converts digital signals from a computer into analog signals that can be transmitted over telephone lines?
A) Router
B) Modem
C) Switch
D) Hub
Question 5: What is the main function of an operating system?
A) To provide entertainment applications
B) To manage hardware resources and run programs

C) To secure online transactions
D) To process emails
Question 6: Which layer of the OSI model handles routing decisions between networks?
A) Physical Layer
B) Data Link Layer
C) Network Layer
D) Transport Layer
Question 7: What is the purpose of firewalls in an ICT system?
A) To speed up network connections
B) To protect against unauthorized access
C) To increase bandwidth efficiency
D) To reduce power consumption
Question 8: Which protocol is used for sending emails across different servers?
A) HTTP
B) FTP
C) SMTP
D) DNS
Question 9: What are the two types of computer memory commonly referred to?
A) RAM and ROM
B) CPU and GPU
C) SSD and HDD
D) Wi-Fi and Bluetooth
Question 10: What does WWW stand for?
A) Wireless Worldwide Web
B) World Wide Web
C) Web Work Wizard
D) Web Writing Workshop

Типовыематериалытекущегоконтроляуспеваемостиобучающихсяктеме 3 ICTintheWorkplace.

Тест.

Question 1: What is the primary benefit of using cloud computing services in a business environment?
A) Reduced need for physical infrastructure
B) Increased security risks
C) Higher costs compared to traditional systems
D) Decreased collaboration among employees
Question 2: Which tool would you use to track project progress and deadlines effectively?
A) Word processor

B) Spreadsheet application
C) Project management software
D) Email client
Question 3: How do virtual meetings contribute to workplace productivity?
A) By reducing travel time and expenses
B) By increasing face-to-face interactions
C) By requiring more preparation than regular meetings
D) By limiting participation to local team members only
Question 4: What role does intranet play in enhancing internal communication within organizations?
A) It provides public information accessible to everyone outside the organization.
B) It facilitates sharing confidential documents and policies internally.
C) It slows down decision-making processes.
D) It increases external marketing efforts.
Question 5: Why is it important for businesses to implement cybersecurity measures?
A) To prevent loss of sensitive customer data
B) To avoid legal compliance issues
C) Both A and B
D) Neither A nor B
Question 6: What advantage does video conferencing offer in remote work settings?
A) Enhanced visual interaction and engagement
B) Limited opportunities for informal discussions
C) Increased reliance on written communication
D) Lowered employee morale
Question 7: How has mobile technology impacted workplace dynamics?
A) Employees have limited flexibility regarding working hours.
B) Mobile devices restrict accessibility to critical tools.
C) Remote work capabilities have increased significantly.
D) Collaboration tools are less effective when accessed via smartphones.
Question 8: What challenge might arise from implementing new technologies in the workplace?
A) Resistance to change from employees unfamiliar with new tools
B) Improved organizational efficiency
C) Easier training sessions due to advanced features
D) Reduction in operational costs
Question 9: Why should companies invest in training their staff on emerging ICT trends?
A) To ensure outdated skills remain relevant

B) To enhance adaptability and competitiveness
C) To create unnecessary financial burdens
D) To decrease overall workforce satisfaction
Question 10: What feature makes enterprise resource planning (ERP) systems valuable for large corporations?
A) They focus solely on accounting and finance modules.
B) They integrate various departments' operations onto a single platform.
C) They replace all existing legacy systems immediately upon implementation.
D) They eliminate the need for human intervention entirely.

Типовые материалы текущего контроля успеваемости обучающихся к теме 4 SoftwareDevelopment.

Тест.
Question 1: What is the initial phase of the software development life cycle (SDLC)?
A) Testing
B) Requirements Gathering
C) Design
D) Implementation
Question 2: Agile methodology emphasizes:
A) Waterfall approach
B) Iterative and incremental development
C) Strict documentation requirements
D) Sequential steps without overlap
Question 3: Which programming paradigm focuses primarily on reusable objects rather than procedures?
A) Object-Oriented Programming (OOP)
B) Functional Programming
C) Procedural Programming
D) Logic-Based Programming
Question 4: What is the purpose of version control systems such as Git?
A) To optimize database queries
B) To monitor user activity
C) To track changes in source code files
D) To encrypt sensitive data
Question 5: Unit testing typically involves:
A) Testing individual components of the software independently
B) End-to-end integration tests
C) User acceptance testing
D) Performance benchmarking

Question 6: Debugging refers to:
A) Identifying and fixing errors in code
B) Optimizing algorithms for better performance
C) Documenting technical specifications
D) Deploying applications to production environments
Question 7: What is continuous integration (CI)?
A) Regularly merging developer's working copies to a shared repository
B) Creating multiple branches for each feature separately
C) Avoiding automated builds altogether
D) Releasing updates manually after thorough manual testing
Question 8: Scrum is best described as:
A) An iterative framework for managing product backlogs
B) A document-driven approach focusing on detailed plans
C) A top-down hierarchical structure for managing projects
D) A technique for optimizing server configurations
Question 9: Refactoring means:
A) Rewriting entire sections of code
A) Adding new functionalities directly
B) Improvements to the internal structure of the code without changing functionality
C) Upgrading hardware for faster execution
Question 10: What is a common metric used to measure software quality?
A) Lines of code (LOC)
B) Mean Time Between Failures (MTBF)
C) Click-through rate (CTR)
D) Return on Investment (ROI)

Эссе.

1. The Evolution of Software Development Methodologies: Discuss the transition from waterfall to agile and DevOps approaches.
2. Challenges in Scaling Software Projects: Explore scalability issues and their implications for large teams and organizations.
3. Innovation Driven by Open Source Software: Highlight the contributions of open-source communities to modern-day software innovation.
4. Ethics in Software Development: Debate whether ethics should guide the creation of software and its impact on society.
5. Artificial Intelligence and Its Role in Modern Software Development: Evaluate AI's influence on coding, testing, and maintenance phases.

6 семестр

Типовые материалы текущего контроля успеваемости обучающихся к теме 1 TheInternet.

Тест.

Question 1: What is the full form of IP address?
A) Individual Port Address
B) Internet Personal Address
C) Internet Protocol Address
D) International Privacy Address
Question 2: Which of these protocols is used for transferring hypertext documents over the internet?
A) HTTP
B) FTP
C) POP3
D) IMAP
Question 3: What does DNS stand for?
A) Domain Name Server
B) Dynamic Navigation Service
C) Digital Networking System
D) Distributed Node Structure
Question 4: Which part of the URL identifies the website's domain name?
A) Protocol (http://)
B) Subdomain (www.)
C) Top-level domain (.com, .org)
D) Path (/index.html)
Question 5: What is the main difference between wired and wireless internet connections?
A) Speed
B) Reliability
C) Type of connection medium
D) All of the above
Question 6: What is a firewall?
A) A program that prevents unauthorized access to a network
B) A virus protection software
C) A backup solution for lost data
D) A type of antispam filter
Question 7: Which protocol is specifically designed for file transfer?
A) FTP
B) HTTPS
C) SSH

D) DHCP
Question 8: What does VPN stand for?
A) Virtual Private Network
B) Very Protected Network
C) Verified Public Nodes
D) Validated Peer Nodes
Question 9: What is phishing?
A) Trying to steal someone's identity through fraudulent emails or websites
B) Fishing for compliments online
C) Sharing too much personal information publicly
D) None of the above
Question 10: What is the significance of IPv6 compared to IPv4?
A) Larger address space allowing for more unique addresses
B) Smaller packet size leading to faster transmission speeds
C) Compatibility with older hardware
D) No significant differences

Типовые материалы текущего контроля успеваемости обучающихся к теме 2 Efficiencyincomputersystems.

Тест.

Question 1: What is the primary goal of cache memory in improving computer efficiency?
A) Increase disk storage capacity
B) Reduce processor heat generation
C) Minimize latency for frequently accessed data
D) Expand the number of available cores
Question 2: Which optimization technique aims at minimizing redundant computations by storing intermediate results?
A) Memoization
B) Parallelism
C) Vectorization
D) Pipelining
Question 3: What impact does parallel processing have on computational efficiency?
A) Decrease total computation time by distributing workload
B) Slow down processing because of synchronization overhead
C) Reduce energy consumption per task
D) Increase I/O bottlenecks
Question 4: Which algorithm design strategy divides problems into smaller subproblems to improve efficiency?

A) Divide-and-conquer
B) Greedy method
C) Backtracking
D) Branch-and-bound
Question 5: What does Big O notation represent in terms of algorithmic efficiency?
A) Best-case scenario runtime complexity
B) Average-case scenario runtime complexity
C) Worst-case scenario runtime complexity
D) Memory usage pattern
Question 6: How does compression help in achieving greater efficiency in data storage and transmission?
A) Removes duplicate data entries
B) Encrypts data for added security
C) Converts data into binary format
D) Reduces the amount of data needed to represent content
Question 7: What is the purpose of load balancing in distributed systems?
A) Ensure equal distribution of traffic across servers
B) Prevent caching mechanisms
C) Increase response times during peak loads
D) Reduce redundancy in data centers
Question 8: What is the primary goal of cache memory in improving computer efficiency?
A) Increase disk storage capacity
B) Reduce processor heat generation
C) Minimize latency for frequently accessed data
D) Expand the number of available cores
Question 9: Which optimization technique aims at minimizing redundant computations by storing intermediate results?
A) Memoization
B) Parallelism
C) Vectorization
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Question 10: What impact does parallel processing have on computational efficiency?
A) Decrease total computation time by distributing workload
B) Slow down processing because of synchronization overhead
C) Reduce energy consumption per task
D) Increase I/O bottlenecks

Типовыематериалытекущегоконтроляуспеваемостиобучающихсяктеме 3 E-commerceandE-government.

Тест.

Question 1: What is the primary objective of e-commerce platforms?
A) Facilitate online buying and selling of goods/services
B) Provide free shipping globally
C) Regulate international trade laws
D) Offer discounts exclusively to government officials
Question 2: Which factor contributes significantly to the success of an e-commerce business?
A) Offline presence in major cities
B) Robust logistics and delivery solutions
C) Exclusive partnerships with luxury brands
D) Limiting payment options to credit cards only
Question 3: What distinguishes B2B (Business-to-Business) commerce from B2C (Business-to-Consumer) commerce?
A) Target audience being other businesses instead of end consumers
B) Use of cash payments exclusively
C) Focus on retail sales promotions
D) Sales tax exemption for all purchases
Question 4: What is a key characteristic of e-government initiatives?
A) Privatization of essential public services
B) Digitization of administrative processes and citizen services
C) Reduction in employment rates in the private sector
D) Mandatory adoption of cryptocurrency payments
Question 5: Which service offered by many governments exemplifies e-governance?
A) Online voter registration and election voting
B) Free public transportation passes
C) Direct mail advertising campaigns
D) Traditional paper-based census surveys
Question 6: What is a potential drawback associated with e-commerce expansion?
A) Over-reliance on brick-and-mortar stores
B) Security breaches exposing consumer data
C) Unnecessary taxation reduction
D) Increased competition from offline retailers
Question 7: What does ERP (Enterprise Resource Planning) aim to achieve in both e-commerce and e-government contexts?
A) Integration of core business processes across departments
B) Exclusively handling payroll and HR functions
C) Only applicable to small-scale enterprises
D) Outdated concept no longer used in modern organizations

Question 8: Which technological advancement enables seamless cross-border e-commerce transactions?
A) Blockchain-based smart contracts
B) Localized currency exchange booths
C) Paper check clearing systems
D) Restrictive import tariffs
Question 9: How does e-government benefit citizens?
A) Increases bureaucratic delays
B) Provides convenient access to public services digitally
C) Limits transparency in governance
D) Requires extensive paperwork submission
Question 10: What challenges do developing countries often face while adopting e-government practices?
A) High levels of literacy and education
B) Infrastructure limitations and lack of reliable connectivity
C) Advanced cybersecurity frameworks already established
D) Universal access to high-speed broadband

Типовые материалы текущего контроля успеваемости обучающихся к теме 4 ComputingandEthics.

Тест.

Question 1: What principle governs ensuring fair treatment of individuals affected by computing systems?
A) Confidentiality
B) Accountability
C) Justice
D) Autonomy
Question 2: Which ethical theory suggests actions are right if they maximize happiness for the greatest number of people?
A) Utilitarianism
B) Kantian Ethics
C) Virtue Ethics
D) Social Contract Theory
Question 3: What is the ethical concern related to facial recognition technology?
A) Energy consumption
B) Invasion of privacy
C) Job creation
D) Environmental pollution
Question 4: According to professional codes of conduct, who bears responsibility for the ethical behavior of computing professionals?

