

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Выборнова Любовь Алексеевна  
Должность: Ректор  
Дата подписания: 13.01.2025 08:15:49  
Уникальный программный ключ:  
c3b3b9c625f6c113afa2a2c42baff9e05a38b76e

Министерство науки и высшего образования Российской Федерации  
федеральное государственное бюджетное образовательное учреждение высшего образования  
«Поволжский государственный университет сервиса» (ФГБОУ ВО «ПВГУС»)

Кафедра «Гостеприимство и межкультурные коммуникации»

Утверждаю  
Проректор  А.П.Старкова  
« 06 »  2023 г

**Программа кандидатского экзамена по дисциплине**

**«Иностранный язык»**

Тольятти 2023 г.

Программа кандидатского экзамена по дисциплине «Иностранный язык» составлена в соответствии с паспортом Высшей аттестационной комиссии Минобрнауки России по научным специальностям 2.2.11 Информационно-измерительные и управляющие системы, 2.3.1 Системный анализ, управление и обработка информации, 2.4.2 Электронные комплексы и системы, 5.2.2 Математические, статистические и инструментальные методы в экономике, 5.2.3 Региональная и отраслевая экономика, 5.2.4 Финансы, 5.2.6 Менеджмент, 5.10.3 Виды искусства, 5.10.1 Теория и история культуры, искусства. Программа включает порядок проведения экзамена, перечень и содержание тем дисциплины «Иностранный язык», а также список литературы для подготовки к кандидатскому минимуму.

Составитель: к. пед. наук Ю.В. Благов

Программа обсуждена на заседании кафедры «Гостеприимство и межкультурные коммуникации»

«01» 12 2023 г., протокол № 4

Заведующий кафедрой

к. филос. н., доцент

Н Д. Алексеева

\_\_\_\_\_  
(уч. степень, уч. звание)

\_\_\_\_\_  
(ФИО)

Программа согласована:

И.о. начальника отдела

аспирантуры

к.э.н., доцент

Е.Ю. Иноземцева

\_\_\_\_\_ 

«05» 12 2023 г.

## Содержание

1	Общие положения к порядку проведения кандидатского экзамена	4
2	Перечень и содержание тем дисциплины «Иностранный язык»	5
3	Список литературы для подготовки к кандидатскому экзамену по дисциплине «Иностранный язык»	6
4	Интернет-ресурсы и другие электронные информационные источники	8
5	Оценочные материалы (шкала оценивания и фонд оценочных средств) для проведения кандидатского экзамена	8
5.1	Шкала оценивания результатов освоения дисциплины, сформированности результатов обучения	8
5.2	Фонд оценочных средств (материалы кандидатского экзамена)	9
5.2.1	Изучающее чтение оригинального текста по специальности. (Два варианта текстов по каждой научной специальности).	9
5.2.2	Беседа с экзаменаторами на иностранном языке по вопросам, связанным со специальностью и научной работой аспиранта. Примерные вопросы для собеседования	28

## **1. Общие положения к порядку проведения кандидатского экзамена**

1.1. Кандидатский экзамен сдается аспирантами, обучающимися по научным специальностям 2.2.11 Информационно-измерительные и управляющие системы, 2.3.1 Системный анализ, управление и обработка информации, 2.4.2 Электронные комплексы и системы, 5.2.2 Математические, статистические и инструментальные методы в экономике, 5.2.3 Региональная и отраслевая экономика, 5.2.4 Финансы, 5.2.6 Менеджмент, 5.10.3 Виды искусства, 5.10.1 Теория и история культуры, искусства, во 2 семестре и является формой промежуточной аттестации.

1.2. В рамках мероприятий текущей и промежуточной аттестации по дисциплине «Иностранный язык», изучаемой в 1-2 семестрах, аспиранты осваивают образовательный компонент в соответствии с утвержденной рабочей программой дисциплины, выполняют практические задания и сдают зачет после первого семестра и кандидатский экзамен после второго семестра соответственно.

1.3. Для приема кандидатских экзаменов создаются комиссии по приему кандидатского экзамена (далее - экзаменационная комиссия), состав которой утверждается приказом ректора Университета или уполномоченным проректором.

1.4. Состав экзаменационной комиссии формируется из числа научно-педагогических работников (в том числе работающих по совместительству) Университета в количестве не более 5 человек и включает в себя председателя, заместителя председателя и членов экзаменационной комиссии. В состав экзаменационной комиссии могут включаться научно-педагогические работники других образовательных организаций.

1.5. Экзаменационная комиссия по приему кандидатского экзамена по иностранному языку правомочна принимать кандидатский экзамен по иностранному языку, если в ее заседании участвуют не менее 2 специалистов, имеющих высшее образование в области языкознания, подтвержденное дипломом специалиста или магистра, и владеющих этим иностранным языком, в том числе 1 кандидат филологических наук, либо педагогических наук, а также 1 специалист по проблемам научной специальности, имеющий ученую степень кандидата или доктора наук и владеющий этим иностранным языком.

1.6. Экзаменационная комиссия принимает кандидатский экзамен у аспирантов и лиц, прикрепленных к Университету для сдачи кандидатских экзаменов, в период, установленный календарным учебным графиком по программе подготовки научных и научно-педагогических кадров в аспирантуре.

1.7. Кандидатский экзамен проводится устно и включает в себя два задания: 1. Изучающее чтение оригинального текста по специальности. Объем 2500- 3000 печатных знаков. 2. Беседа с экзаменаторами на иностранном языке по вопросам, связанным со специальностью и научной работой аспиранта. Проведение кандидатского экзамена с применением дистанционных образовательных технологий допускается в случаях, препятствующих аспиранту лично присутствовать в Университете, при наличии уважительных причин на основании личного заявления о необходимости прохождения кандидатского экзамена с применением дистанционных образовательных технологий.

1.8. Материалы для сдачи кандидатского экзамена утверждаются заведующим кафедрой или уполномоченным им лицом. Программа кандидатского экзамена размещается в ЭИОС университета не позднее, чем за месяц до начала экзаменационной сессии.

1.9. На подготовку к ответу по материалу аспиранту отводится 30-40 минут. Форма проверки: передача извлеченной информации осуществляется на русском языке в течение 2-3 минут.

1.10. На кандидатском экзамене аспирант должен продемонстрировать умение пользоваться иностранным языком как средством профессионального общения в научной

сфере. Аспирант должен владеть нормами изучаемого языка и правильно использовать их во всех видах речевой коммуникации, в форме устного и письменного общения.

1.11. Экзаменаторы имеют право задавать экзаменуемому уточняющие вопросы по существу в рамках программы кандидатского экзамена. Во время кандидатского экзамена экзаменуемые могут пользоваться настоящей программой, а также, с разрешения экзаменаторов, справочными и другими пособиями и материалами. В случае использования какой-либо литературы без разрешения экзаменационной комиссии экзаменуемый удаляется с экзамена с выставлением неудовлетворительной оценки.

1.12. Решение экзаменационной комиссии оформляется протоколом, в котором указываются шифр и наименование научной специальности, наименование отрасли науки, по которой подготавливается диссертация; оценка уровня знаний по кандидатскому экзамену; фамилия, имя, отчество (последнее - при наличии), ученая степень (в случае ее отсутствия - уровень профессионального образования и квалификация) каждого члена экзаменационной комиссии. Оценка за кандидатский экзамен выставляется также в экзаменационной ведомости. Протоколы заседаний экзаменационных комиссий по приему кандидатских экзаменов подлежат постоянному хранению.

1.13. Результаты кандидатского экзамена объявляются в день его проведения.

## **2. Перечень и содержание тем дисциплины «Иностранный язык»**

### **Типовые задания по темам**

Тема 1. Я и моё научное исследование

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Подготовьте пересказ текста.

Тема 2. Моя научная специальность

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Подготовьте пересказ текста.

Тема 3. В мире науки и технологии

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Подготовьте пересказ текста.

Тема 4. Подготовка научной статьи с использованием IT-технологии

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Напишите научную статью.

6. Подготовьте пересказ текста.

Тема 5. Языковые клише для аннотации научной статьи.

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Напишите аннотацию к научной статье.
6. Подготовьте пересказ текста.