A) Users
B) Developers
C) Government regulators
D) Ethicists
Question 5: What is a primary ethical consideration in artificial intelligence development?
A) Maximizing profits
B) Ensuring fairness and avoiding bias
C) Meeting deadlines
D) Reducing carbon emissions
Question 6: What ethical dilemma arises when collecting user data without consent?
A) Violation of intellectual property rights
B) Misuse of copyrighted material
C) Breach of trust and invasion of privacy
D) Distribution of malware
Question 7: What is the moral obligation of software engineers when designing autonomous vehicles?
A) Maximize fuel efficiency
B) Prioritize passenger safety over pedestrians
C) Ensure vehicles comply with regulations
D) Balance safety concerns equitably
Question 8: What constitutes responsible disclosure in cybersecurity?
A) Reporting vulnerabilities privately to the vendor
B) Publicly announcing vulnerabilities immediately
C) Ignoring discovered flaws
D) Selling vulnerability details to third parties
Question 9: Which action violates ethical standards in software engineering?
A) Performing rigorous testing before release
B) Implementing strong encryption for sensitive data
C) Placing backdoors in software intentionally
D) Following transparent coding guidelines
Question 10: What ethical issue arises concerning algorithmic decision-making?
A) Algorithms cannot account for cultural diversity
B) Lack of interpretability leads to biased outcomes
C) Computational inefficiencies hinder deployment
D) Cost-benefit analyses become obsolete

Эссе.

1. Ethical Implications of Artificial Intelligence. Examining the ethical dilemmas surrounding the use of AI in healthcare, criminal justice, hiring processes, and military applications.
2. Privacy Concerns in the Age of Surveillance. Exploring the balance between national security interests and individual privacy rights in light of mass surveillance technologies.
3. Bias in Algorithmic Decision-Making. Investigating how biases creep into algorithms and their far-reaching societal impacts.
4. Cybersecurity Ethics: Responsibilities and Rights. Addressing questions around hacking, whistleblowing, and responsibilities of companies to protect user data.
5. Intellectual Property Rights in Software Development. Discussing ownership disputes, piracy, patent wars, and open-source philosophies.
6. Internet Freedom vs Regulation. Balancing freedom of speech with censorship, fake news propagation, hate speech, and harmful content regulation.
7. Digital Divide and Equality. Analyzing disparities in access to technology and their broader socioeconomic ramifications

7 семестр

Типовые материалы текущего контроля успеваемости обучающихся к теме1 Introductiontoprogramming

Тест

Question 1: What is the basic unit of any programming language?

A) Function

B) Variable

C) Statement

D) Class

Question 2: What type of error occurs if there is a syntax mistake in your code?

A) Logical Error

B) Syntax Error

C) Runtime Error

D) Semantic Error

Question 3: Which of the following statements correctly defines a variable in Python?

A) variable = value

B) value = variable

C) let variable = value

D) var variable = value

Question 4: What is the purpose of comments in programming languages?

A) To execute additional logic
B) To define variables
C) To make notes explaining the code
D) To declare constants
Question 5: What will be the result of executing this statement in Python: print("Hello, world!")?
A) Hello, world!
B) hello, world!
C) Error
D) Empty string
Question 6: Which operator is used for division in most programming languages?
A) +
B) -
C) *
D) /
Question 7: What is meant by debugging in programming?
A) Fixing logical and syntactical errors in code
B) Running a program repeatedly
C) Commenting out parts of the code
D) Updating libraries
Question 8: What is a loop in programming?
A) A sequence of instructions executed once
B) A mechanism to repeat a block of code until a condition is met
C) A way to stop the execution of a program
D) A type of variable declaration
Question 9: What is the correct order of precedence for arithmetic operators (+, -, *, /)?
A) + > * > - > /
B) * > / > + > -
C) / > * > + > -
D) There is no predefined order
Question 10: What happens when you attempt to divide by zero in most programming languages?
A) The program continues normally
B) The operation returns infinity
C) An exception/error is raised
D) The result is undefined but doesn't cause any issue

Типовые материалы текущего контроля успеваемости обучающихся к теме2Coding

Тест
Question 1: What is the purpose of indentation in Python?

A) Indentation determines the scope of loops and conditional blocks.

B) Indentation improves readability but has no effect on execution.

C) Indentation specifies the start and end of functions.

D) Indentation helps reduce memory usage.

Question 2: What is the output of the following JavaScript code snippet? console.log(typeof null);

A) object

B) null

C) undefined

D) boolean

Question 3: In Python, how do you iterate over elements of a list called 'my_list'?

A) for i in my_list:

B) while i in my_list:

C) foreach(i in my_list):

D) map(my_list, lambda x: x)

Question 4: What does the return keyword do in a function?

A) Terminates the function and outputs a specified value.

B) Continues execution of the next line inside the function.

C) Prints the return value to the console.

D) Creates a new instance of the function.

Question 5: What is the result of running the following JavaScript code? constarr = [1, 2, 3];arr.push(4);console.log(arr.length);

A) 3

B) 4

C) 5

D) Error

Question 6: In Python, what does the expression [i*2 for i in range(5)] produce?

A) [0, 2, 4, 6, 8]

B) [1, 2, 3, 4, 5]

C) [2, 4, 6, 8, 10]

D) [0, 1, 2, 3, 4]

Question 7: What is the purpose of the try-catch construct in JavaScript?

A) Catch syntax errors before they occur.

B) Handle exceptions and errors gracefully.

C) Define a function that executes automatically.

D) Create infinite loops safely.

Question 8: In Python, what is the correct way to open a file named example.txt for reading?

A) open('example.txt', 'r')

B) readFile('example.txt')

C) file.open('example.txt')

D) new FileReader('example.txt')

Question 9: What is recursion in programming?

A) A function calling itself indirectly or directly.

B) Looping through arrays sequentially.

C) Sorting elements alphabetically.

D) Applying filters to data sets.

Question 10: What is the output of the following Python code?def greet(name): print(f"Hello, {name}")greet("Alice")

A) Hello, Alice

B) Alice

C) Hello,

D) Nooutput

Типовые материалы текущего контроля успеваемости обучающихся к теме3Variables

Тест

Question 1: What is a variable in programming?

A) A fixed location in memory where values cannot be changed.

B) A placeholder for a piece of data whose value may vary during program execution.

C) A permanent identifier assigned to a constant value.

D) A special character used to mark the beginning of a comment.

Question 2: What type of variable retains its value even after the program ends?

A) Global variable

B) Static variable

C) Persistent variable

D) Constant variable

Question 3: In Python, how do you assign a value to a variable?

A) var x = 10

B) let x = 10

C) x := 10

D) x = 10

Question 4: What is the default scope of a variable declared inside a function in JavaScript?

A) Global scope

B) Block scope

C) Lexical scope

D) Function scope

Question 5: What is the difference between declaring a variable with var, let, and const in JavaScript?

A) var creates global variables, let creates block-scoped variables, and const creates mutable variables.

B) var is hoisted, let and const are not hoisted.

C) var and let allow reassignment, whereas const disallows reassignment.

D) All three keywords behave identically.

Question 6: In Python, what happens if you try to access a variable that hasn't been defined yet?

A) The program runs smoothly with a default value.

B) An error (NameError) is thrown indicating the variable is not defined.

C) The interpreter silently ignores the reference.

D) The variable is automatically initialized to None.

Question 7: What is a naming convention followed for variables in Python?

A) CamelCase

B) PascalCase

C) snake_case

D) UPPERCASE

Question 8: What is shadowing in the context of variables?

A) Accessing a variable from another module.

B) Using a variable before it's declared.

C) Declaring a new variable with the same name as an outer variable.

D) Passing a variable as a parameter to a function.

Question 9: Can a variable hold different types of data in dynamically typed languages like Python?

A) Yes, variables can hold different types depending on assignment.

B) No, variables must always retain the same type throughout the program.

C) Only numeric types can be mixed together.

D) Types are statically checked at compile-time.

Question 10: What is the proper way to declare a final (constant) variable in Java?

A) const int MY_VAR = 10;

B) final int MY_VAR = 10;

C) static int MY_VAR = 10;

D) immutable int MY_VAR = 10;

Типовые материалы текущего контроля успеваемости обучающихся к теме4ThefirststepswithVisualC++

Тест

Question 1: What is the extension of a Visual C++ project file?

A) .cpp

B) .vcproj

C) .exe

D) .cs

Question 2: Where do you write your code in Visual Studio for a C++ project?

A) Solution Explorer

B) Output Window

C) Editor window

D) Property Pages

Question 3: What command is used to display text in the console in a simple C++ program?

A) cout<< "Text";

B) printf("Text");

C) Console.WriteLine("Text");

D) write("Text");

Question 4: Which header file includes standard input/output stream definitions in C++?

A) <iostream>

B) <stdio.h>

C) <cstdlib>

D) <conio.h>

Question 5: What is the purpose of including the #include directive in a C++ program?

A) To specify compiler flags

B) To include library headers necessary for compilation

C) To set build configurations

D) To link executable binaries

Question 6: In Visual Studio, how do you build and run a C++ project?

A) Press Ctrl+F5

B) Right-click on the project and select Build

C) Select Run → Start Without Debugging

D) All of the above

Question 7: What is the starting point (entry point) of every C++ program?

A) Main()

B) Init()

C) EntryPoint()

D) Start()

Question 8: If you want to debug your C++ program step-by-step in Visual Studio, which button would you click?

A) Continue

B) Step Into

C) Stop Debugging

D) Attach to Process

Question 9: What does the std::endl do in C++?

A) Adds a newline character and flushes the buffer

B) Closes the current file handle

C) Reads input from the keyboard

D) Starts a new thread

Question 10: What is the output of the following C++ code snippet?#include <iostream>using namespace std;int main() { cout<< "Hello, World!"; return 0;}

A) Hello, World!
B) Hello
C) World
D) Nothing gets printed

Эссе

1. Introduction to Visual C++ Environment: Guide beginners through setting up their first Visual C++ project, discussing IDE navigation and tools.
2. Understanding Basic Syntax in Visual C++: Covering variables, functions, classes, and control flow constructs in Visual C++.
3. Building Your First Console Application in Visual C++: Walkthrough of creating and compiling a simple console application.
4. Visual C++ Libraries Overview: Discussion of pre-built libraries included in Visual Studio, such as STL, Boost, and WinAPI.
5. Comparing Visual C++ with Other Languages: Comparison of Visual C++ with other popular languages like Python, Java, and C#, highlighting strengths and weaknesses.

8 семестр

Типовыематериалытекущегоконтроляуспеваемостиобучающихсяк теме 1 IntroductiontofundamentalconceptforBusinessAnalysis

Тест

Question 1: What is the primary goal of business analysis?
A) To develop new products
B) To identify and understand stakeholder needs
C) To train employees
D) To increase revenue instantly
Question 2: What skill is crucial for a business analyst when gathering requirements?
A) Creativity
B) Mathematical ability
C) Effective communication
D) Graphic designing
Question 3: Which of the following techniques is NOT typically used in business analysis?
A) SWOT Analysis
B) PESTLE Analysis
C) Persona Creation
D) Branding Strategy
Question 4: What is a gap analysis used for in business analysis?
A) Measuring brand loyalty
B) Determining gaps between current state and desired future state
C) Evaluating market saturation

D) Assessing stock prices

Question 5: Which of the following activities is NOT performed by a business analyst?

A) Defining project scope

B) Developing marketing strategies

C) Analyzing business processes

D) Conducting stakeholder interviews

Question 6: What is the importance of understanding stakeholders' priorities in business analysis?

A) Helps in prioritizing requirements

B) Ensures regulatory compliance

C) Guarantees profitability

D) Establishes organizational culture

Question 7: What is the purpose of a use case diagram in business analysis?

A) Depicting system architecture

B) Showing relationships between actors and system functions

C) Calculating ROI

D) Managing inventory

Question 8: What is the difference between a requirement and a specification?

A) Requirement describes WHAT is needed; Specification explains HOW it will be implemented

B) Requirement lists cost estimates; Specification details timeline

C) Requirement is created by developers; Specification by analysts

D) Requirement predicts outcomes; Specification forecasts trends

Question 9: What is the role of a prototype in business analysis?

A) Final deliverable product

B) Temporary test version to validate ideas

C) Marketing brochure

D) Legal contract

Question 10: What does a SWOT analysis consist of?

A) Strengths, Weaknesses, Opportunities, Threats

B) Sales, Workflow, Operations, Training

C) Supply chain, Workers, Organization, Technology

D) Strategic planning, Workforce management, Organizational goals, Task allocation

Типовые материалы текущего контроля успеваемости обучающихся к теме2Decisionmaking, dataandinformation

Тест

Question 1: What is the relationship between data and information?

A) Data becomes information when given meaning and context.

B) Information is raw facts and figures collected from various sources.

C) Data and information are synonymous terms.
D) Information exists prior to data collection.
Question 2: What is the purpose of decision-making models in business?
A) To predict weather patterns
B) To aid in making informed choices based on analyzed data
C) To calculate financial ratios
D) To enforce strict rules on employees
Question 3: What is metadata?
A) Additional descriptive data about the characteristics of other data
B) Raw unprocessed numerical values
C) Large datasets containing diverse types of information
D) Complex mathematical formulas
Question 4: Which of the following best describes structured data?
A) Randomly organized pieces of information
B) Well-defined formats stored in relational databases
C) Textual information extracted from social media posts
D) Images and videos captured by surveillance cameras
Question 5: What is big data characterized by?
A) Volume, variety, velocity, veracity, and value
B) Single-source data silos
C) Simple and easily managed datasets
D) Limited data analytics possibilities
Question 6: What is the primary role of dashboards in decision-making?
A) Presenting complex data visually for quick insights
B) Storing raw data for later retrieval
C) Generating random numbers for simulations
D) Maintaining historical archives of old reports
Question 7: What is a KPI (Key Performance Indicator)?
A) A measurable value that demonstrates how well an organization achieves its objectives
B) A subjective opinion of senior executives
C) An irrelevant metric for strategic planning
D) A temporary trend unrelated to long-term goals
Question 8: What is predictive modeling?
A) Historical analysis of past events
B) Using statistical methods to predict future outcomes
C) Collecting data randomly without purpose
D) Publishing research papers on data science
Question 9: What is data mining?
A) Extracting valuable insights from vast amounts of data
B) Manually sorting spreadsheets
C) Downloading data from the internet
D) Writing SQL queries
Question 10: What is the difference between data and knowledge?

A) Knowledge arises from interpreting and applying meaningful patterns found in data.

B) Data represents opinions; knowledge is factual.

C) Data comes from books; knowledge originates from experience.

D) There is no distinction; they mean the same thing.

Типовые материалы текущего контроля успеваемости обучающихся к теме 3Financialmodelling

Тест

Question 1: What is the primary purpose of financial modeling?

A) Predicting exact future revenues

B) Assisting decision-making through analyzing scenarios

C) Monitoring daily stock price fluctuations

D) Auditing financial statements

Answer: B) Assisting decision-making through analyzing scenarios

Question 2: What is sensitivity analysis in financial modeling?

A) Changing assumptions to see impacts on outcomes

B) Measuring investor sentiment towards stocks

C) Recording daily trading volumes

D) Calculating net present value (NPV)

Question 3: What does DCF (Discounted Cash Flow) model estimate?

A) Future dividends paid by a company

B) Current stock price volatility

C) Value of an investment based on projected cash flows

D) Total debt repayment schedule

Question 4: What is terminal value in a financial model?

A) Value of the firm beyond the explicit projection period

B) Initial capital expenditure required

C) One-time dividend payout

D) Liquidation proceeds at bankruptcy

Question 5: What is leverage in corporate finance?

A) The ratio of equity to assets

B) Debt used to magnify returns

C) Ratio of short-term liabilities to long-term ones

D) Company's gross profit margin

Question 6: What does ROIC (Return on Invested Capital) indicate?

A) Interest expense divided by earnings before interest and taxes

B) Rate of return generated on invested capital

C) Annual growth rate of the company's revenues

D) Tax shield provided by depreciation

Question 7: What is EV (Enterprise Value)?

A) Market cap plus debt minus cash equivalents

B) Equity value alone

C) Net income multiplied by shares outstanding

D) Book value of shareholders' equity

Question 8: What is a Monte Carlo simulation in financial modeling?

A) A deterministic prediction of asset prices

B) Statistical sampling to simulate possible outcomes

C) Historical comparison of stock performances

D) Benchmarking against industry peers

Question 9: What is the formula for calculating NPV (Net Present Value)?

A) Sum of discounted future cash flows minus initial investment

B) Revenue divided by COGS (Cost of Goods Sold)

C) Enterprise value divided by book value

D) Gross profit minus operating expenses

Question 10: What is Scenario Analysis in financial modeling?

A) Studying hypothetical situations to assess their effects

B) Setting fixed parameters for projections

C) Tracking real-time market movements

D) Quantitative risk assessment focused on derivatives

Эссе

1. Fundamentals of Financial Modeling

Overview of financial modeling techniques and their role in corporate valuation.

Common methodologies employed in practice (DCF, comparable company analysis).

2. Applications of Discounted Cash Flow (DCF) Models

Breakdown of DCF components: terminal value, discount rate selection, and cash flow estimation.

Case studies demonstrating the effectiveness of DCF in valuing companies across industries.

3. Sensitivity Analysis in Financial Modeling

Definition and practical application of sensitivity analysis.

Example of varying inputs (such as revenue growth rates, margins, and discount rates) to determine model stability.

4. Scenario Analysis in Risk Assessment

Distinguishing between base-case, optimistic, and pessimistic scenarios.

Using Monte Carlo simulations to quantify uncertainty and mitigate risks.

5. Three-Statement Financial Model Construction

Constructing interconnected Income Statements, Balance Sheets, and Cash Flow Statements.

Real-world example illustrating links between financial statements and their relevance in financial forecasting.

5.2. Типовые оценочные материалы для текущего контроля успеваемости обучающихся (вне контрольных точек): приведены в п. 6.2.

5.3. Один или несколько тематических блоков дисциплины завершаются контрольной точкой (далее – КТ). Текущий контроль успеваемости по дисциплине предусматривает не менее 2 (двух) и не более 10 (десяти) КТ в течение периода освоения дисциплины.

Максимальное количество баллов за любой тип работ в рамках КТсоставляет 100 (сто) баллов.

Распределение весовых коэффициентов по КТ в рамках текущего контроля успеваемости по дисциплине и формулы расчета:

Наименование контрольной точки	Максимальное количество баллов за работу в рамках КТ, которое может набрать студент	Коэффициент веса контрольной точки	Результат контрольной точки, участвующий в формировании итоговой балльной оценки по дисциплине (отражается в журнале БРС в СДО)
КТ 1	100	0,3	30
КТ 2	100	0,3	30
Итого:	х	0,6	60

Формула расчета результата контрольной точки:
Результат контрольной точки = Количество баллов за работу в рамках КТ х Коэффициент веса контрольной точки.

5.4. Формы текущего контроля успеваемости обучающихся в рамках КТитиповые оценочные материалы:

5 семестр

Распределение весовых коэффициентов по КТ в рамках текущего контроля успеваемости по дисциплине и формулы расчета:

Наименование контрольной точки	Максимальное количество баллов за работу в рамках КТ, которое может набрать студент	Коэффициент веса контрольной точки	Результат контрольной точки, участвующий в формировании итоговой балльной оценки по дисциплине (отражается в журнале БРС в СДО)
КТ 1	100	0,3	30
КТ 2	100	0,3	30
Итого:	х	0,6	60

КТ – 1.
Тема 1-4
Тестовые задания с инструкцией по выполнению

Match each term with its corresponding definition. Some terms may seem closely related, so pay close attention to subtle distinctions. This exercise will help reinforce your understanding of basic computing terminology.

Term Meaning
Algorithm A finite sequence of steps to solve a problem
Debugging Finding and removing errors in code
Variable A container holding a value
Function A reusable block of code performing a specific task
Compiler Translates high-level code into machine-readable format
Binary Representation of data using zeros and ones
Encryption Transforming plain text into unreadable ciphertext
Database Structured collection of data
Firewall Protects networks from unauthorized access
Bandwidth Measure of data transfer rate
Loop Repeated execution of a section of code
Cloud Computing Delivery of computing services over the internet
Malware Malicious software intended to damage or exploit vulnerable systems
Server Centralized system serving requests from clients
Input Device Tool enabling user interaction
Output Device Equipment displaying processed information
RAM Volatile memory temporarily storing active data
Hard Drive Non-volatile storage medium for persistent data retention
User Interface Part of software enabling interaction between user and application
Source Code Original code written by programmer

КТ – 2.

Тема1-4

Эссе

1. Evolution of Programming Languages. Trace the evolution of programming languages from assembly language to modern paradigms like Python, JavaScript, and Rust.
2. Impacts of Quantum Computing. Explore the revolutionary shift quantum computing brings to cryptography, optimization, and scientific discovery.
3. Security Risks in IoT Devices. Analyze the vulnerabilities inherent in IoT ecosystems and propose mitigation strategies.
4. Emergence of Edge Computing. Describe how edge computing complements cloud computing and supports lower latency, higher efficiency, and reduced bandwidth usage.
5. Blockchain Beyond Bitcoin. Study how blockchain technology extends beyond cryptocurrencies into supply chains, healthcare, and governance.

6 семестр

Распределение весовых коэффициентов по КТ в рамках текущего контроля успеваемости по дисциплине и формулы расчета:

Наименование контрольной точки	Максимальное количество баллов за работу в рамках КТ, которое может набрать студент	Коэффициент веса контрольной точки	Результат контрольной точки, участвующий в формировании итоговой балльной оценки по дисциплине (отражается в журнале БРС в СДО)
КТ 1	100	0,3	30
КТ 2	100	0,3	30
Итого:	x	0,6	60

КТ – 1.

Тема 1-4

Тестовые задания с инструкцией по выполнению

Match each term on the left side with its correct definition from the right side.

Terms

Hardware

Software

Operating System

Motherboard

CPU

RAM

Input Device

Output Device

Network

Firewall

Definitions

A. A program responsible for managing hardware and software resources of a system.

B. Components such as keyboards or mice used to input data into computers.

C. Physical components like monitors, hard drives, etc., making up the computer.

D. An internal component that connects various parts of a computer together.

E. Devices like printers or speakers used to output information from computers.

F. Central Processing Unit, which performs most calculations within a computer.

G. Random Access Memory, providing temporary storage space for running

programs.

H. Collection of interconnected devices allowing communication between them.

I. Programs designed to perform specific tasks, e.g., word processors or browsers.

J. Security mechanism preventing unauthorized access to networks or systems.

КТ – 2.

Тема1-4

Эссе

1. Evolution of Operating Systems

Explore how operating systems have evolved from DOS to modern-day OS like Windows, macOS, Linux, etc., highlighting key innovations and their impact on computing.

2. Cybersecurity Threats in Modern Computing Environments

Discuss common cyber threats such as malware, phishing attacks, ransomware, and strategies for protecting data and networks.

3. Artificial Intelligence in Software Development

Examine AI's role in enhancing software development processes through machine learning algorithms, automation tools, and predictive analytics.

4. Cloud Computing Revolutionizing Business Operations

Analyze cloud computing technologies' benefits—scalability, cost efficiency—and challenges like security concerns or vendor lock-in issues.

5. Impact of Social Media Platforms on Society

Investigate social media's influence on communication patterns, political discourse, mental health, and economic activities.

7 семестр

Распределение весовых коэффициентов по КТ в рамках текущего контроля успеваемости по дисциплине и формулы расчета:

Наименование контрольной точки	Максимальное количество баллов за работу в рамках КТ, которое может набрать студент	Коэффициент веса контрольной точки	Результат контрольной точки, участвующий в формировании итоговой балльной оценки по дисциплине (отражается в журнале БРС в СДО)
КТ 1	100	0,3	30
КТ 2	100	0,3	30
Итого:	х	0,6	60

КТ – 1.

Тема 1-4

Тестовые задания с инструкцией по выполнению

Match each term with its correct definition.

Term Definition

Algorithm A set of instructions to solve a problem or perform a task.

Debugging Process of finding and fixing errors in code.

Syntax Rules governing structure of statements within programming languages.

Variable Placeholder storing values during program execution.

Function Reusable block of code performing specific actions.

Object-Oriented Programming (OOP) Paradigm emphasizing objects containing properties & methods.

IDE Integrated Development Environment facilitating coding workflows.

КТ – 2.

Тема1-4

Эссе

1. The Importance of Algorithms in Problem Solving

Discuss why well-designed algorithms matter and illustrate examples where they make significant impacts.

2. Programming Languages: Evolution Over Time

Trace the history of programming languages from early assembly codes to today's high-level scripting languages.

3. Challenges Faced by Beginner Developers

Identify common obstacles faced by new coders and propose solutions to overcome these hurdles.

4. Data Structures: Foundational Elements of Coding

Explain different types of data structures (arrays, linked lists, trees) and demonstrate their practical uses.

5. Debugging Techniques for Efficient Code Fixes

Explore best practices for identifying and resolving bugs efficiently in large-scale projects.

8 семестр

Распределение весовых коэффициентов по КТ в рамках текущего контроля успеваемости по дисциплине и формулы расчета:

Наименование контрольной точки	Максимальное количество баллов за работу в рамках КТ, которое может набрать студент	Коэффициент веса контрольной точки	Результат контрольной точки, участвующий в формировании итоговой балльной оценки по дисциплине (отражается в журнале БРС в СДО)
КТ 1	100	0,3	30
КТ 2	100	0,3	30

Итого:	x	0,6	60

КТ – 1.