Тема 6. Реферирование и аннотирование

Практическое занятие:

1. Прочитайте и переведите текст.
2. Ответьте на вопросы к тексту.
3. Выполните лексические и грамматические упражнения.
4. Составьте диалогическое и монологическое высказывание.
5. Подготовьте реферирование и аннотирование научной статьи..
6. Подготовьте пересказ текста.

### 3. Список литературы для подготовки к кандидатскому экзамену по дисциплине «Иностранный язык»:

#### 3.1. Основная литература

1. Белякова, Е. И. Английский для аспирантов : учеб. пособие / Е. И. Белякова. – 2-е изд., перераб. и доп. – Документ read. – Москва : Вузов. учеб. [и др.], 2022. – 188 с. : табл. – Прил. – URL: <https://znanium.com/read?id=386908> (дата обращения: 06.12.2022). – Режим доступа: для авториз. пользователей. – ISBN 978-5-9558-0306-7. - 978-5-16-102693-9. – Текст : электронный.

2. Воног, В. В. English for postgraduate students : учеб. пособие для аспирантов и соиск. инж., гуманитар. и естественнонауч. специальностей / В. В. Воног, О. А. Прохорова ; Сиб. федер. ун-т. - Документ read. - Красноярск : СФУ, 2020. - 100 с. - Прил. - URL: <https://znanium.com/read?id=379853> (дата обращения: 02.03.2022). - Режим доступа: для авториз. пользователей. - ISBN 978-5-7638-4220-3. - Текст : электронный.

3. Гальчук, Л. М. Английский язык в научной среде. Практикум устной речи = Speaking activities on academic english for master's degree and postgraduate studies : учеб. пособие по англ. яз. для аспирантов, магистрантов и науч. работников / Л. М. Гальчук. – 2-е изд. – Документ read. – Москва : Вузов. учеб. [и др.], 2022. – 80 с. – URL: <https://znanium.com/read?id=388340> (дата обращения: 07.12.2021). - Режим доступа: для авториз. пользователей. – ISBN 978-5-9558-0463-7. - 978-5-16-011288-6. - 978-5-16-103464-4. – Текст : электронный.

4. Джиоева, А. А. Английская номинативность и картина мира : монография / А. А. Джиоева ; МГУ им. М. В. Ломоносова. - Документ Bookread2. - Москва : ИНФРА-М, 2019. - 176 с. - (Научная мысль). - URL: <http://znanium.com/bookread2.php?book=1002053> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-16-012888-7. - 978-5-16-105290-7. - Текст : электронный.

#### 3.2. Дополнительная литература

5. Агеев, С. В. Лексические трудности английского языка / С. В. Агеев, Н. А. Бондарева, Е. Е. Петрова. - Документ HTML. - Москва : РИОР [и др.], 2015. - 99 с. - URL:

<http://znanium.com/bookread.php?book=503482> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-16-102860-5. - Текст : электронный.

6. Английский язык: экономика и финансы (Environment): учеб. по специальностям "Финансы и кредит", "Бухгалт. учет, анализ и аудит" и "Налоги и налогообложение" / Г. А. Дубинина, И. Ф. Драчинская, Н. Г. Кондрахина, О. Н. Петрова ; Финансовая акад. при Правительстве РФ. - Документ HTML. - Москва : Альфа-М [и др.], 2011. - 208 с. - URL: <http://znanium.com/bookread.php?book=204548> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-98281-225-4. - 978-5-16-004514-6. - Текст : электронный.

7. Английский язык: экономика и финансы (Majors): учеб. по специальностям "Финансы и кредит", "Бухгалт. учет, анализ и аудит" и "Налоги и налогообложение" / Г. А. Дубинина, И. Ф. Драчинская, Н. Г. Кондрахина, О. Н. Петрова ; Финансовая акад. при Правительстве РФ. - Документ HTML. - Москва : Альфа-М [и др.], 2011. - 176 с. - URL: <http://znanium.com/bookread.php?book=234898> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-98281-259-9. - 978-5-16-004847-5. - Текст : электронный.

8. Арнольд, И. В. Стилистика. Современный английский язык : учеб. для вузов по специальности "Англ. яз." / И. В. Арнольд ; науч. ред. П. Е. Бухаркин. - 10-е изд. - Москва : Флинта [и др.], 2010. - 383 с. - Предм. указ. - ISBN 978-5-89349-363-4. - 978-5-02-022688-3 : 196-70. - Текст : непосредственный.

9. Красюк, Н. И. Деловая переписка на английском языке : учеб.-справ. пособие / Н. И. Красюк, В. В. Красюк. - Москва [и др.] : Суфлер [и др.], 2013. - 220 с. : ил. - (Без репетитора). - Прил. - ISBN 978-5-222-20501-3. - 978-5-4452-0051-2 : 218-08. - Текст : непосредственный.

10. Маньковская, З. В. Английский язык в ситуациях повседневного делового общения : учеб. пособие по англ. яз. по специальности "Перевод и переводоведение" направления "Лингвистика и межкультур. коммуникация" / З. В. Маньковская. - Документ Bookread2. - Москва : ИНФРА-М, 2019. - 223 с. - (Высшее образование - Бакалавриат). - Прил. - URL: <http://znanium.com/bookread2.php?book=995410> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-16-005065-2. - 978-5-16-105-422-2. - Текст : электронный.

11. Маньковская, З. В. Идиомы и фразовые глаголы в деловом общении (английский язык) : учеб. пособие для вузов по направлению 45.03.01 "Филология" / З. В. Маньковская. - Документ Bookread2. - Москва : ИНФРА-М, 2019. - 184 с. - (Высшее образование - Бакалавриат). - Прил. - год 27.03. - URL: <https://new.znanium.com/read?id=354918> (дата обращения: 15.10.2020). - Режим доступа: для авториз. пользователей. - ISBN 978-5-16-004460-6. - Текст : электронный.

12. Мюллер, В. К. Англо-русский, русско-английский словарь : соврем. ред. : 120 тыс. сл. / В. К. Мюллер. - Москва : Стандарт, 2014. - 830 с. - ISBN 978-5-91336-124-0 : 191-48. - Текст : непосредственный.

#### **4. Интернет-ресурсы и другие электронные информационные источники**

1. eLIBRARY.RU : научная электронная библиотека : сайт. - Москва, 2000 - . - URL: <https://elibrary.ru> (дата обращения: 03.12.2021). - Режим доступа: для зарегистрир. пользователей. - Текст: электронный.

2. КонсультантПлюс : справочная правовая система : сайт / ЗАО «КонсультантПлюс». - Москва, 1992 . - URL: <http://www.consultant.ru> (дата обращения 03.12.2021). - Текст : электронный.

3. Электронная библиотечная система Поволжского государственного университета сервиса : сайт / ФГБОУ ВО «ПВГУС». - Тольятти, 2010 - . - URL. :

<http://elib.tolgas.ru> (дата обращения 03.12.2021). - Режим доступа: для авториз. пользователей. - Текст : электронный.

4. Электронно-библиотечная система Znanium.com : сайт / ООО "ЗНАНИУМ". – Москва, 2011 - . - URL: <https://znanium.com/> (дата обращения 03.12.2021). - Режим доступа: для авториз. пользователей. - Текст : электронный.

5. Электронно-библиотечная система Лань : сайт / ООО "ЭБС ЛАНЬ". - Москва, 2011 - . - URL: <https://e.lanbook.com/> (дата обращения 03.12.2021). - Режим доступа: для авториз. пользователей. - Текст : электронный.

## 5. Оценочные материалы (шкала оценивания и фонд оценочных средств) для проведения кандидатского экзамена

### 5.1. Шкала оценивания результатов освоения дисциплины, сформированности результатов обучения

При оценке знаний и уровня подготовки определяется:

- уровень освоения программы специальной дисциплины «Иностранный язык» и материала, предусмотренного программой кандидатского экзамена;

Форма проведения промежуточной аттестации	Шкалы оценки уровня сформированности результатов обучения		Шкала оценки уровня освоения дисциплины		
	Уровневая шкала оценки компетенций	100 бальная шкала, %	100 бальная шкала, %	5-бальная шкала, дифференцированная оценка/балл	недифференцированная оценка
зачет / экзамен	допороговый	ниже 61	ниже 61	«неудовлетворительно» / 2	не зачтено
	пороговый	61-85,9	61-69,9	«удовлетворительно» / 3	зачтено
			70-85,9	«хорошо» / 4	зачтено
повышенный	86-100	86-100	«отлично» / 5	зачтено	

По итогам текущей успеваемости аспиранту может быть выставлен оценка «зачтено» по промежуточной аттестации в соответствии за набранными за 1 семестр баллами (по накопительному рейтингу). Аспирантам, набравшим в ходе текущего контроля успеваемости по дисциплине от 61 до 100 баллов и выполнившим все обязательные виды запланированных учебных занятий, по решению преподавателя без прохождения промежуточной аттестации выставляется оценка в соответствии со шкалой оценки результатов освоения дисциплины. По итогам 2 семестра аспирантами сдается кандидатский экзамен. Сдача кандидатского экзамена является обязательной, независимо от результатов текущего рейтинга.