Тема 1-4

Тестовые задания с инструкцией по выполнению

Connect each term below with its corresponding meaning:

Term Meaning

Discount Rate Interest rate applied to calculate present value of future cash flows.

CAPEX Capital expenditures required for acquiring long-term assets.

WACC Weighted average cost of capital combining debt and equity costs proportionately.

DCF Method estimating intrinsic value based on projected discounted future cash flows.

Free Cash Flow Remaining cash after necessary investments in operations and maintenance.

NPV Net Present Value representing total worth adjusted for time value of money.

IRR Internal Rate of Return measuring profitability relative to initial investment amount.

Beta Coefficient Measure indicating volatility compared to market benchmarks.

Dividend YieldAnnual dividends paid divided by stock price expressed as percentage yield.

Profit Margin Ratio Indicator showing net income per dollar generated by revenue sales.

КТ – 2.

Тема1-4

Эссе

1. Overview of Key Components in Building Effective Financial ModelsDescribe essential elements such as inputs, outputs, assumptions, formulas, and constraints crucial for model accuracy.
2. Comparison Between Static vs Dynamic Financial ModelsDifferentiate static models relying solely on historical data versus dynamic ones incorporating forward-looking forecasts.
3. Applications of Monte Carlo Simulations in FinanceExplain how probabilistic simulations improve decision-making amidst uncertainty.
4. Discounted Cash Flow Analysis ExplainedDetail the mechanics behind calculating present values using discount rates and future cash flow projections.
5. Understanding WACC Calculation and Its Role in ValuationDerive weighted average cost of capital formula step-by-step illustrating practical business valuation scenarios.

Для каждой формытекущего контроля успеваемости обучающихся в рамках КТопределены критерии оценивания результатов выполнения задания.

1. Критерии оценки тестовых заданий:

Критерии оценки	Диапазон баллов	Описание критерия
Количество правильных ответов	0-40	Менее 50% - неудовлетворительно 50%-69% - удовлетворительно 70%-89% - хорошо 90% и более - отлично
Степень трудности вопросов	0-30	Простые вопросы – 1 балл Средней сложности – 2 балла Сложные – 3 балла
Соблюдение сроков сдачи	0-30	Задержка выполнения задания приводит к снижению итогового балла за тест на 30%
Итого максимально:	100	

2. Критерии оценивания эссе:

Критерии оценки	Диапазон баллов	Описание критерия
Содержание и раскрытие темы	0-20	Детальное, последовательное описание всех этапов с конкретными примерами
Грамотность изложения	0-20	Соблюдены все правила грамматики, орфографии и пунктуации
Стилистика	0-20	Единый стиль изложения, точные формулировки, уместное использование терминов, лаконичность
Логика изложения	0-20	Чёткая последовательность изложения, логические связи между частями текста, аргументы подтверждают выводы
Оригинальность	0-20	Уникальный подход к теме, нестандартные решения, инновационные идеи, собственная позиция автора
Итого максимально:	100	

5.5. Описание дополнительных материалов и оборудования, необходимых для выполнения проверочных заданий.

Для выполнения проверочных заданий по дисциплине необходимо материально-техническое обеспечение учебных аудиторий (наглядными материалами, экраном, мультимедийным проектором с ноутбуками (ПК) для презентации учебного материала, выходом в сеть Интернет, программными продуктами MicrosoftOffice (Excel, Word, PowerPoint)) в зависимости от типа занятий: семинарского и лекционного типов, групповых и индивидуальных консультаций, текущего контроля и промежуточной аттестации.

Для самостоятельной работы обучающимся необходим доступ в читальные залы библиотеки и/или помещение, оснащенное компьютерной техникой с возможностью подключения к сети «Интернет», доступ в электронную информационно-образовательную среду организации и ЭБС.

Базы данных, информационно-справочные и поисковые системы

1. www.biblio-online.ru –Электронно-библиотечная система [ЭБС] Юрайт;
2. http://www.iprbookshop.ru – Электронно-библиотечная система [ЭБС] «Iprbooks»
3. https://e.lanbook.com - Электронно-библиотечная система [ЭБС] «Лань».
4. http://elibrary.ru/ - Научная электронная библиотека Elibrary.ru.
5. https://new.znanium.com Электронно-библиотечная система [ЭБС] «Znanium.com».
6. https://dlib.eastview.com – Информационный сервис «EastView».
7. https://www.jstor.org - Jstor. Полные тексты научных журналов и книг зарубежных издательств.
8. https://elibrary.worldbank.org - Электронная библиотека Всемирного Банка.
9. https://link.springer.com - Полнотекстовые политематические базы академических журналов и книг издательства Springer.
10. https://ebookcentral.proquest.com - Ebook Central. Полные тексты книг зарубежных научных издательств.
11. https://www.oxfordhandbooks.com - Доступ к полным текстам справочников Handbooks издательства Oxford по предметным областям: экономика и финансы, право, бизнес и управление.
12. https://journals.sagepub.com - Полнотекстовая база научных журналов академического издательства Sage.
13. Справочно-правовая система «Консультант».
14. Электронный периодический справочник «Гарант».

6. Формы промежуточной аттестации, критерии и шкала оценивания, типовые оценочные материалы по дисциплине

6.1. Промежуточная аттестация проводится в форме зачета/зачета с оценкой.

Зачет/ зачет с оценкой поводится в письменной форме. Обучающийся получает экзаменационный билет с вариантами 3-х заданий различного типа. На выполнение заданий дается 20 минут. По завершении подготовки необходимо представить ответы в письменном виде, подробно изложив ход выполнения задания, сделать выводы (при необходимости).

При реализации промежуточной аттестации в ЭО/ДОТ могут быть использованы следующие формы: устно в ДОТ - в форме обоснованных ответов на задания различного типа; письменно в СДО - в форме письменного решения заданий различного типа; тестирование в СДО.

6.2. Типовые оценочные материалы промежуточной аттестации.

Типовые вопросы, выносимые на зачет 5 семестр:

1. What are the primary drivers shaping innovation in ICT today?Consider technological advancements, consumer demands, regulatory changes, and global connectivity factors.
2. How has mobile technology transformed business operations worldwide? Discuss the impact of smartphones, tablets, wearables, and BYOD policies on corporate strategy.
3. Can artificial intelligence replace human roles completely? If yes/no, why? Debate whether AI will lead to job displacement or augment workforce capabilities overall.
4. What challenges arise when implementing cloud computing infrastructure? Address migration risks, scalability issues, interoperability problems, and security vulnerabilities.
5. Should governments impose stricter regulation on tech giants? Justify your stance.Weigh anti-trust laws, taxation reforms, data protection measures, and ethical considerations.
6. In what ways could virtual/augmented reality reshape industries like tourism, retail, medicine?Imagine VR/AR applications transforming customer experiences, medical training, remote collaboration efforts.
7. Are there gender biases evident in STEM fields particularly within ICT sector?Research barriers women face entering ICT careers and suggest possible remedies fostering inclusivity.
8. To what extent does cybercrime pose threats to national security interests? Assess hacker motives, state-sponsored espionage campaigns, and countermeasure effectiveness.

9. Is 5G truly revolutionary or merely incremental progress compared to previous generations?Contemplate low latency, higher bandwidth capacity, network slicing capabilities introduced by fifth-generation cellular networks.
10. Will quantum computing render existing encryption methods obsolete soon? Predict timelines until RSA encryption becomes vulnerable due to advances in quantum factoring algorithms.
11. Why has IoT adoption been slower than anticipated despite massive potential? List roadblocks hindering widespread implementation of connected devices ecosystems.
12. Do social media platforms exacerbate polarization in society? Support your viewpoints.Study echo chambers, filter bubbles, algorithmic bias effects leading towards divisiveness.
13. Which technologies hold greatest promise solving environmental sustainability crises?Highlight renewable energy sources integration, carbon capture innovations, smart grid initiatives benefitting planetary conservation.
14. Could biometric authentication fully replace passwords/pins eventually? Elaborate pros/cons of fingerprint scanners, facial recognition systems replacing conventional login credentials.
15. Does remote work culture driven by COVID necessitate permanent shifts away from office-centric models?Speculate future workplace arrangements post-pandemic normalcy restoring flexible hybrid setups.

Типовые вопросы, выносимые на зачет 6 семестр:

1. What makes the Internet secure, and what are the main challenges facing its security?Think about firewalls, antivirus programs, encryption protocols, and common attack vectors.
2. How did the evolution of computer hardware affect software development? Consider improvements in CPU speeds, memory capacities, and graphical processing units.
3. Will quantum computers revolutionize our approach to computation?Discuss the possibilities of exponentially faster computations and their real-world applications.
4. Are cryptocurrencies reshaping traditional banking systems?Explore decentralized currencies like Bitcoin and Ethereum and their potential impact on central banks.
5. How does the Internet of Things (IoT) transform everyday life?Delve into smart homes, wearable tech, industrial automation, and challenges like device compatibility.
6. What is the significance of cloud computing for small businesses?Focus on scalability, reduced costs, increased flexibility, and potential pitfalls.

7. Can the Internet become a public utility similar to water or electricity?Debate government intervention, universal access, and legal frameworks.
8. Is Artificial Intelligence fundamentally changing the nature of work?Reflect on AI's role in automating jobs, skill redistribution, and ethics of labor replacement.
9. Where does edge computing fit in relation to centralized cloud servers? Compare local data processing near end users versus distant server farms.
10. Do current cyber-security measures adequately protect individuals online? Consider two-factor authentication, VPNs, browser safety features, and recent breaches.
11. Has Moore's Law reached its limits, and what comes next?Discuss exponential growth predictions and alternative paradigms like optical chips.
12. Who owns the data stored on cloud services?Examine ownership disputes, GDPR compliance, and ethical responsibilities.
13. Would blockchain technology eliminate fraudulent activities?Explore transparency, immutability, decentralization, and loopholes.
14. Why is search engine optimization important for businesses online?Highlight visibility, SEO strategies, organic rankings, and competition dynamics.
15. Should governments censor harmful content online?Balance freedom of speech with child safety, hate speech prevention, and propaganda control.

Типовые вопросы, выносимые на зачет7 семестр:

1. What are the fundamental differences between compiled and interpreted languages?Consider compilation steps, runtime environments, debugging processes, and use cases.
2. How do garbage collectors function in managed languages like Java and .NET?Explain automatic memory management, heap allocation, reference counting, and limitations.
3. Why is abstraction important in designing maintainable software systems? Relate encapsulation, inheritance, polymorphism, and modular design patterns.
4. When should functional programming paradigms be preferred over object-oriented styles?Contrast FP and OOP approaches, immutable states, side-effects avoidance, and parallelism.
5. What unique challenges arise when working with legacy code bases?Explore outdated dependencies, lack of documentation, inconsistent naming conventions, and architectural flaws.
6. Can pair programming genuinely improve developer productivity?Discuss collaborative coding, shared responsibility, mutual learning, and downsides.

7. Is test-driven development (TDD) universally beneficial, or context-dependent?Debate benefits of pre-writing tests, mock objects, continuous integration, and its applicability.
8. Which factors determine choosing between front-end and back-end specializations?Weigh skills required, industry demand, salary prospects, and personal preferences.
9. Are coding bootcamps sufficient preparation for junior dev positions? Compare structured courses, mentorship opportunities, project portfolios, and self-study alternatives.
10. What's the difference between RESTful APIs and GraphQLendpoints? Compare request formats, response structures, resource representation, and scalability.
11. Does formal CS education still matter in this era of self-taught developers? Evaluate theoretical foundations, curriculum rigor, networking events, and industry certifications.
12. Should beginners focus exclusively on one language or learn many simultaneously?Assess cognitive overload, transferrable skills acquisition, ecosystem diversity, and hiring criteria.
13. Do version control systems like Git enhance team collaboration?Illustrate branching workflows, merge conflicts resolution, commit histories, and repository hosting.
14. Will static typing ultimately prevail over dynamically typed languages? Reason through compile-time error detection, explicit contracts, expressiveness tradeoffs, and usability.
15. In what ways does profiling and optimization contribute to better performance?Cover bottleneck identification, memory profiling, cache utilization, and optimization strategies.

Типовые вопросы, выносимые на зачет с оценкой 8 семестр:

1. What role does SWOT analysis play in assessing competitive advantage? Consider strengths, weaknesses, opportunities, and threats within organizational contexts.
2. How does Porter’s Five Forces framework aid in industry attractiveness assessment?Examine bargaining power, rivalry intensity, substitution threats, entry barriers, and supplier influence.
3. Why is conducting break-even point analysis vital for startups?Define fixed costs, variable costs, contribution margins, and sales volume thresholds.
4. What distinguishes qualitative forecasting methods from quantitative ones? Compare judgmental techniques, Delphi method, surveys, trend extrapolation, and econometric models.

5. In what circumstances would scenario analysis outperform sensitivity analysis?Discuss hypothetical worst-case/best-case scenarios versus single-point variations.
6. How can firms balance short-term liquidity needs with long-term solvency objectives?Weigh cash flow management, working capital optimization, leverage ratios, and debt servicing capacity.
7. Understand the difference between horizontal and vertical financial statement analysis.Interpret line-item comparisons year-over-year versus proportional distribution of revenues/expenses.
8. Is diversification inherently beneficial, or can it dilute company focus? Evaluate product/service expansion, geographic reach, synergies, cannibalization risks, and complexity overhead.
9. When deciding on M&A activity, which financial indicators signal strong merger candidates?Highlight valuation multiples, profit margins, complementary resources, cultural alignment, and growth trajectories.
10. Does outsourcing non-core functions always result in cost savings?Factor in transaction costs, quality control, intellectual property leakages, and hidden inefficiencies.
11. Can big data analytics deliver sustainable competitive advantage in hyper-competitive markets?Assess predictive modeling, segmentation strategies, customer retention tactics, and scalability challenges.
12. To what degree should companies prioritize ethical investing in socially responsible initiatives?Explore green financing options, triple bottom-line reporting, stakeholder activism, and reputational gains.
13. Would embracing agile methodologies disrupt traditional hierarchical organizational structures?Contrast iterative cycles, self-managed teams, empowerment hierarchies, and command-and-control regimes.
14. Do venture capitalists favor disruption-led innovation or steady evolutionary improvement?Contemplate radical breakthroughs, incremental enhancements, funding priorities, and exit strategies.
15. If implemented correctly, could blockchain technology revolutionize supply chains?Envision transparent ledgers, traceability, tamper-resistant records, smart contract enforcements, and interoperability gaps.

Типовые проверочные задания для самоподготовки обучающегося к промежуточной аттестации:

5 семестр

Тема 1. HistoryofICT*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. Which of the following was the first true personal computer?
A) Commodore PET
B) Apple II
C) TRS-80
D) Osborne 1
2. What was the original purpose of ARPANET?
A) Commercial internet browsing
B) Military communications experiment
C) Educational institution networks
D) Video streaming

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. ENIAC → a. One of the first electronic general-purpose computers, built in the 1940s.
2. Microprocessor → b. A small computer chip that performs calculations and logic operations.
3. Internet → c. A global network connecting millions of computers.
4. Email → d. A system for sending and receiving digital messages.
5. World Wide Web → e. A collection of web pages accessed through the internet.

Example 2 – Synonyms
Instructions: Match each term with its closest synonym.
A: Terms B: Synonyms
1. Develop → a. Create
2. Device → b. Gadget
3. Store → c. Save
4. Communicate → d. Share information
5. Innovation → e. New idea or invention

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: computer, internet, communication, software, network, information
The _____ revolutionized how we connect and share data.
A _____ is a group of computers linked together.
Early ICT systems were focused on _____ processing.

Modern ICT combines hardware and _____.
The development of the _____ enabled global communication.

Example 2
Word box: ENIAC, microprocessor, PC, smartphone, cloud computing, AI
_____ was one of the earliest electronic computers.
The _____ made it possible to create personal computers.
The _____ combined phone and internet technology.
_____ allows users to access files anywhere online.
_____ is now used to improve ICT automation and efficiency.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the stages in the development of computers in the correct order.
a. ENIAC is built in the 1940s.
b. The microprocessor is invented in the 1970s.
c. Personal computers become common in the 1980s.
d. The internet expands in the 1990s.
e. Smartphones and cloud computing dominate after 2000.

Example 2
Instructions: Put the main communication technologies in historical order.
Telegraphs allow coded messages to be sent.
Telephones make voice communication possible.
Radios broadcast news and entertainment.
Television brings visual communication.
The internet connects people worldwide.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
The first _____ (computer / telephone) was developed in the 1940s.
The _____ (internet / telegraph) was originally a military project.
The _____ (microchip / floppy disk) allowed computers to become smaller.
The _____ (World Wide Web / radar) made it easier to share documents online.
_____ (Email / Typewriter) became the main way to send messages electron

ically.

Example 2

_____ (Cloud computing / Steam engines) allow data to be stored online.
The _____ (ENIAC / calculator) was one of the first electronic computers.
_____ (Artificial Intelligence / Printing press) is now part of modern ICT.
_____ (Social media / Fax machines) changed the way people communicate.
The _____ (microprocessor / telescope) was key to the rise of personal computers.

Задание открытого типа с развернутым ответом

1. Discuss the impact of Charles Babbage's designs on modern computing.
2. Describe the contributions of Grace Hopper to the field of programming languages.

Тема 2. Introduction to ICT System*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. Which of the following is NOT a component of an ICT system?
A) Hardware
B) Software
C) Living organisms
D) Data and information

2. What is the main function of hardware in an ICT system?
A) To store and retrieve data
B) To execute commands and perform calculations
C) To physically carry out the tasks instructed by software
D) To communicate with other systems

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each ICT term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Hardware → a. The physical components of a computer system.
2. Software → b. The programs and instructions that tell the hardware what to do.
3. Input device → c. Equipment used to enter data into a computer.
4. Output device → d. Equipment used to display or produce information.
5. Storage device → e. A unit used to save data permanently or temporarily.

Example 2 – Antonyms
Instructions: Choose the antonym (opposite meaning).
Input → (a) output (b) save (c) upload
Permanent → (a) stable (b) temporary (c) fixed
Online → (a) connected (b) wireless (c) offline
Digital → (a) analog (b) automatic (c) virtual
Active → (a) busy (b) idle (c) fast

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: hardware, software, data, input, output, storage
ICT systems process _____ using both _____ and _____.
A mouse and a keyboard are examples of _____ devices.
A monitor and printer are examples of _____ devices.
A hard disk or USB drive is a type of _____ device.
The computer cannot work without both _____ and _____.

Example 2
Word box: CPU, RAM, ROM, network, server, internet**
The _____ processes all instructions in a computer.
The _____ provides temporary working memory.
The _____ stores instructions that don't change.
A _____ connects multiple computers together.
A _____ provides files or services to other computers over a _____.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps of information processing in an ICT system in the correct order.
a. Data is entered into the system.
b. The CPU processes the data.
c. Information is stored in memory.
d. The processed information is displayed as output.
e. The user can save or print the results.

Example 2
Instructions: Arrange the basic steps in using a computer system in the right order.
Switch on the computer.
The operating system loads.

The user logs into the system.
The user opens a program.
The user inputs data and saves results.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
The _____ (CPU / modem) controls all processing in the computer.
The _____ (mouse / speaker) is an input device.
The _____ (monitor / keyboard) displays the output.
_____ (Hardware / Software) includes programs and operating systems.
_____ (Data / Cable) are raw facts and figures entered into a computer.

Example 2
_____ (RAM / ROM) is temporary memory used while the system is running.
_____ (Printer / Router) is used to send data to a network.
_____ (Operating system / Hard disk) manages the computer's resources.
_____ (Flash drive / Monitor) is a storage device.
A _____ (server / scanner) provides services to other computers.

Задание открытого типа с развернутым ответом

1. Define the term "Information and Communication Technology (ICT)" and give examples of its components.
2. What are the key components of an ICT system, and how do they interact with each other?

Тема 3. ICTintheWorkplace*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the primary reason for implementing ICT systems in a workplace?

A) To replace human labor
B) To automate repetitive tasks and increase efficiency
C) To reduce dependence on paper-based record keeping
D) To cut down on communication costs

2. Which of the following is NOT a benefit of ICT in the workplace?

A) Enhanced collaboration among employees
B) Reduced productivity
C) Better decision-making through data analysis
D) Flexibleworkarrangements

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each ICT term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Teleworking → a. Working from home or a remote location using ICT tools.
2. Video conferencing → b. Holding meetings with participants through video links.
3. Email → c. A system for sending and receiving digital messages.
4. Cloud storage → d. Saving files online instead of on a local computer.
5. Collaboration tools → e. Software that helps teams work together on projects.

Example 2
Instructions: Match the beginnings (A) and endings (B) of sentences.
A: Sentence start B: Sentence ending
1. Teleworking allows employees → a. to work from home using ICT tools.
2. Cloud systems help companies → b. store and access data anywhere.
3. Email is commonly used → c. for formal business communication.
4. Video conferencing saves → d. time and travel costs for meetings.
5. Collaboration platforms make it easier → e. to share documents and ideas in real time.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: computer, internet, teleworking, communication, productivity, cloud storage
ICT improves _____ in modern offices.
_____ allows employees to work from remote locations.
The _____ connects workers and offices worldwide.
Files can be saved securely using _____.
_____ tools like email and chat support team collaboration.

Example 2
Word box: firewall, password, security, data backup, encryption, privacy**
_____ helps protect information from cyberattacks.
A strong _____ prevents unauthorized access.
_____ converts data into secret code.
_____ ensures that files can be restored if lost.
Good ICT practices protect user _____.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps in sending an email at work in the correct order.
a. Open the email application.
b. Type the recipient's address.
c. Write the subject and message.
d. Attach any required files.
e. Click "Send."

Example 2
Instructions: Put the steps of data protection in the workplace in order.
Create strong passwords.
Install antivirus software.
Backup important files.
Encrypt sensitive information.
Updatesoftwareregularly.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
ICT helps improve _____ (efficiency / pollution) in the workplace.
Employees often use _____ (video conferencing / cooking apps) for remote meetings.
Files are safer when stored on _____ (cloud / paper) systems.
_____ (Email / Television) is used for business communication.
_____ (Teleworking / Carpooling) allows flexibility in working location.

Example 2
A _____ (firewall / spreadsheet) protects networks from threats.
Data _____ (backup / delivery) helps recover lost files.
Workers use _____ (word processors / engines) to write reports.
A _____ (password / wallpaper) secures user accounts.
Online collaboration improves team _____ (productivity / pollution).

Задание открытого типа с развернутым ответом

1. How has the adoption of cloud computing transformed the way businesses operate and collaborate?
2. What are the key benefits and challenges of implementing enterprise resource planning (ERP) systems in organizations?

Тема 4. SoftwareDevelopment*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the first stage in the Software Development Life Cycle (SDLC)?
A) Design
B) Maintenance
C) Requirements Gathering
D) Testing

2. Which methodology follows an iterative and incremental approach to software development?
A) Waterfall
B) Agile
C) Spiral
D) RAD (Rapid Application Development)

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each software development term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Algorithm → a. A set of instructions for solving a problem step by step.
2. Programming language → b. A formal language used to write software.
3. Source code → c. The original code written by a programmer.
4. Compiler → d. A program that translates source code into machine code.
5. Debugging → e. The process of finding and fixing errors in code.

Example 2 – Synonyms
Instructions: Match each term with its closest synonym.
A: Terms B: Synonyms
1. Error → a. Bug
2. Fix → b. Correct
3. Create → c. Develop
4. Step → d. Stage
5. Output → e. Result

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.

Word box: coding, testing, debugging, documentation, maintenance, deployment
Software development includes _____ and _____ to ensure quality.
_____ means writing source code in a programming language.
_____ involves releasing the product to users.
_____ helps users and developers understand the software.
_____ ensures the program continues to work after release.

Example 2
Word box: algorithm, program, source code, compiler, error, execution
The _____ defines how the program solves a problem.
The _____ translates code into machine language.
A _____ is a set of instructions written to perform a task.
During _____ the code is run to see if it works.
An _____ occurs when there's a mistake in the code.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps of the Software Development Life Cycle (SDLC) in the correct order.
a. Requirements analysis
b. Design
c. Implementation (coding)
d. Testing
e. Deployment
f. Maintenance

Example 2
Instructions: Arrange the steps of debugging in the right order.
Identify the error.
Reproduce the error.
Analyze the cause.
Fix the problem.
Testthesolution.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A _____ (compiler / monitor) translates source code into executable code.
The process of finding and fixing bugs is called _____ (debugging / deployment).
_____ (Algorithms / Devices) describe logical steps to solve a problem.

_____ (Documentation / Hardware) explains how software works.
The _____ (testing / painting) phase ensures the program works properly.

Example 2
_____ (Python / Photoshop) is a programming language used for coding.
The _____ (design / cleaning) phase outlines how the software will look and function.
_____ (Version control / Traffic control) tracks code changes among developers.
_____ (Maintenance / Construction) involves updating software after release.
_____ (Deployment / Baking) means launching the program for users.

Задание открытого типа с развернутым ответом

1. Discuss the importance of requirements gathering in software development.
2. Explain the difference between agile and waterfall methodologies in software development.