**Результат обучения считается сформированным (повышенный уровень),** если при устных собеседованиях аспирант исчерпывающе, последовательно, четко и логически стройно излагает учебный материал; свободно справляется с вопросами и другими видами заданий, требующих применения знаний, использует в ответе дополнительный материал; все предусмотренные рабочей учебной программой задания выполнены в соответствии с установленными требованиями, аспирант способен анализировать полученные результаты; проявляет самостоятельность при выполнении заданий, качество их выполнения оценено числом баллов от 86 до 100, что соответствует повышенному уровню сформированности результатов обучения.

**Результат обучения считается сформированным (пороговый уровень),** если при устных собеседованиях аспирант последовательно, четко и логически стройно излагает учебный материал; справляется с вопросами и другими видами заданий, требующих применения знаний; все предусмотренные рабочей учебной программой задания выполнены в соответствии с установленными требованиями, аспирант способен

анализировать полученные результаты; проявляет самостоятельность при выполнении заданий, качество их выполнения оценено числом баллов от 61 до 85,9, что соответствует пороговому уровню сформированности результатов обучения.

**Результат обучения считается несформированным**, если аспирант при выполнении заданий не демонстрирует знаний учебного материала, допускает ошибки, неуверенно, с большими затруднениями выполняет задания, не демонстрирует необходимых умений, качество выполненных заданий не соответствует установленным требованиям, качество их выполнения оценено числом баллов ниже 61, что соответствует допороговому уровню.

## **5.2. Фонд оценочных средств (материалы кандидатского экзамена)**

### **5.2.1. Изучающее чтение оригинального текста по специальности. (Два варианта текстов по каждой научной специальности).**

Научная специальность: **2.2.11 Информационно-измерительные и управляющие системы**

#### **Текст1. Information Systems and Future**

**Information System** is an integrated set of components designed for collecting, storing, and processing data and for providing information, knowledge, and digital products. Organizations or businesses primarily rely on these systems to manage operations, customer and supplier interactions and compete in the Marketplace. From an the Industry perspective, global organizations are built entirely around Information Systems.

**History** was invented over the millennia, new capabilities appeared, and people became empowered. The invention of the printing press by Johannes Gutenberg in the mid-15th century and the invention of a mechanical calculator by Blaise Pascal in the 17th century are but two examples. These inventions led to a profound revolution in the ability to record, process, disseminate, and reach for information and knowledge. This led, in turn, to even deeper changes in individual lives, business organization, and human governance.

The first large-scale mechanical information system was Herman Hollerith's census tabulator. Invented in time to process the 1890 U.S. census, Hollerith's machine represented a major step in automation, as well as an inspiration to develop computerized information systems.

One of the first computers used for such information processing was the **UNIVACI**, installed at the U.S. Bureau of the Census in 1951 for administrative use and at General Electric in 1954 for commercial use. Beginning in the late 1970s, personal computers brought some of the advantages of information systems to small businesses and to individuals. Early in the same decade the Internet began its expansion as the global network of networks. In 1991 the World Wide Web, invented by Tim Berners-Lee as a means to access the interlinked information stored in the globally dispersed computers connected by the Internet, began operation and became the principal service delivered on the network. The global penetration of the Internet and the Web has enabled access to information and other resources and facilitated the forming of relationships among people and organizations on an unprecedented scale. The progress of electronic commerce over the Internet has resulted in a dramatic growth in digital interpersonal communications (via e-mail and social networks), distribution of products (software, music, e-books, and movies), and business transactions (buying, selling, and advertising on the Web). With the worldwide spread of smartphones, tablets, laptops, and other computer-based mobile devices, all of which are connected by wireless communication networks, information systems have been extended to support mobility as the natural human condition.

As information systems enabled more diverse human activities, they exerted a profound influence over society. These systems quickened the pace of daily activities, enabled people to develop and maintain new and often more-rewarding relationships, affected the structure and

mix of organizations, changed the type of products bought, and influenced the nature of work. Information and knowledge became vital economic resources. Yet, along with new opportunities, the dependence on information systems brought new threats. Intensive industry innovation and academic research continually develop new opportunities while aiming to contain the threats.

The main components of information systems are computer hardware and software, telecommunications, and data warehouses, human resources, and procedures.

## **Текст 2. Information system infrastructure and architecture**

A well-designed information system rests on a coherent foundation that supports responsive change — and, thus, the organization's agility—as new business or administrative initiatives arises. Known as the information system infrastructure, the foundation consists of core telecommunications networks, databases and data warehouses, software, hardware, and procedures managed by various specialists. With business globalization, an organization's infrastructure often crosses many national boundaries. Establishing and maintaining such a complex infrastructure requires extensive planning and consistent implementation to handle strategic corporate initiatives, transformations, mergers, and acquisitions. Information system infrastructure should be established in order to create meaningful options for future corporate development.

When organized into a coherent whole, the specific information systems that support operations, management, and knowledge work constitute the system architecture of an organization. Clearly, an organization's long-term general strategic plans must be considered when designing an information system infrastructure and architecture.

### *Organization of information services*

Information services of an organization are delivered by an outside firm, by an internal unit, or by a combination of the two. Outsourcing of information services helps with such objectives as cost savings, access to superior personnel, and focusing on core competencies.

An information services unit is typically in charge of an organization's information systems. When the systems are largely outsourced, this unit is of a limited size and concentrates on aligning the systems with the corporate competitive strategy and on supervising the outside company's services. When information services are provided in-house and centralized, this unit is responsible for planning, acquiring, operating, and maintaining information systems for the entire organization. In decentralized structures, however, the central unit is responsible only for planning and maintaining the infrastructure, while business and administrative specialists supervise systems and services for their own units. A variety of intermediate organizational forms are possible.

In many organizations, information systems are headed by a chief information officer (CIO) or a chief technology officer (CTO). The activities of information services are usually supervised by a steering committee consisting of the executives representing various functional units of the organization. Steering committees set the priorities for the development of future systems. In the organizations where information systems play a strategic role, boards of directors need to be involved in their governance. As described below, a vital responsibility of an

information services unit is to ensure uninterrupted service and integrity of the systems and information in the face of many security threats.

### *Information systems as a field of study*

An information system is a discipline of study that is generally situated in business schools. The essential objective of the discipline is to develop and study the theories, methods, and systems of using information technology to operate and manage organizations and to support their marketplace offerings. The discipline employs a sociotechnical approach, placing the study of information technology in the context of management, organizations, and society. The academic study of information systems originated in the 1960s. The scholarly society furthering the development of the discipline is the Association for Information Systems (AIS).

## **Научная специальность 2.3.1 Системный анализ, управление и обработка информации**

### **Текст 1. SYSTEMS ANALYSIS**

Systems analysis is the process of examining a business situation for the purpose of developing a system solution to a problem or devising improvements to such a situation. Before the development of any system can begin, a project proposal is prepared by the users of the potential system and/or by systems analysts and submitted to an appropriate managerial structure within the organization.

The project proposal is the attempt to respond to or take advantage of a particular situation and is an essential element for correctly launching the system analysis. Although there are no hard and fast rules as to the form and content of the project proposal, the proposal should address the following points:

- The specifics of the business situation or problem.
- The significance of the problem to the organization.
- Alternative solutions.
- The possible use of computer information systems to solve the problem.
- The various people interested in or possessing knowledge relevant to the problem.

The systems development life cycle (SDLC) describes a set of steps that produces a new computer information system. The SDLC is a problem-solving process. Each step in the process delineates a number of activities. Performing these activities in the order prescribed by the SDLC will bring about a solution to the business situation. The SDLC process consists of the following phases:

1. Preliminary investigation — the problem is defined and investigated.
2. Requirements definition — the specifics of the current system as well as the requirements of the proposed new system are studied and defined.
3. Systems design — a general design is developed with the purpose of planning for the construction of the new system.
4. Systems development — the new system is created.
5. System installation — the current operation is converted to run on the new system.
6. Systems evaluation and monitoring — the newly operational system is evaluated and monitored for the purpose of enhancing its performance and adding value to its functions.
7. Looping back from a later phase to an earlier one may occur if the need arises.

Each phase has a distinct set of unique development activities. Some of these activities may span more than one phase. The management activity tends to be similar among all phases.

The SDLC is not standardized and may be unique to a given organization. In other words, the names and number of phases may differ from one SDLC to the next. However, the SDLC discussed here is, to a large extent, representative of what is typically adopted by organizations. At each phase certain activities are performed; the results of these activities are documented in a report identified with that phase. Management reviews the results of the phase and determines if the project is to proceed to the next phase.

The first two phases of the SDLC process constitute the systems-analysis function of a business situation. The following discussion will concentrate on phase one (Preliminary Investigation) and phase two (Requirements Definition) of the outlined SDLC process. Therefore, the goal of preliminary investigation is simply to identify and select a project for development from among all the projects that are under consideration. Organizations may differ in how they identify and select projects for development. Some organizations have a formal planning process that is carried out by a steering committee or a task force made up of senior managers.

## **Текст 2. INFORMATION SYSTEMS: Definition and All You Need To Know**

As our culture becomes more and more dependent on digital tools, we will have an ever greater need for experts in IT and data management. When you study computer management information systems at the university level, you position yourself to play a crucial role in the workplace of the future. You are needed by companies of all sizes so that they can more effectively and strategically employ technology to achieve their objectives. Read on to learn more about management information systems degrees, salaries, and good examples in this article.

Management information systems (MIS) are a collection of tools and processes for compiling and presenting information gathered from a variety of sources. Managers can generate reports in an MIS that give them a birds-eye perspective of all the data they need to make choices, from the most granular to the most strategic. Even while modern management information systems rely heavily on technology to compile and show data, the notion itself predates the advent of modern computing.

The management information systems (MIS) of a company rely heavily on the use of computers. In earlier decades, most businesses only needed a small number of computers to act as central data repositories. Today, a wide variety of computing devices collect and transmit vital information from many different sources, including cash registers, time sheets, and inventories. Data is collected and used it generates insights by the MIS software, which is then used to direct operations.

Below are the four basic types of MIS;

- Databank information system.
- Predictive information system.
- Decision making information system.
- Decision taking information system.

The company's requirement for precise data can be met with the help of MIS. Incoming data is automatically processed by the system to streamline administrative procedures. Additionally, the system's data can be retrieved in real-time with the help of internet technology.

Experts in computer systems, networks, programming, algorithmic procedures, and data analysis are in demand across nearly all sectors of the economy. Because of computer science, we have the internet, digital photography, email, and open-source software.

Incorporating degrees in management information systems into a business can increase the availability and value of internal data. When used for data, this technology has the potential to enhance data gathering, security, and analysis, ultimately leading to better business decisions, less risk, and enhanced outcomes. Bachelor's degrees in management information systems equip students with the knowledge and abilities necessary to design, build, deploy, and maintain such systems.

The need for people with degrees in management information systems data professionals rises as more and more firms adopt a data-first strategy. The Bureau of Labor Statistics predicts a growth of 25% for operations research analysts and 33% for information security analysts, which is more than three and four times as fast as the predicted rate for all jobs, respectively.

Many of the best universities offering degrees in management information systems online now have information systems tracks in response to rising student demand. Though four-year bachelor's degree programs are the norm, students may find more flexibility and shorter completion times with online education. In this tutorial, we take a look at the B.S. in MIS that may be earned online, as well as some of the potential careers for those who earn this degree.

Научная специальность: **2.4.2 Электронные комплексы и системы**

### **Текст 1. Elements of Electronic Communications System**

Electronic communication is the transmission, reception, and processing of information between two or more locations with the use of electronic circuits. The basic components of electronic communications system are the transmitter, communications channel or medium, receiver, and noise. Analog signals (such as human voice) or digital signals (binary data) are inputted into the system, processed in the electronic circuits for transmission, and then decoded by the receiver. The system is said to be reliable and effective only when errors are minimized in the process.

Transmitter is defined as a collection of one or more electronic devices or circuits that converts the original source information—also called known as baseband signal—to a form suitable for transmission. It is a part of the system where the sender inputs or encodes the information. Examples of transmitters are our mobile phones and AM radio transmitters.

A radio transmitter is an electronic unit that accepts the information signal to be transmitted and converts it into a radio frequency (RF) signal capable of being transmitted over long distances.

The channel is the medium by which the electronic signal is sent or propagated from one place to another. It provides a means of transporting signals between a transmitter and a receiver. The channel can be as simple as copper wire or as complex as optical fiber and satellite systems. Signals can also be propagated through radio waves or free space depending upon the type of modulation and frequency being used.

Although a channel provides a way for communication, it also attenuates the signal that carries the message. All types of media are capable of degrading the signals, resulting in weaker signals, and appear to have smaller amplitudes. Amplifiers are included both in the transmitter and receiver to compensate for this problem.

The receiver is a collection of electronic devices and circuits that accepts the transmitted signals from the transmission medium and then converts those signals back to their original

form, which is understandable by humans. Good examples of receivers are radio devices and television sets.

Primary requirements for any communications receiver:

#### Selectivity

- This is the ability of a receiver to select a signal of a desired frequency while rejecting those on closely adjacent frequencies. With good selectivity, the receiver can select the desired signal and eliminate all other RF signals. Tuned circuits or LC circuits are used to obtain selectivity.

#### Sensitivity

- This is the ability of a receiver to pick up weak signals. Sensitivity is directly related to the receiver's gain. By the way, gain is the factor by which an input signal is multiplied to produce the output. This can be increased by having a series of amplification. Better sensitivity is attained with higher gain.

#### System Noise

- Noise is any unwanted electrical signal that interferes with the information signal. It is random electrical energy that enters the system via the medium. However, noise can also be generated in the receiver, which causes some errors in the demodulation process.
- Noise may come from different sources, such as the atmosphere, particularly lightning, and thunderstorms. It may also come from outer space, where the sun and billions of stars emit radiation that interferes with the signal.

## **Текст 2. Electronic Systems**

Electronic systems do this with the aid of input devices such as sensors, that respond in some way to this information and then uses electrical energy in the form of an output action to control a physical process or perform some type of mathematical operation on the signal.

But electronic control systems can also be regarded as a process that transforms one signal into another so as to give the desired system response. Then we can say that a simple electronic system consists of an input, a process, and an output with the input variable to the system and the output variable from the system both being signals.

There are many ways to represent a system, for example: mathematically, descriptively, pictorially or schematically. Electronic systems are generally represented schematically as a series of interconnected blocks and signals with each block having its own set of inputs and outputs.

As a result, even the most complex of electronic control systems can be represented by a combination of simple blocks, with each block containing or representing an individual component or complete sub-system. The representing of an electronic system or process control system as a number of interconnected blocks or boxes is known commonly as “block-diagram representation”.

Electronic Systems have both Inputs and Outputs with the output or outputs being produced by processing the inputs. Also, the input signal(s) may cause the process to change or may itself cause the operation of the system to change. Therefore the input(s) to a system is the “cause” of the change, while the resulting action that occurs on the systems output due to this cause being present is called the “effect”, with the effect being a consequence of the cause.

So for example in an audio system, a microphone (input device) causes sound waves to be converted into electrical signals for the amplifier to amplify (a process), and a loudspeaker

(output device) produces sound waves as an effect of being driven by the amplifiers electrical signals.

But an electronic system need not be a simple or single operation. It can also be an interconnection of several sub-systems all working together within the same overall system.

Our audio system could for example, involve the connection of a CD player, or a DVD player, an MP3 player, or a radio receiver all being multiple inputs to the same amplifier which in turn drives one or more sets of stereo or home theatre type surround loudspeakers.

But an electronic system cannot just be a collection of inputs and outputs, it must “do something”, even if it is just to monitor a switch or to turn “ON” a light. We know that sensors are input devices that detect or turn real world measurements into electronic signals which can then be processed. These electrical signals can be in the form of either voltages or currents within a circuit. The opposite or output device is called an actuator that converts the processed signal into some operation or action, usually in the form of mechanical movement.