6 семестр

Тема 1. TheInternet*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What does the abbreviation "HTTP" stand for?
A) Hypertext Transfer Protocol
B) High Traffic Transfer Protocol
C) Hyperlinked Typing Protocol
D) Homepage Transition Protocol

2. Which protocol is used for secure communication over the internet?
A) FTP
B) HTTPS
C) SMTP
D) TCP/IP

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each Internet term (Column A) with its correct definition (Column B).
A: Terms B: Definitions

1. Browser → a. A program used to access and view websites.
2. Search engine → b. A tool that helps users find information on the Internet.
3. Website → c. A collection of related web pages under one domain.
4. URL → d. The address used to access a web page.
5. Link → e. A clickable element that takes you to another page or website.

Example 2 – Antonyms
Instructions: Choose the antonym (opposite meaning).
Online → (a) available (b) offline (c) uploaded
Private → (a) public (b) secure (c) limited
Upload → (a) download (b) connect (c) send
Secure → (a) protected (b) unsafe (c) encrypted
Connect → (a) link (b) attach (c) disconnect

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: browser, website, link, search engine, Internet, data
The _____ connects millions of computers worldwide.
A _____ is a collection of related web pages.
You can find information using a _____.
A _____ allows you to access web pages.
A _____ helps you move between different pages.

Example 2
Word box: download, upload, firewall, password, security, connection
A strong _____ protects online accounts.
You need a stable Internet _____ to stream videos.
A _____ blocks unwanted traffic from entering a network.
You can _____ photos to a social media site.
You can _____ files from the Internet to your device.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for using a search engine in the correct order.
a. Open a browser.
b. Type the search term in the search box.
c. Press Enter or click “Search.”
d. Review the results page.
e. Click a link to open a website.

Example 2

Instructions: Arrange the steps of downloading a file in the correct order.
Find the file you want to download.
Click the download link.
Choose a location to save the file.
Wait for the download to finish.
Open the file from your device.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A _____ (browser / keyboard) is used to open and view web pages.
The _____ (Internet / library) connects people and computers worldwide.
A _____ (search engine / database) helps users find information online.
You can _____ (upload / delete) photos to a cloud service.
A _____ (firewall / microphone) protects a computer from online threats.

Example 2
The _____ (URL / CPU) tells your browser where to find a web page.
Users can _____ (download / recycle) music from online stores.
A _____ (server / printer) hosts websites and online applications.
_____ (Cybersecurity / Geography) focuses on protecting online systems.
_____ (Bandwidth / Memory) affects how fast data can be transferred online.

Задание открытого типа с развернутым ответом

1. Discuss the ethical implications of widespread surveillance facilitated by the internet.
2. Explain the impact of social media on interpersonal relationships and mental health.

Тема 2. Efficiencyincomputersystems*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the purpose of caching in computer systems?
A) To increase memory capacity
B) To store frequently used data closer to the processor
C) To reduce power consumption
D) To accelerate disk reads/writes

2. Which technique reduces the execution time of frequently reused portions of code?
A) Recursion
B) Memoization
C) Polymorphism
D) Exceptionhandling

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Processing speed → a. The rate at which a computer completes tasks.
2. Memory → b. Temporary or permanent storage used by the computer.
3. Cache → c. A small, fast memory that stores frequently used data.
4. Optimization → d. Improving a system's performance and efficiency.
5. Power consumption → e. The amount of energy used by computer components.

Example 2
Instructions: Match the beginnings (A) and endings (B) of sentences.
A: Sentence start B: Sentence ending
1. System efficiency can be improved → a. by cleaning unnecessary files and updating software.
2. Upgrading RAM helps → b. a computer run multiple applications smoothly.
3. Overheating can cause → c. the system to slow down or shut down unexpectedly.
4. Disk defragmentation makes → d. data easier for the computer to access.
5. A fast processor allows → e. faster performance and smoother multitasking.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: speed, efficiency, overheating, multitasking, optimization, upgrade
A system with more RAM improves _____ and _____.
_____ occurs when the computer temperature becomes too high.
_____ means performing many tasks at once.
_____ helps increase performance without new hardware.
An _____ installs better hardware or newer software.

Example 2

Word box: maintenance, cooling, power, performance, memory, disk cleanup
Regular system _____ helps avoid errors and crashes.
_____ fans keep components from overheating.
_____ affects how much energy a computer consumes.
Adding more _____ allows smoother multitasking.
_____ removes temporary files and frees space.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for optimizing a computer system in the correct order.
a. Delete unnecessary files.
b. Run a virus scan.
c. Update the operating system.
d. Defragment the hard drive.
e. Restart the computer.

Example 2
Instructions: Arrange the steps for improving computer performance in the correct order.
Check system resources.
Add more RAM or storage if needed.
Close unnecessary background programs.
Clean dust and ensure proper cooling.
Test system performance after changes.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A fast processor improves system _____ (performance / color).
Regular maintenance keeps a system _____ (efficient / decorative).
Upgrading your hardware can increase computer _____ (speed / shape).
_____ (Overheating / Downloading) can damage internal components.
Disk cleanup removes _____ (temporary / permanent) files.

Example 2
A _____ (cache / cable) stores frequently used data for faster access.
A _____ (cooling / coloring) system helps prevent heat buildup.
System _____ (optimization / decoration) improves speed and stability.
Adding more RAM increases _____ (multitasking / formatting) ability.
Energy-efficient systems consume less _____ (power / sound).

Задание открытого типа с развернутым ответом

1. Discuss the trade-offs between performance and energy consumption in modern computing.
2. Explain the role of parallel processing in enhancing computational efficiency.

Тема 3. E-commerce and E-government*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the primary purpose of e-commerce?
A) Facilitating government services online
B) Selling goods and services through the internet
C) Providing educational courses online
D) Broadcasting television programs

2. Which of the following is NOT a benefit of e-government?
A) Improved transparency
B) Enhanced convenience for citizens
C) Reduced corruption
D) Increased bureaucratic hurdles

Задание закрытого типа на установление соответствия

Example 1 – E-Commerce Basics
A: Terms B: Definitions
1. Online shopping → a. Buying goods or services through the Internet.
2. E-payment → b. Paying electronically via card or digital wallet.
3. Shopping cart → c. A virtual container for items to buy online.
4. Checkout → d. The process of confirming and paying for an order.
5. Customer review → e. Feedback left by buyers about a product or service.

Example 2 – E-Government Concepts
A: Terms B: Definitions
1. E-government → a. The use of digital technology to deliver government services.
2. E-participation → b. Online citizen involvement in decision-making.
3. Digital signature → c. An electronic form of identification for documents.
4. Online portal → d. A single website for access to multiple public services.
5. Data privacy → e. Protection of personal information shared online.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Choose all correct words from the list that complete each sentence.
Example 1 – E-Commerce
Word box: transaction, payment, cart, website, delivery, customer
An online _____ involves exchanging money for goods.
The _____ process requires a secure gateway.
A _____ stores items before purchase.
Every e-commerce _____ needs to ensure fast shipping.
A _____ can track their order online.

Example 2 – E-Government
Word box: portal, privacy, transparency, citizen, service, document
An online _____ provides access to government services.
_____ means protecting people's personal data.
Digital _____ submission saves time and paper.
_____ engagement increases government accountability.
_____ is important for trust in public systems.

Задание закрытого типа на установление последовательности

Example 1 – E-Commerce Purchase Process
Instructions: Put the steps in the correct order.
a. Add items to your shopping cart.
b. Select a payment method.
c. Confirm your order.
d. Receive delivery confirmation.
e. Visit the online store.

Example 2 – Using an E-Government Portal
Instructions: Arrange the steps in the correct order.
Open the official e-government website.
Log in with your digital ID.
Select the desired service (e.g., tax, license renewal).
Upload the required documents.
Submit the request and receive confirmation.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1 – E-Commerce
Choose the correct option to complete each sentence.
Customers can buy products through an online _____ (store / government).

A _____ (payment / password) gateway processes online transactions securely.
Before purchasing, customers often read product _____ (reviews / receipts).
The company offers free _____ (delivery / decoration) for orders above $50.
A digital _____ (cart / shelf) holds selected products until checkout.

Example 2 – E-Government
Choose the correct option.
Citizens can access services using an online _____ (portal / printer).
A _____ (digital signature / logo) verifies the authenticity of electronic documents.
Governments aim for better _____ (transparency / translation) through open data.
Secure systems help protect user _____ (privacy / priority).
E-participation encourages _____ (citizen / company) engagement in governance.

Задание открытого типа с развернутым ответом

1. Discuss the challenges faced by small businesses when venturing into e-commerce.
2. Explain the role of data analytics in optimizing e-commerce operations.

Тема 4. ComputingandEthics*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the primary concern addressed by cyberethics?
A) Hardware design
B) Moral implications of computing
C) Programming languages
D) Network protocols

2. Which of the following is NOT a type of cybercrime?
A) Phishing
B) Money laundering
C) Copyright infringement
D) Whaling

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match the terms in Column A with their correct definitions in Column B.

A: Terms B: Definitions
1. Privacy → a. Protecting personal information from unauthorized access.
2. Cybercrime → b. Illegal activities carried out using computers or the internet.
3. Plagiarism → c. Copying someone's work or ideas without giving credit.
4. Encryption → d. Converting data into a secret code to prevent unauthorized access.
5. Ethics → e. Moral principles that govern behavior in technology use.

Example 2
Instructions: Match each sentence beginning (A) with its correct ending (B).
A: Sentence start B: Sentence ending
1. Ethical computing means → a. using technology in a responsible and fair way.
2. Data protection laws exist → b. to prevent misuse of personal information.
3. Plagiarism is considered → c. a serious violation of academic ethics.
4. Hackers may try → d. to access systems without authorization.
5. Encryption helps → e. keep sensitive data secure from attackers.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: privacy, security, ethics, law, hacking, protection
Computing _____ refers to moral principles in the use of technology.
Data _____ helps prevent identity theft.
_____ is an illegal activity that invades computer systems.
_____ ensures that personal data is kept safe.
Governments create _____ to regulate technology use.

Example 2
Word box: password, encryption, copyright, honesty, cybercrime, integrity
_____ prevents unauthorized access to files.
Using a strong _____ improves data security.
_____ protects original digital creations.
_____ means telling the truth and acting fairly.
_____ includes fraud, hacking, and identity theft.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps to protect your data online in the correct order.
a. Create strong passwords.
b. Use two-factor authentication.

c. Avoid sharing personal details publicly.
d. Install antivirus software.
e. Regularly back up your files.

Example 2
Instructions: Arrange the ethical decision-making steps in order.
Identify the ethical issue.
Gather relevant information.
Consider possible consequences.
Make a responsible decision.
Reflectontheoutcome.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
_____ (Ethics / Email) refers to moral behavior in computer use.
Always respect _____ (copyright / software) laws when using online content.
A _____ (password / mouse) helps secure your account.
_____ (Plagiarism / Programming) means copying others' work without credit.
Protecting personal data is a matter of _____ (security / graphics).

Example 2
A _____ (firewall / network) blocks unauthorized Internet traffic.
_____ (Cyberbullying / Debugging) involves harming others online.
Users should follow _____ (ethical / electrical) standards when coding.
_____ (Encryption / Animation) is used to secure sensitive data.
_____ (Hacking / Browsing) is illegal and unethical without permission.

Задание открытого типа с развернутым ответом

1. Discuss the implications of data privacy violations in the age of big data.
2. What role do software developers play in ensuring ethical computing practices?

7 семестр

Тема 1. Introduction to programming*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the purpose of a variable in programming?

A) To store and manipulate data
B) To define the structure of a program
C) To execute program instructions
D) To control program flow

2. Which of the following is NOT a primitive data type in most programming languages?
A) Integer
B) Boolean
C) String
D) Object

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each programming term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Algorithm → a. A set of step-by-step instructions to solve a problem.
2. Variable → b. A container that stores data values.
3. Loop → c. A programming structure that repeats instructions.
4. Function → d. A reusable block of code that performs a specific task.
5. Debugging → e. The process of identifying and fixing errors in code.

Example 2 – Synonyms
Instructions: Match each term with its closest synonym.
A: Terms B: Synonyms
1. Error → a. Bug
2. Code → b. Program instructions
3. Execute → c. Run
4. Fix → d. Correct
5. Input → e. Data entry

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: variable, loop, function, input, output, debugging
_____ stores data for use in a program.
_____ repeats a set of instructions multiple times.
_____ processes data and produces results.
_____ helps programmers find and fix errors.
_____ allows the user to provide information to the program.