Electronic systems operate on either continuous-time (CT) signals or discrete-time (DT) signals. A continuous-time system is one in which the input signals are defined along a continuum of time, such as an analogue signal which “continues” over time producing a continuous-time signal.

But a continuous-time signal can also vary in magnitude or be periodic in nature with a time period  $T$ . As a result, continuous-time electronic systems tend to be purely analogue systems producing a linear operation with both their input and output signals referenced over a set period of time.

Научная специальность: **5.2.2 Математические, статистические и инструментальные методы в экономике**

### **Текст 1. MATHEMATICAL METHODS IN ECONOMICS**

Can we, people of the 21st century, imagine our world without mathematics? Of course, we can't do this because no discipline (science) can do without accurate calculations and analysis and at the same time not using mathematics. Many people think that mathematics is the queen of sciences and it is the language of all accurate sciences. Physics, chemistry, biology, etc., rely on it. Economics is no exception. You can find widespread mathematics in economics from modeling processes in the economy to the mathematical analysis of the model you got. The main purpose of this article is to show the potential of applied mathematics in economics. In other words we are going to consider mathematical economics.

First of all, we need to give an exact definition of this concept. According to the dictionary mathematical economics is a model of economics that utilizes math principles and methods to create economic theories and to investigate economic quandaries. Mathematics permits economists to conduct quantifiable tests and create models to predict future economic activity.' Mathematical economics includes econometric, mathematical optimization, game theory, linear and nonlinear programming, function analysis, and go etc. Also, it is worth mentioning financial mathematics.

What should we start with? Primarily, we need to build a model of an investigated object and to describe how this object behaves. But we can't do it accurately because we can rely only on past data in a similar situation. We need to use simplified assumptions to make the model. It is one of the basic principles of economics. After we made the model we can analyze it and get a

new useful information. For example, we have producers (firms) and consumers and we want to describe how they make decisions in the world of scarcity. For that, we need to build a model of their behavior by using data from similar situations in the past. But this is not enough because we need more data. So we suggest that producers always maximize profit and consumers maximize the utility of goods they buy. As practice shows, in most cases, this suggestion is justified.

Financial mathematics deals with interest rates, financial flows, company activity analysis, etc. This is a very important subject in economics. Mainly financial mathematics shows the difference between present value and future value of the investigated object (it can be finance flow or something else). This difference is very significant because time plays an important role in the economy (time is money) and money today is not equal to money tomorrow. For example, we need to find a break-even point. There are two approaches to that. Using the first of them, let's call it accounting, we take into account only depreciation. In the second approach, we take into account possible investments and subtract them from the total amount of the flow. It is the second method that gives a more accurate assessment of the situation. For example, Lockheed company appealed in 1971 to the U.S. Congress about the loss of production of military aircraft TriStar L-1011. The appeal was argued that the commercial attractiveness of the production was determined taking into account the break-even point of production of about 200 aircraft. However, this figure did not take into account the previous investment of \$ 1 billion. Taking into account these imputed costs; the break-even point is increased to 500 aircraft).

Mathematical Optimization is a branch of applied mathematics that is useful in many different fields. In the framework of this article, it is simply impossible to fully describe this concept. Let we need to maximize our profit and we have the profit function of the goods that the company produces.

## **Текст 2. Mathematical Methods In Economics**

Mathematical methods in economics are an important tool for conducting analysis. They are used in the construction of theoretical models that allow us to display the available links in everyday life. Also, using these methods, the behavior of business entities and the dynamics of economic indicators in the country are predicted quite accurately.

In more detail I would like to dwell on forecasting indicators of economic objects, which is an instrument of decision theory. Forecasts of social and economic development of any country are based on a mathematical analysis of certain indicators (inflation dynamics, gross domestic product, etc.). Formation of the expected indicators is carried out using such methods of applied statistics and econometrics as regression analysis, factor analysis and correlation analysis.

The branch of the study "Economics and Mathematical Methods" has always been quite interesting for scientists in this field. Thus, Academician Nemchinov has identified five mathematical methods of research in planning and forecasting:

- method of mathematical modeling;
- balance method ;
- vector-matrix method;
- method of successive approximation;
- The method of optimal public evaluation.

Another academic, Kantorovich, divided the mathematical methods into four groups:

- models of interaction between economic units;

- Macroeconomic models, including demand models and the balance method;
- optimization models;

Modeling of economic systems is applied with the purpose of making an effective and correct decision in the economic sphere. At the same time, modern computer technology is mainly used.

The modeling process itself should be carried out in this order:

1. Statement of the problem. It is necessary to clearly articulate the problem, determine the objects related to the problem being solved, and the situation realized as a result of its solution. It is at this stage that a quantitative and qualitative analysis of subjects, objects and situations relevant to them is carried out.

2. System analysis of the problem. All objects must be divided into elements with the definition of the connection between them. It is at this stage that it is best to use mathematical methods in the economy, with the help of which a quantitative and qualitative analysis of the properties of newly formed elements is conducted and as a result of which certain inequalities and equations are deduced. In other words, we get a system of indicators.

3. System synthesis is a mathematical formulation of the problem, during the organization of which a mathematical model of the object is formed and algorithms for solving the problem are determined. At this stage, there is a possibility that the adopted models of the previous stages may turn out to be incorrect, and to get the correct result one will have to return one or two steps back.

Once the mathematical model is formed, you can proceed to develop a program for solving the task on the computer. If you have a fairly complex object that consists of a large number of elements, you will need to create a database and tools to work with it.

If the task takes a standard form, then any suitable mathematical methods in the economy and a ready-made software product are used.

The final stage is the direct operation of the generated model and obtaining the correct results.

Mathematical methods in the economy should be used precisely in a certain sequence and with the use of modern information and computing technologies.

Научная специальность: **5.2.3 Региональная и отраслевая экономика**

### **Текст 1. WHAT IS A REGIONAL ECONOMY?**

The regional economy is the economic activity of society, structurally related to mesoeconomic science. Its main difficulty lies in the variety of forms. In general, she is studying the basics of rational distribution of various industries and markets for the sale of their products. You will learn more about the regional economy from our article.

The regional economy is one of the sectors of the national economy that studies the organization of production with an emphasis on the territorial features of each region. The subject of its study are processes and phenomena that are associated with the development of the market in various fields and with the unification of the economic systems of the regions into a single whole. In addition, the regional economy is a research system whose purpose is to identify common and distinctive features inherent in various regions of the country, as well as to determine the specifics of each of them.

Based on the data obtained, individual programs are created taking into account specific features in individual territorial units. Two main approaches to the systematization and analysis of this type of economy can be distinguished: each area is considered as part of the world economy or part of the state.

The regional economy is a combination of several approaches. If world economic and geopolitical are used directly when studying the situation with local development, then the territorial reproduction method of studying is more relevant in the national economy. In the conditions of the administrative distribution system, where the main priority belongs to sectoral management, the regional economy was the least developed. The proof is the fragmentation in the development of various areas of our country and the variety of methods of the regional economy.

At present, a multistructured economy, radically new economic relations, and also a new management system are being actively formed. Since the regional economy is the economy of the regions, there is an urgent need for a new system for managing the socio-economic development of territories. Creating new mechanisms is impossible without the theory of regional reproduction, as well as without studying the laws of social reproduction and their subtleties at the level of each region. The reproductive approach to the process of managing social and economic systems in them is impossible without studying the interconnections and dependencies between the various elements of production in all territorial areas that ensure the qualitative development of the country's economic condition.

The regional economy is the economy of regions, the definition of which needs to be discussed in more detail. In various literature, such related concepts are used: the system of territories, the economy of regions, a region, etc. All of them have different semantic meanings. In an economy where the main object of management decisions is the territory, and decisions can be made at the federal, regional, municipal levels, it is necessary to realize the enormous responsibility in dividing the territory into entities. Within the framework of the European Economic Community, a common concept for the region has been developed. A sign of a territorial association as an independent unit is the community of economic processes in this area and in the country as a whole. In another way, we can say that the economic processes of a particular region should be associated with the general pace of development of the country, which are determined on the basis of common economic, social and natural factors.

## **Текст 2. REGIONAL ECONOMY**

The report 'Regional Economy: Commentaries by Bank of Russia Main Branches' (hereinafter, the Report) reviews the current economic situation in the seven Russian macro-regions, the boundaries of which correspond to the regions of operation of the Main Branches of the Central Bank of the Russian Federation (hereinafter, the Bank of Russia MBs). The content of the Report is prepared by the specialists of the Bank of Russia Main Branches. The feature of this Report is that it relies on qualitative analysis methods. Such analysis is based on the most comprehensive scope of economic information available regionally, including non-financial companies' surveys and experts' opinions. This approach makes it possible to combine official statistics with estimates by businesses, analysts and industry associations and to identify trends emerging in regions.

An important source of information for the Report is the monitoring of over 14,000 non-financial companies<sup>1</sup> carried out by the Bank of Russia Main Branches. It provides high-frequency data on the development of industries in all Russian regions. These data are combined with information received by the Bank of Russia Main Branches, including following various events with the engagement of regional executive authorities, business representatives, industrial unions, and entrepreneurs' associations. Along with this high-quality information, we also use figures, including official statistics. All data are verified for accuracy and consistency.

This Report is prepared to be a reliable source of the most up-to-date information about regional development for addressing the objectives of monetary policy. It describes key trends in economic activity and pricing processes in Russian regions, as well as the identified effects of both country-wide and local factors. All this is an integral part of the information the Bank of Russia's management needs to make monetary policy decisions. This Report is considered by the Bank of Russia's management in the course of preparations for making key rate decisions.

Companies consider that the adjustment to the new conditions is not complete yet. They continue to search for new suppliers and optimize their logistics schemes. Enterprises expect costs to rise in 2023, but this growth will slow down, as compared to the previous year. Prices for raw materials, components and equipment will remain the major factor affecting cost changes. Logistics costs are expected to rise further, including because of the indexation of rail transportation rates. Most companies plan to raise wages (see the Box 'Regional and sectoral labour markets'). To cut their costs, enterprises plan to continue to refocus on Russian manufacturers in order to substitute imported components. Some companies consider that their output might contract due to less effective capabilities.

In 2023, enterprises plan to continue the pass-through of costs to prices. The extent and the duration of this pass-through will depend on demand trends in the market. Companies that did not raise prices in 2022 because of contractual terms plan a 10–20% increase on average. In 2022, due to the sanctions, enterprises had to readjust their business processes, which entailed higher costs. The impact of certain cost factors varied across industries and regions. The pass-through of costs to prices was limited due to weak demand. The process of the adjustment to the new conditions is not complete yet. Meanwhile, companies continue to search for new partners and transportation routes in order to reduce their costs.

Научная специальность: **5.2.4 Финансы**

### **Текст 1. What Does Finance Mean?**

Finance is a term for matters regarding the management, creation, and study of money and investments. It involves the use of credit and debt, securities, and investment to finance current projects using future income flows. Because of this temporal aspect, finance is closely linked to the time value of money, interest rates, and other related topics.

"Finance" is typically broken down into three broad categories: public finance, corporate finance, and personal finance.

Public finance includes tax systems, government expenditures, budget procedures, stabilization policy and instruments, debt issues, and other government concerns. Corporate

finance involves managing assets, liabilities, revenues, and debts for a business. Personal finance defines all financial decisions and activities of an individual or household, including budgeting, insurance, mortgage planning, savings, and retirement planning.

The federal government helps prevent market failure by overseeing the allocation of resources, distribution of income, and stabilization of the economy. Regular funding for these programs is secured mostly through taxation.

Borrowing from banks, insurance companies, and other governments and earning dividends from its companies also help finance the federal government. State and local governments also receive grants and aid from the federal government. Other sources of public finance include user charges from ports, airport services, and other facilities; fines resulting from breaking laws; revenues from licenses and fees, such as for driving; and sales of government securities and bond issues.

### **Corporate Finance**

Businesses obtain financing through a variety of means, ranging from equity investments to credit arrangements. A firm might take out a loan from a bank or arrange for a line of credit. Acquiring and managing debt properly can help a company expand and become more profitable. Startups may receive capital from angel investors or venture capitalists in exchange for a percentage of ownership. If a company thrives and goes public, it will issue shares on a stock exchange; such initial public offerings (IPO) bring a great influx of cash into a firm. Established companies may sell additional shares or issue corporate bonds to raise money. Businesses may purchase dividend-paying stocks, blue-chip bonds, or interest-bearing bank certificates of deposit (CDs); they may also buy other companies in an effort to boost revenue.

### **Personal Finance**

Personal financial planning generally involves analyzing an individual's or a family's current financial position, predicting short-term, and long-term needs, and executing a plan to fulfill those needs within individual financial constraints. Personal finance depends largely on one's earnings, living requirements, and individual goals and desires.

### **Social Finance**

Social finance typically refers to investments made in social enterprises including charitable organizations and some cooperatives. Rather than an outright donation, these investments take the form of equity or debt financing, in which the investor seeks both a financial reward as well as a social gain.

### **Behavioral Finance**

There was a time when theoretical and empirical evidence seemed to suggest that conventional financial theories were reasonably successful at predicting and explaining certain types of economic events. Nonetheless, as time went on, academics in the financial and economic realms detected anomalies and behaviors which occurred in the real world but could not be explained by any available theories.

## **Текст 2. Finance**

**Finance**, the process of raising funds or capital for any kind of expenditure. Consumers, business firms, and governments often do not have the funds available to make expenditures, pay their debts, or complete other transactions and must borrow or sell equity to obtain the money they need to conduct their operations. Savers and investors, on the other hand, accumulate funds

which could earn interest or dividends if put to productive use. These savings may accumulate in the form of savings deposits, savings and loan shares, or pension and insurance claims; when loaned out at interest or invested in equity shares, they provide a source of investment funds. Finance is the process of channeling these funds in the form of credit, loans, or invested capital to those economic entities that most need them or can put them to the most productive use. The institutions that channel funds from savers to users are called financial intermediaries. They include commercial banks, savings banks, savings and loan associations, and such nonbank institutions as credit unions, insurance companies, pension funds, investment companies, and finance companies.

Three broad areas in finance have developed specialized institutions, procedures, standards, and goals: business finance, personal finance, and public finance. In developed nations, an elaborate structure of financial markets and institutions exists to serve the needs of these areas jointly and separately.

Business finance is a form of applied economics that uses the quantitative data provided by accounting, the tools of statistics, and economic theory in an effort to optimize the goals of a corporation or other business entity. The basic financial decisions involved include an estimate of future asset requirements and the optimum combination of funds needed to obtain those assets. Business financing makes use of short-term credit in the form of trade credit, bank loans, and commercial paper. Long-term funds are obtained by the sale of securities (stocks and bonds) to a variety of financial institutions and individuals through the operations of national and international capital markets.

Personal finance deals primarily with family budgets, the investment of personal savings, and the use of consumer credit. Individuals typically obtain mortgages from commercial banks and savings and loan associations to purchase their homes, while financing for the purchase of consumer durable goods (automobiles, appliances) can be obtained from banks and finance companies. Charge accounts and credit cards are other important means by which banks and businesses extend short-term credit to consumers. If individuals need to consolidate their debts or borrow cash in an emergency, small cash loans can be obtained at banks, credit unions, or finance companies.

The level and importance of public, or government, finance has increased sharply in Western countries since the Great Depression of the 1930s. As a result, taxation, public expenditures, and the nature of the public debt now typically exert a much greater effect on a nation's economy than previously. Governments finance their expenditures through a number of different methods, by far the most important of which is taxes. Government budgets seldom balance, however, and in order to finance their deficits governments must borrow, which in turn creates public debt. Most public debt consists of marketable securities issued by a government, which must make specified payments at designated times to the holders of its securities.

Научная специальность: **5.2.6 Менеджмент**

**Текст 1. What is Management?**

The term Management has different meaning in different perspective. The meaning varies with the person to whom it is referred to. In general we can say that management is a process that involves planning, managing resources to accomplish the set objectives, and measuring the results got. When we say resources we mean to say not only the human resources but also the other resources (financial resources, materials required, machineries involved etc.) that are needed to accomplish a task or an objective.

There is a common perception that management involves only the managers and the people involved with the management of the company. It is definitely not so. Each and every person in an organization has some tasks that involves managing some resource and reporting about that resource to the higher authority.