Example 2
Word box: algorithm, code, syntax, compile, conditional, comment
A(n) _____ is a sequence of steps to solve a problem.
Programmers write _____ to tell the computer what to do.
Correct _____ is essential for the program to run.
A compiler is used to _____ the code into machine language.
A _____ explains the code but is ignored by the compiler.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for writing a program in the correct order.
a. Design an algorithm.
b. Write code in a programming language.
c. Test the program.
d. Debug errors.
e. Run the program.

Example 2
Instructions: Arrange the steps for using a loop correctly.
Initialize the loop variable.
Check the loop condition.
Execute the loop body.
Update the loop variable.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A _____ (variable / compiler) stores a value in a program.
_____ (Loops / Comments) repeat instructions multiple times.
Conditional statements allow programs to _____ (make decisions / display images).
_____ (Debugging / Input) identifies and fixes code errors.
A _____ (function / monitor) is a reusable block of code that performs a task.

Example 2
The _____ (compiler / keyboard) translates code into machine language.
_____ (Syntax / Internet) defines the correct structure of code.
_____ (Input / Output) is information received by the program.
_____ (Output / Input) is information produced by the program.
_____ (Algorithm / Monitor) is a step-by-step plan to solve a problem.

Задание открытого типа с развернутым ответом

1. Explain the difference between interpreted and compiled languages. Give examples of each.
2. Describe the role of variables in programming.

Тема 2. Coding*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the purpose of comments in code?
A) To execute instructions
B) To store data
C) To provide explanations and annotations
D) To call functions

2. Which of the following is NOT a type of loop in most programming languages?
A) For-loop
B) While-loop
C) Until-loop
D) Do-while loop

Задание закрытого типа на установление соответствия

Example 1
A: Terms B: Definitions
1. Algorithm → a. A set of step-by-step instructions to solve a problem.
2. Syntax → b. The rules that define how code must be written.
3. IDE → c. Software that helps programmers write and test code.
4. Comment → d. Text added to code to explain it, ignored by the program.
5. Compile → e. To translate code into machine-readable instructions.
Example 2 – Antonyms
Instructions: Choose the antonym (opposite meaning) for each term.
Start → (a) run (b) finish (c) loop
Correct → (a) faulty (b) valid (c) functional
Compile → (a) run (b) ignore (c) interpret
Output → (a) input (b) result (c) data
Simple → (a) complex (b) easy (c) basic

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: variable, loop, function, input, output, debugging

_____ stores data for use in a program.
_____ repeats a set of instructions multiple times.
_____ processes data and produces results.
_____ helps programmers find and fix errors.
_____ allows the user to provide information to the program.

Example 2
Word box: algorithm, code, syntax, compile, conditional, comment
A(n) _____ is a sequence of steps to solve a problem.
Programmers write _____ to tell the computer what to do.
Correct _____ is essential for the program to run.
A compiler is used to _____ the code into machine language.
A _____ explains the code but is ignored by the compiler.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for writing and testing code in the correct order.
a. Design the algorithm.
b. Write code in a programming language.
c. Test the program.
d. Debug errors.
e. Run the program.

Example 2
Instructions: Arrange the steps to create a loop in the correct order.
Initialize the loop variable.
Check the loop condition.
Execute the loop body.
Update the loop variable.
Repeat steps 2–4 until the condition is false.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
The _____ (compiler / mouse) translates code into machine-readable instructions.
_____ (Syntax / Internet) defines the rules for writing correct code.
_____ (Input / Output) is information entered into a program.
_____ (Output / Input) is information produced by the program.
An _____ (algorithm / monitor) is a step-by-step plan to solve a problem.

Example 2

Instructions: Choose the correct word to complete each sentence.
A _____ (variable / compiler) stores a value in a program.
_____ (Loops / Comments) repeat instructions multiple times.
Conditional statements allow programs to _____ (make decisions / store files).
_____ (Debugging / Input) identifies and fixes errors in code.
A _____ (function / monitor) is a reusable block of code that performs a task.

Задание открытого типа с развернутым ответом

1. Discuss the importance of version control systems in collaborative coding projects.
2. Explain the role of code reviews in ensuring high-quality software development.

Тема 3. Variables*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is a variable in programming?
A) A named storage location that holds a value
B) A command that prints something on the screen
C) A mathematical equation
D) A sequence of characters

2. What is the process of assigning a value to a variable called?
A) Declaration
B) Assignment
C) Initialization
D) Evaluation

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each term with its correct definition.
A: Terms B: Definitions
1. Variable → a. A named storage location in memory for data.
2. Data type → b. Defines what kind of value a variable can hold (e.g., number, text).
3. Constant → c. A value that cannot be changed after being assigned.
4. Initialization → d. Assigning the first value to a variable.
5. Scope → e. The region of a program where a variable is accessible.

Example 2

A: Sentence start B: Sentence ending
1. A variable is used → a. to store data in a program.
2. Constants are useful → b. when values should not change.
3. A local variable is → c. only accessible within a specific function or block.
4. A global variable can → d. be accessed from anywhere in the program.
5. Initializing a variable → e. sets its first value.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: integer, string, boolean, float, global, local
A _____ can hold decimal numbers.
A _____ stores text.
A _____ variable stores true/false values.
A _____ variable can be used anywhere in the program.
A _____ variable is only available inside a function or block.

Example 2
Word box: assign, initialize, increment, constant, scope, value
To _____ a variable means to give it a value.
To _____ a variable means to set its first value.
A _____ cannot change once defined.
To increase a variable by one is to _____ it.
The _____ of a variable defines where it can be used.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for declaring and using a variable in the correct order.
a. Declare the variable with a name and type.
b. Initialize it with a value.
c. Use it in expressions or calculations.
d. Optionally update the variable value.
e. Program reads or outputs its value.

Example 2
Instructions: Arrange the steps for working with a constant.
Declare the constant with a name and type.
Assign its value.
Use it in calculations or output.
Attempting to change it results in an error.
The program reads its value wherever used.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A _____ (variable / constant) can change during program execution.
A _____ (constant / variable) cannot be modified after assignment.
The _____ (scope / type) defines where a variable can be accessed.
A _____ (boolean / string) variable stores true/false values.
A _____ (float / integer) can store decimal numbers.

Example 2
_____ (Initialization / Debugging) sets the first value of a variable.
A _____ (global / local) variable can be accessed from any function.
_____ (Integer / String) variables store whole numbers.
_____ (Assign / Increment) means to give or update a variable value.
_____ (Data type / Constant) defines the kind of data a variable holds.

Задание открытого типа с развернутым ответом

1. Explain the difference between local and global variables.
2. Discuss the concept of variable scope and its significance in programming.

Тема 4. The first steps with Visual C++*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the primary function of Visual C++?
A) Drawing graphics
B) Creating animations
C) Writing and compiling C++ code
D) Designing websites

2. What is the purpose of a header file in C++?
A) Contains executable code
B) Includes declarations of functions and variables
C) Defines the layout of a graphical user interface
D) Setsupprojectconfiguration

Задание закрытого типа на установление соответствия

Example 1

Instructions: Match each term with its correct definition.
A: Terms B: Definitions
1. Compiler → a. Converts C++ code into machine language.
2. IDE → b. An environment for writing, testing, and debugging code.
3. Project → c. A container for all files and settings of a program.
4. Source file → d. The file that contains your C++ code, usually ending in .cpp.
5. Build → e. The process of compiling and linking code into an executable program.

Example 2 – Antonyms
Instructions: Choose the antonym (opposite meaning).
Start → (a) run (b) stop (c) build
Debug → (a) fix (b) run (c) break
Error-free → (a) incorrect (b) faulty (c) bugged
Open → (a) run (b) close (c) save
Compile → (a) execute (b) delete (c) interpret

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: compiler, project, solution, source file, build, debug
The _____ translates your C++ code into an executable file.
A _____ contains your source code and settings.
You can _____ your program to check for syntax errors.
The _____ process compiles and links all the files.
A _____ in Visual Studio can contain multiple projects.

Example 2
Word box: run, execute, code, IDE, error list, output window
To see your program's result, click _____.
The _____ displays results and system messages.
The _____ shows syntax errors detected by the compiler.
You write your _____ inside the Visual C++ editor.
Visual Studio is an example of an _____.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps for creating and running a new C++ project in Visual Studio.
a. Open Visual Studio.
b. Create a new C++ project.

c. Write your code in the editor.
d. Build the project.
e. Run the program to see results.

Example 2
Instructions: Arrange the debugging process steps in the correct order.
Run the program.
Observe errors or unexpected results.
Open the “Error List” window.
Correct mistakes in the code.
Rebuildandtestagain.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
The _____ (compiler / debugger) translates code into machine language.
A _____ (project / folder) contains all source files and settings.
The _____ (output window / desktop) shows compilation results.
A C++ program starts with the _____ (main / first) function.
The _____ (debugger / browser) is used to fix errors.

Example 2
The Visual Studio _____ (IDE / OS) is used to write and test C++ programs.
To create an executable file, you must _____ (build / open) the project.
The _____ (error list / toolbox) shows mistakes in your code.
_____ (Comments / Loops) are used to explain code for readability.
To start your program, click _____ (Run / Edit).

Задание открытого типа с развернутым ответом

1. What are the initial steps to set up a new project in Visual C++?
2. Explain the role of the compiler in Visual C++ and how it differs from an interpreter.

8семестр

Тема 1. Introduction to fundamental concept for Business Analysis*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. Which of the following best defines Business Analysis?

A. The process of managing company finances
B. The practice of identifying business needs and finding solutions to business problems
C. The development of marketing strategies
D. The documentation of company policies

2. Which of the following is a key responsibility of a Business Analyst?
A. Coding and software testing
B. Gathering and documenting requirements
C. Managing payroll
D. Designing marketing materials

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each business analysis term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Business analyst → a. A professional who identifies business needs and recommends solutions.
2. Requirement → b. A condition or capability needed by a stakeholder to solve a problem.
3. Stakeholder → c. Any person or group affected by or interested in a project outcome.
4. Business process → d. A set of related activities that produce a specific business result.
5. Deliverable → e. A tangible output or product of a project or phase.

Example 2 – Synonyms
Instructions: Match each term with its synonym or similar concept.
A: Terms B: Synonyms
1. Objective → a. Goal
2. Outcome → b. Result
3. Analyze → c. Examine
4. Recommend → d. Suggest
5. Validate → e. Confirm

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Choose all correct words from the list that complete each sentence.
Word box: stakeholders, requirements, analysis, deliverables, business case, data
A business analyst collects _____ from different departments.
The project team produces several _____ like reports and models.

The _____ describes the justification for starting a project.
_____ involves studying how an organization operates.
All decisions must be supported by accurate _____.

Example 2
Word box: feasibility, goals, processes, outcomes, improvements, systems
A _____ study checks if a project is realistic and affordable.
Business _____ define what the company aims to achieve.
Analysts often review _____ to find bottlenecks.
_____ are measurable results of a project.
Continuous _____ are essential for long-term success.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the basic steps of business analysis in order.
a. Identify the business problem.
b. Gather and analyze requirements.
c. Develop possible solutions.
d. Present recommendations to stakeholders.
e. Support implementation and evaluate results.

Example 2
Instructions: Arrange the steps for preparing a business case in the correct order.
Define the problem or opportunity.
Gather relevant data and research.
Analyze costs, risks, and benefits.
Write the business case document.
Present and review with stakeholders.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
The _____ (stakeholder / program) provides input about project needs.
A _____ (requirement / decision) defines what a system must do.
The _____ (business case / meeting) justifies why the project is important.
A _____ (feasibility / marketing) study checks if a project is achievable.
The _____ (analyst / designer) documents and analyzes business requirements.

Example 2
SWOT analysis helps identify _____ (internal / random) strengths and weaknesses.

A gap analysis compares the current and _____ (future / present) state.
A process model shows how tasks _____ (flow / pause) in a business system.
Deliverables are the _____ (tangible / optional) outputs of analysis work.
Effective documentation makes communication more _____ (clear / hidden).

Задание открытого типа с развернутым ответом

1. Discuss the importance of understanding stakeholder needs in business analysis.
2. Explain the difference between qualitative and quantitative data in business analysis.

Тема 2. Decision making, data and information ***УКОС-4.1, 4.2, 4.3***

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. Which of the following best describes the relationship between data, information, and decision-making?
A. Information is converted into data to make decisions
B. Data becomes information when it is processed and used to make decisions
C. Decision-making produces data that becomes information
D. Data and information are unrelated to decision-making

2. Which type of decision is made routinely, using established rules or procedures?
A. Strategic decision
B. Non-programmed decision
C. Programmed decision
D. Creative decision

Задание закрытого типа на установление соответствия

Example 1
Instructions: Match each term with its correct definition.
A: Terms B: Definitions
1. Data → a. Raw facts and figures that have not yet been processed.
2. Information → b. Data that has been organized and made meaningful.
3. Decision making → c. The process of choosing the best option among alternatives.
4. Evidence → d. Reliable information used to support a choice or judgment.
5. Criteria → e. Standards or principles used to evaluate possible options.