Decision making is an important part in management and it often reflects the experience of the person making the decision. Decision making is centered on the three basic questions that lead to making a decision. What change has to be done to achieve a particular goal? To what extent the change has to be made? And how to make that change happen? These questions are dealt with the theories of management. It seems that management theories appeared around 1920. With the development of technology and other development, the management is subdivided into many categories that involve a particular process

Now-a-days each and every process has its own management methods and personnel for managing that process. The basic principle remains the same as planning, organizing, staffing, directing, and controlling to achieve the goal by using the human, financial and material resources.

#### Role of Manager in an Organization

A manager's job is very crucial in an organization. He is a planner, coordinator, producer and a marketer. The success of an organization will depend upon the caliber of the manager in utilizing the resources for achieving business goals. A manager is a pivotal figure in the task of creating wealth. There are rapid changes in technology, methods of production, marketing techniques, financial set up and the manager should be competent enough to cope with the changes.

A manager is a person in the organization who directs the activities of others. The managers perform their work at different levels and they are called by different names. The first line managers are usually called supervisors or in a manufacturing they may be called foremen. Middle level managers include all levels of management between the supervisory level and the top level of the organization.

These managers may be called functional managers, plant heads, and project managers. Near the top of hierarchy, there may be top managers who are responsible for making organizational decisions and setting policies and strategies that affect all the aspects of the organization. These persons may be called vice-president, managing director, chief executive officer or chairman of the board etc.

A manager has to perform functions like planning, organizing, staffing, directing and controlling. All these functions are essential for running an organization smoothly and achieving enterprise objectives. Planning is required for setting goals and establishing strategies for coordinating activities.

Organization helps in determining what tasks are to be done, how to do them, how to group the tasks and where decisions are to be made. Staffing function is essential for employing various types of persons and performing various activities like training, development, appraisal, compensation, welfare etc.

The directing function requires giving instructions and motivating sub-ordinates to accomplish their goals. A manager has to perform the controlling function for monitoring activities to ensure that they are being accomplished as planned and correcting any significant deviations.

## **Текст 2. Management**

Management means many things to many people. Management is nothing more than clerical work and putting fancy signatures. But truly management is the process of planning, organizing, staffing, directing, coordinating and controlling the activities of business enterprises. It is also described as the technique of leadership, decision making and a mean of coordinating.

As there is no universally accepted definition for management, it is difficult to define it.

But a simple traditional definition, defines it as the "art of getting things done by others". This definition brings in two elements namely accomplishment of objectives, and direction of group activities towards the goal. The weaknesses of this definition are that firstly it uses the word "art", whereas management is not merely an art, but it is both art and science. Secondly, the definition does not state the various functions of a manager clearly.

A more elaborate definition given by George R. Terry, defines management as a process "consisting of planning, organizing, actuating and controlling, performed to determine and accomplish the objectives by the use of people and resources." Firstly it considers management as a "process" i.e. a systematic way of doing things. Secondly it states four management activities: Planning, organizing, actuating, and controlling. Planning is thinking of actions in advance. Organizing is coordination of the human and material resources of an organization. Actuating is motivation and direction of subordinates. Controlling means the attempt to ensure no deviation from the norm or plan. Thirdly it states that manager uses people and other resources. For example a manager who wants to increase the sales, might try not only to increase the sales force, but also to increase advertising budget. And fourthly, it states that management involves the act of achieving the organization's objectives.

Management is a process which brings the scarce human and material resources together and motivates people for the achievement of objectives of the organization. Management is not a onetime act but an on-going series of interrelated activities. The sum total of these activities is known as management process. It consists of a set of interrelated operations or functions necessary to achieve desired organizational goals.

Management involves characteristics of both art and science. While certain aspects of management make it a science, certain others which involve application of skills make it an art. Every discipline of art is always backed by science which is basic knowledge of that art. Similarly, every discipline of science is complete only when it is used in practice for solving various kinds of problems.

Management as a science has the following characteristics:

1. Its principles, generalizations and concepts are systematic. In this case the manager can manage the situation or organization in a systematic and scientific manner.
2. Its principles, generalizations and concepts are formulated on the basis of observation, research, analysis and experimentation, as is the case with the principles of other sciences.

3. Like other sciences, management principles are also based on relationship of cause and effect. It states that same cause under similar circumstance will produce same effect. Suppose if workers are paid more (cause), they produce more (effect).
4. Management principles are codified and systematic, and can be transferred from one to another and can be taught.
5. Management principles are universally applicable to all types of organizations.

Научная специальность: **5.10.1 Теория и история культуры, искусства**

### **Текст 1. What is Culture?**

Culture is defined as the collective values, customs, norms, arts, social institutions, and intellectual achievements of a particular society.

Culture influences consumers through the norms and values established by the society in which they live. It is the broadest environmental factor that influences you as consumer. Cultural values are enduring and any attempts to change them generally fail.

#### **Types of cultures**

Cultural values are enduring beliefs that a given behavior or outcome is desirable or good (Milton J. Rokeach). Our values, as enduring beliefs, serve as standards that guide our behavior across situations and over time. Values are so ingrained that most of us are not really consciously aware of them and individuals often have difficulty describing them.

Social values represent “normal” behavior for a society or group. Personal values define “normal” behavior for an individual. Personal values mirror the individual’s choices made from the variety of social values to which that individual gets exposed. Our value systems refer to the total set of values and the relative importance cultures place on them.

#### **Functional**

The culture of every society has specific functions that it performs. It offers stability, dependability framework of common values, traditions, beliefs, practices and facilitative behavior for societal interaction.

#### **Socialization**

It is a social process which arises out of human interaction and is human making; it is created by the society for the society, presented by the society and transmitted through social means.

#### **Prescriptive**

Acceptable norms and behaviors are defined and prescribed by the society through the culture. The cultural norm provides the range of desired or acceptable behaviors. Behaviors that fall outside these ranges are frowned at or ignored.

#### **Cultural symbolism**

A symbol is anything that stands for or suggests something else by association such as words, numbers or illustrations, symbols which could be either referential from one generation to another or expressive.

Expensive symbolisms are subject to interpretation, meanings are inferred to them to get the desired message across to the recipient. Symbols could make a product cheap, or prestigious. Car designers make extensive use of expressive symbols.

#### **Culture relativism**

This is the tendency of judging any behavior from the context of its own environment and cultural context. For a grown up first son of the father to die before the father is unacceptable in Ibo Land despite the fact that death is not negotiable.

To each culture, there is doubt that each will tend to uphold and defend the values and standards of its own. That is why ethnocentrism concludes that the way we do things is right and

the way others do things is right and the way others do things is wrong because we are judging them from the context and standards of our own cultural setting.

### **Cultural change**

Culture must be adaptive to survive. Cultural change therefore must be a continuous process to accommodate the technological and cultural diffusion. When a technological innovation occurs, the culture must change to accommodate it.

## **Текст 2. Art and culture**

The Oxford Advanced Learner's Dictionary of Current English by Hornby gives us the following definition of the notion "art". "Art" is the creation or expression of what is beautiful, especially in visual form. Drawing, painting, sculpture, architecture, literature, music, ballet belong to the fine art".

Really when something is extremely beautiful or has great cultural value, we say: "It's art". Art has always been occupation for the few, but has been admired by many. Art reflects feelings and emotions, brings delight and admiration, and makes life pure as it awakens our best hidden qualities. Speaking about arts, we connect this notion with culture. According to the dictionary culture of a community or nation includes all the arts, beliefs and social institutions characteristic of a community or nation. We can speak about either material, or spiritual culture. Art is both.

Russia is a country that can rightfully boast its artistic and cultural traditions, its art galleries attract huge crowds of tourists from all over the world. St. Petersburg is a precious stone in the crown of Russian cities. The Hermitage is famous all over the world for its valuable rare collections of canvases and other art objects covering a span of about seven hundreds years and comprising masterpieces of by Leonardo da Vinci, Titian, Raphael, Rembrandt, and Rubens. The collections illustrate the art of Italy, Spain, Holland, Germany, France, Britain, and Sweden. The West - European Department also includes a fine collection of European Sculpture. People come to admire the collections of tapestry, precious textiles, weapons, ivory, pottery, porcelain and furniture as well.

Speaking about art one should not forget about music, especially classic music. Outstanding Russian composers make the whole world admire their music. One can find a man, who does not know Pyotr Ilyich Tchaicovsky, Michail Glinka, Nikolai Rimsky-Korsakov - the prominent composers of 19th century, and Sergey Rachmaninov, Sergey Prokofiev and Dmitriy Shostakovich.

It was Glinka (1804-1857) who laid the foundation for modern Russian music; his music expressed the temperament of Russian people. His two best known operas "Ivan Susanin" and "Ruslan and Ludmila" were based on Russian folklore and historical legends.

The most famous ballets "Swan Lake", "The Sleeping Beauty", "The Nutcracker" and not less famous operas "The Queen of Spades", "Eugene Onegin" are still excellently staged and performed not only in Russian but in many greatest theatres in the world.

Russia is world famous for its literature. The "golden age" of Russian literature began in the 19th century when such outstanding masters of letters such as Alexander Pushkin, Lermontov, Gogol, Turgenev, and Dostoyevsky created their immortal masterpieces.

Alexander Pushkin, the father of Russian Literature was the authors of more than 700 lyrical poems. He wrote also the volumes of dramatic works, short stories, made adaptations of Russian fairy-tales.

Russia is famous for its architecture. The real jewel of architecture is the Moscow Kremlin with its cathedrals, towers and red brick walls. Just outside the Kremlin walls stands St. Basil's Cathedral, one of the world most astonishing buildings with 8 domes of different designs and colors.

St. Petersburg has great number of real masterpieces of architecture of different styles and is definitely worth visiting and being admired.

Russia is rich also in young talents, new Russian culture is forming. It will appear on the basis of the old one, but its essence will be new. We can hear new voices in music and poetry, new canvases of modern artists, great actors and film directors.

All of them will make their contribution into Russian Culture and Art.

Научная специальность: **5.10.3 Виды искусства**

### **Текст 1. What Is Art?**

Since prehistoric times, humans have been creating art of various forms. Over the years as tools and technologies have changed and developed, the concept of what art means has come under scrutiny, and indeed, it is an ongoing debate. There are different opinions as to what can be classified as art. In this article, we will discuss seven of the most widely accepted kinds of art without confusing them with art genre and form in art. The seven major forms of art are painting, sculpture, architecture, literature, music, cinema, and theater.

There are about as many definitions of art as there are people alive. As a widely accepted definition, art is produced when imagination or creativity are used to create something that can be directly experienced through our senses. Although visual art that is witnessed through our sense of sight is the most common form, art can appeal to our other senses as well, such as our auditory or tactile perceptions.

Most of the art forms that are discussed in this article go back thousands of years. From prehistoric cave paintings and figurines found in dank caves across the world to the exquisite architecture and sculptures in Greece and Rome, even in the ancient world, creativity played a monumental part in personal and public life, as it continues to do today.

Art provides us with a crucial glimpse into history – a means through which we can understand the life of the humans that came before us and without which the world would be far a far less interesting and inspiring place! It provides a doorway into galaxies of possibility for expression and a platform for political and social commentary.

Although there has been much speculation regarding the definition of art over the years, there is a general consensus that there are seven main kinds of art, most of which have been around for centuries if not thousands of years. These different types of art are painting, sculpture, architecture, literature, music, cinema, and theater.

Since humans started producing art thousands of years ago, the meaning of the word has become a topic of debate. The common element in all definitions of the word “art” is an element of creativity in the production of something that is accessible to the human senses or experience. Usually, art is visual, such as painting, drawing, or photography but it can appeal to other senses as well. Art can combine dimensions of functionality and aesthetics.

Art allows for creative expression and can bring beauty into built environments. It is also a medium through which social and political commentary and criticism can be communicated. Art in all its forms gives us insight into the social and cultural history of humanity and can bring people together in a community that is based on mutual enjoyment and creativity.

There are many ways of categorizing different art forms, most people agree that sculpture, architecture, literature, theatre, cinema, painting, and music are the seven primary art forms, though this excludes other types of art such as photography and digital art.

Concerning the question of what is form in art, it should be differentiated from the seven forms of art, namely architecture, literature, sculpture, theater, music, painting, and cinema.

Form in art on the other hand (including drawing), refers to a depiction of an object that has height, width, and depth – the way an object occupies space whether it is in two dimensions or three. Form is one of several elements in art, among others such as texture, value, color, and shape.

## **Текст 2. What are the 7 Art Forms?**

Art in any form is an expression or application of human creativity, skill, and imagination. Many of the arts are experienced visually but can also be audible or enjoyed through sensory touch. Arts were traditionally appreciated primarily for their beauty or emotional power but are now often used for political expression or social commentary.

Most art can be generally categorized into the seven different forms of art we will look at in this article. Recognizing and understanding each of the distinct categories of art not only enables us to enjoy art more, but it's also vital to help us understand the role of the arts in our lives and history.

Specific mediums and forms of artistic expression have changed throughout human history, but for the most part, art falls into one of the following seven classical forms. Each different form of art is experienced differently and affects our emotions and feelings.

The seven different art forms are Painting, Sculpture, Literature, Architecture, Theater, Film, and Music. However, back in the day, the seven different art forms were called the Liberal Arts, consisting of Grammar, Logic, Rhetoric, Arithmetic, Geometry, Astronomy, and Music.

### **1. Painting.**

We start with one of the most popular and thus – arguably – one of the most important art forms, painting. Painting has been a compelling force throughout history in the arts.

### **2. Sculpture.**

The second central pillar of visual arts is, without any doubt, sculpture. With sculpture, visual art is no longer limited to the dimensional surface of a painting, drawing, or photograph, as it consists of all three-dimensional artworks. A sculpture is most often produced using materials such as marble, wood, copper, or bronze.

### **3. Literature.**

We briefly move away from the visual arts and take on literature as our third art form. Literature as an art form consists of the art of words or written work. Think of poetry, prose, drama fiction, or non-fiction. The most common non-fiction genres are essays, letters, diaries, and biographies.

### **4. Architecture.**

Up next, we encounter architecture as our fourth form of art. Architecture has always had an obvious and strong connection with art. Architecture is not only a practice of constructing buildings or other structures. It also has a powerful cultural, aesthetic, and even ideological purpose.

### **5. Theater.**

Our fifth form of art consists of theatre or the performing arts in general, with the exception of music. Think of dance or drama that must be performed in front of an audience. Although very different in many ways compared to other visual arts, theatre or the performing arts are intensely expressive, marked by emotions and feelings, on stage and in the theatre hall.

### **6. Film.**

Film was invented by the turn of the 19th century to the 20th century. With the invention and experimentation of motion pictures, an entirely new art form was introduced. At first, people were intensely occupied with the so-called cinema of attractions, in which the film's central idea was simply the wonder of moving pictures.

#### 7. Music.

Our final form of art is the art of music. Art is not an object, nor can it be visually experienced with music. The art itself is the arrangement of sound in time. As with theatre, music needs a performance. As a result, it is only temporary and volatile. Music is one of the most expressive forms of art and has a very direct impact. Music has a very extensive history, from Ancient pan flutes to 21st-century pop music. As discussed in our introduction, music was already an art form during the Liberal Arts and has always had a very high social status.

### **5.2.2. Беседа с экзаменаторами на иностранном языке по вопросам, связанным со специальностью и научной работой аспиранта.**

#### **Примерные вопросы для собеседования:**

1. What is your name?
2. What educational institution did you graduate from? When?
3. What is your speciality?
4. Why did you decide to take a post-graduate course?
5. What is the subject of your future scientific research?
6. Who is your scientific supervisor?
7. Have you ever participated in any scientific conferences?
8. Do you have any publications?
9. What methods are you going to use in your investigation?
10. What will your scientific research give the world? In what way can your investigation/research be useful to science?
11. Who is your scientific supervisor and what is his/her contribution to science?
12. What does your scientific work deal with? Or: What problem do you investigate?
13. What can you tell about your scientific work?
14. How do you plan your research?
15. Who are the best informed scientists in the field of your research?
16. What contribution may your research make into science?
17. Did you take part in scientific conferences?
18. Did you make any reports? What were they devoted to? Were your reports a success?
19. Are you going to take part in scientific conferences in the future?
20. Have you got any publications?
21. How long have you been working at your research?
22. What do you think the social role of your investigation is?
23. Why are you interested in such a problem?