Example 2 – Antonyms
Instructions: Choose the opposite meaning.
Reliable → (a) stable (b) uncertain (c) trusted

Logical → (a) reasonable (b) irrational (c) careful
Consistent → (a) variable (b) similar (c) frequent
Include → (a) exclude (b) cover (c) involve
Precise → (a) vague (b) detailed (c) narrow

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Word box: information, evidence, data, criteria, decision, process
Every _____ should be supported by accurate facts.
A business analyst collects _____ from various systems.
_____ are standards used to compare different options.
Reliable _____ ensures sound and logical reasoning.
Decision making is a step-by-step _____ of choosing an action.

Example 2
Word box: accuracy, analysis, quality, reliability, feedback, judgment
The _____ of data determines the trustworthiness of the outcome.
Managers rely on _____ to interpret trends and results.
_____ ensures that data is consistent and error-free.
Decision makers use _____ from staff to improve results.
Sound _____ depends on both facts and experience.

Задание закрытого типа на установление последовательности

Example 1
Instructions: Arrange the steps of the decision-making process in the correct order.
a. Identify the problem.
b. Gather relevant data and information.
c. Analyze the data.
d. Generate possible solutions.
e. Choose the best option and take action.

Example 2
Instructions: Put the data handling process in the right order.
Collect raw data.
Process and organize data.
Convert data into meaningful information.
Analyze the information.
Make decisions based on findings.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
Data must be _____ (accurate / optional) to support good decisions.
Managers use _____ (intuition / information) to guide their actions.
_____ (Quantitative / Descriptive) data is expressed in numbers.
_____ (Analysis / Guessing) helps transform data into insights.
Clear _____ (criteria / opinions) are essential for fair evaluation.

Example 2
Decisions should be based on _____ (evidence / rumors).
Data without context cannot become _____ (information / noise).
Qualitative data focuses on _____ (opinions / numbers).
The first step in decision making is to _____ (define / skip) the problem.
_____ (Reliable / Random) data improves the accuracy of analysis.

Задание открытого типа с развернутым ответом

1. Explain how data-driven decision-making differs from intuition-based decision-making. What are the advantages and disadvantages of each?
2. Describe a real-life situation (or example) where data analytics improved a company's strategic decision-making process.

Тема 3. Financialmodelling*УКОС-4.1, 4.2, 4.3*

Задание закрытого типа с выбором одного правильного ответа из нескольких вариантов предложенных

1. What is the primary purpose of a financial model?
A. To record historical transactions
B. To predict future financial performance based on assumptions
C. To audit company accounts
D. To design marketing strategies

2. Which of the following is typically included in a financial model?
A. Marketing campaign details
B. Income statement, balance sheet, and cash flow statement
C. Employee satisfaction surveys
D. Product design sketches

Задание закрытого типа на установление соответствия

Example 1

Instructions: Match each financial modelling term (Column A) with its correct definition (Column B).
A: Terms B: Definitions
1. Financial model → a. A structured tool (usually in Excel) used to forecast financial performance.
2. Assumption → b. An estimated value used in calculations when exact data is not available.
3. Forecast → c. A prediction of future financial outcomes based on data and trends.
4. Cash flow → d. The movement of money into and out of a business.
5. Variable → e. A value that can change depending on business conditions or inputs.

Example 2
Instructions: Match each sentence beginning with its correct ending.
A: Sentence start B: Sentence ending
1. A financial model helps → a. predict a company's financial future.
2. Assumptions must be → b. realistic and based on reliable data.
3. The cash flow statement shows → c. the inflow and outflow of money.
4. Sensitivity analysis tests → d. how results change when key variables vary.
5. The balance sheet reports → e. assets, liabilities, and equity at a given date.

Задание закрытого типа с выбором нескольких правильных ответов из нескольких вариантов предложенных

Example 1
Word box: model, assumptions, forecasts, data, analysis, scenarios
A financial _____ is used to simulate business performance.
Reliable _____ ensures realistic results.
_____ are educated guesses about uncertain values.
Future _____ help companies plan ahead.
Analysts often test different _____ to evaluate risks.

Example 2
Word box: expenses, revenue, profit, variables, outcome, growth
Changes in _____ can greatly affect profitability.
The model calculates _____ based on expected sales.
After subtracting costs from _____ we get net income.
An uncertain _____ can be explored using sensitivity tests.
Financial _____ is often measured in percentage increase over time.

Задание закрытого типа на установление последовательности

Example 1

Instructions: Arrange the steps for building a financial model in the correct order.
a. Define the model's objective.
b. Collect historical data.
c. Make key assumptions.
d. Build formulas and calculations.
e. Test scenarios and validate results.

Example 2
Instructions: Put the steps of financial forecasting in order.
Identify revenue drivers.
Estimate costs and expenses.
Create cash flow projections.
Review and adjust assumptions.
Present the forecast to management.

Задание комбинированного типа с выбором одного правильного ответа из предложенных и обоснованием выбора

Example 1
Instructions: Choose the correct word to complete each sentence.
A financial _____ (model / policy) helps predict company performance.
_____ (Assumptions / Records) form the basis of all calculations.
The income statement reports _____ (profits / assets) over time.
_____ (Scenario / Simple) analysis tests different conditions.
A _____ (valuation / contract) estimates a firm's worth.

Example 2
_____ (Forecasting / Guessing) uses historical data to estimate the future.
Sensitivity analysis checks how _____ (variables / constants) affect results.
The cash flow statement tracks _____ (money / goods) moving in and out.
Accurate _____ (data / trends) is essential for building a reliable model.
Investors rely on _____ (financial / emotional) models for decision making.

Задание открытого типа с развернутым ответом

1. Explain the key components that should be included in a well-structured financial model.
2. How can assumptions impact the accuracy and reliability of a financial model? Provideanexample.

6.3. Критерии и шкала оценивания на основе БРС.

Критерии и балльная шкала определяются преподавателем

КРИТЕРИИ ОЦЕНИВАНИЯ	РЕЗУЛЬТАТ В БАЛЛАХ
Дан полный, в логической последовательности развернутый ответ на поставленный вопрос, где он продемонстрировал знания предмета в полном объеме учебной программы, достаточно глубоко осмысливает дисциплину, самостоятельно, и исчерпывающе отвечает на дополнительные вопросы, приводит собственные примеры по проблематике поставленного вопроса, решил предложенные практические задания без ошибок	40
Дан развернутый ответ на поставленный вопрос, где студент демонстрирует знания, приобретенные на лекционных и семинарских занятиях, а также полученные посредством изучения обязательных учебных материалов по курсу, дает аргументированные ответы, приводит примеры, в ответе присутствует свободное владение монологической речью, логичность и последовательность ответа. Однако допускается неточность в ответе. Решил предложенные практические задания с небольшими неточностями.	30-39
Дан ответ, свидетельствующий в основном о знании процессов изучаемой дисциплины, отличающийся недостаточной глубиной и полнотой раскрытия темы, знанием основных вопросов теории, слабо сформированными навыками анализа явлений, процессов, недостаточным умением давать аргументированные ответы и приводить примеры, недостаточно свободным владением монологической речью, логичностью и последовательностью ответа. Допускается несколько ошибок в содержании ответа и решении практических заданий.	20-29
Дан ответ, который содержит ряд серьезных неточностей, обнаруживающий незнание процессов изучаемой предметной области, отличающийся неглубоким раскрытием темы, незнанием основных вопросов теории, несформированными навыками анализа явлений, процессов, неумением давать аргументированные ответы, слабым владением монологической речью, отсутствием логичности и последовательности. Выводы поверхностны. Решение практических заданий не выполнено, т.е. студент не способен ответить на вопросы даже при дополнительных наводящих вопросах преподавателя.	0-19

7. Методические материалы по освоению дисциплины (модуля)

Подготовка к промежуточной аттестации осуществляется студентом самостоятельно с использованием перечня вопросов к промежуточной аттестации, конспекта лекций по дисциплине и рекомендованных источников литературы.

В период подготовки к промежуточной аттестации студенты вновь обращаются к пройденному учебному материалу. При этом они не

только укрепляют полученные знания, но и получают новые. Подготовка студента к промежуточной аттестации включает в себя два этапа:

– самостоятельная работа в течение семестра;
– непосредственная подготовка в дни, предшествующие промежуточной аттестации по темам курса.

Основным источником подготовки к промежуточной аттестации является конспект лекций, где учебный материал дается в систематизированном виде, основные положения его детализируются, подкрепляются современными фактами и информацией, которые в силу новизны не вошли в опубликованные печатные источники. В ходе подготовки к промежуточной аттестации студентам необходимо обращать внимание не только на уровень запоминания, но и на степень понимания излагаемых проблем.

8. Учебная литература и ресурсы информационно-телекоммуникационной сети Интернет

8.1. Основнаялитература

1) Мельничук, Марина Владимировна. Профессиональный английский язык: экономика и менеджмент. : учебник / М. В. Мельничук, М. А. Белогаш. - Москва : ИНФРА-М, 2024. - 217 с. - Текст: электронный. - URL: https://znanium.ru/catalog/document?id=452341#bib.
2) Герасимова, Елена Борисовна. Анализ эффективности бизнеса = BusinessPerformanceAnalysis : учебник / Е. Б. Герасимова. - Москва :КноРус, 2024. - 198 с. - Текст: электронный. - URL: https://book.ru/books/956714.
3) Смирнова, Елена Владимировна. Технический английский язык для специалистов в сфере IT-технологий : учебное пособие / Е. В. Смирнова, К. С. Браженец, Л. С. Сидоркина. - Москва : РУСАЙНС, 2024. - 110 с. - Текст: электронный. - URL: https://book.ru/books/951564
4) Салынская, Татьяна Владимировна. Business: InformationSystemsandTechnologies : учебное пособие / Т. В. Салынская, А. А. Ясницкая, С. В. Фирсова. - Москва : РУСАЙНС, 2024. - 136 с. - Текст: электронный. - URL: https://book.ru/books/953847.

8.2. Дополнительная литература

1) Ашурбекова, Т. И. Английский язык для экономистов (B1–B2) : учебник и практикум для вузов / Т. И. Ашурбекова, З. Г. Мирзоева. — 2-е изд., испр. и доп. — Москва : Издательство Юрайт, 2025. — 195 с. — (Высшее образование). — ISBN 978-5-534-07039-2. — Текст : электронный

// Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/561756

2) Халилова Л. А. Englishforstudentsofeconomics : учебник английского языка для студентов экономических специальностей / Л. А. Халилова. .− 2-е изд. − Москва : ФОРУМ, 2009. − 384 с. − Библиогр.: с. 378. - ISBN 978-5-91134-310-1. − Текст: электронный // ЭБС МегаПро [сайт]. − URL: https://megapro.ranepa.ru/MegaPro/Web/SearchResult/ToPage/1

8.3. Нормативные правовые документы и иная правовая информация – не предусмотрено

8.4 Интернет-ресурсы

1 Business English Pod: www.BusinessEnglishPod.com
2 Skills 360 – Business English: www.myBEonline.com
3 Lingualeo: https://lingualeo.com/ru
4 The Economist Radio (All audio: https://itunes.apple.com/ru/podcast/the-economist-radio-all-audio/id151230264?mt=2
5 Business Skills 360 Podcast for Business English: https://itunes.apple.com/ru/podcast/business-skills-360-podcast/id465088372?mt=2
6 Business English Pod :: Learn Business English: https://itunes.apple.com/ru/podcast/business-english-pod-learn/id206603090?mt=2
7 English Vocabulary for Business Video Vocab: https://itunes.apple.com/ru/podcast/english-vocabulary-for-business/id363384247?mt=2

9. Материально-техническая база, информационные технологии, программное обеспечение и информационные справочные системы

№ п/п	Наименование
1.	Специализированные залы для проведения лекций, оснащенные персональным компьютером/ноутбуком и мультимедийным проектором
2.	Аудитории и компьютерные классы, оборудованные посадочными местами и персональными компьютерами с выходом в Интернет для проведения практических занятий
3.	«МТС Линк» — российская платформа для онлайн-коммуникаций и совместной работы команд ;«Яндекс Телемост» — сервис для видеоконференций от Яндекса; Я-мессенджер
4.	Технические средства обучения: персональные компьютеры; программные средства, обеспечивающие просмотр видеофайлов в форматах AVI, MPEG-4, DivX, RMVB, WMV; программы для работы с электронными таблицами для обработки, анализа и визуализации данных; соответствующие онлайн-инструменты для построения интеллект-карты и моделей в различных нотациях

5.	Научная библиотека (в т.ч. электронные информационные ресурсы научной библиотеки)
6.	СДО Академии https://lms.ranepa.ru/