

APPROVED

**at a meeting of the Academic Council of
NJSC «KazNU named after al-Farabi»
Protocol № 11 from 23. 05. 2025 y.**

The program of the entrance exam for applicants to the PhD for the group of educational programs D069 – «Library science, information processing and archival science»

1. General provisions.

1. The program was drawn up in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 “On Approval of the Model Rules for Admission to Education in Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education” (hereinafter referred to as the Model Rules).

2. The entrance exam to doctoral studies consists of an interview, writing an essay and an exam on the profile of the group of educational programs.

Block	Points
1. Interview	30
2. Essay	20
3. Exam according to the profile of the group of the educational program	50
Total admission score	100/75

3. The duration of the entrance exam is 3 hours 10 minutes, during which the applicant writes an essay and answers the electronic examination ticket. The interview is conducted at the university premises before the entrance exam.

2. Procedure for the entrance examination.

1. Applicants for doctoral studies in the group of educational programs D069 – «Library science, information processing and archival science» write a problematic / thematic essay. The volume of the essay is at least 250 words.

The purpose of the essay is to determine the level of analytical and creative abilities, expressed in the ability to build one’s own argumentation based on theoretical knowledge, social and personal experience.

Types of essays:

- motivational essay revealing the motivation for research activities;

- scientific-analytical essay justifying the relevance and methodology of the planned research;
- problem/thematic essay reflecting various aspects of scientific knowledge in the subject area.

2. The electronic examination card consists of 3 questions.

Topics for exam preparation according to the profile of the group of the educational program.

Discipline «Theoretical Problems of Archival Studies»

Topic 1. The general theory of the document (archival aspect)

A document as an object of study of archival studies. The purpose, objectives, aspects of the general theory of the document. Social functions of documents. Problems of origin of types of documents. The place of archival documents and archives in social memory. Works: V.N. Avtokratova, B.S. Ilizarova, V.P. Kozlova, K. B. Gelman-Vinogradova, L.S. Vygotsky, S.L. Rubinstein, L.K. Robane et al.

Topic 2. Archival terminology. Works in the field of archival terminology

B.S. Ilizarov and the concept of archives as the social memory of mankind. V.N. Avtokratov, B.S. Ilizarov on the formation of the terms “archive”, “archival document” (1989). The development of the concept of “archive fund” in archival studies of the XX century. The concept of “documentary fund” and the prerequisites for its appearance. The concept of the founder.

Legal consolidation of the main archival terms in the Law of the Republic of Kazakhstan “On the National Archival Fund and Archives” (dated December 22, 1998) (changes dated 10.28.2015 No. 368-V). Dictionaries of archival terminology. Comparative analysis of the main archival terms of foreign countries.

The concepts of “archival science”, “archival business”, “fund”, “archival document”, “theory and methodology of archival science”, “next fund”, “archival fund”. The ratio of the concepts of “information” and “document”. Key document concepts.

Sources of acquisition of archives. The concepts of “source of acquisition” and “zone of acquisition”.

The conceptual apparatus of modern information technology. The development of the ideas of fundamental archiving in the works of V.P. Kozlova, O.M. Medushevskaya, I.V. Karapetyants, V.M. Magidova, E.V. Starostina, T.I. Horchordina.

Topic 3. The object and subject of archival studies

V.N. Autocrats about the subject and object of archival studies. The development of the concept of the “foundation” and the “principle of origin” as the theoretical core of the

new science of archives. Authorship of the basic concepts of archival studies (V.K. Klein, V.V. Snigirev, G.S. Gabaev).

Object of archiving: a system of archival institutions, documentary resources on paper and other media, archive management tools, scientifically-mincer The object of archival studies: documented retrospective information.

The subject of archival studies at the empirical, theoretical and methodological levels.

Topic 4. Patterns, principles, scientific approaches, methods, methods of archiving

Patterns of archival studies: fundraising, optimization of the composition of the NAF of the Republic of Kazakhstan, distribution of information in the archive fund.

The principle of objectivity. The principle of historicism. The principle of comprehensiveness. The principle of integrated assessment. The principle of socio-political neutrality. The principle of scientific effectiveness.

Special principles of archival studies: the indivisibility of the fund, intra-fund systematization of materials, centralization of archiving. Principles of value expertise.

Topic 5. Scientific approaches in archival studies

Source and information approaches in the development of a scientific theory of value examination. Separation of the concepts of "value" and "utility" of the document. V.N. Avtokratov and A.V. Elpatievsky about the problem of involving computer science categories in archival studies. Polemic B.S. Ilizarova with V.N. Avtokratov on fundamental issues of the general theory of archival studies. The modern concept of scientists in the formation of "historical space". Discussions of historians and archivists in the late 1970s on the methods of collecting and storing personal archives.

Differentiated, system-structural, functional and probabilistic approaches in archival studies. The role of general methods of cognition in archival studies. Comparative historical method. Source methods for researching documents and their application in the selection, organization and description of documents. The development of archival statistics based on mathematical and statistical research methods. Methods: historical, historical-comparative, actualistic, descriptive, modeling, functional analysis, quantified. Narrow profile archival methods: methods, micromethods, a single accounting method.

Topic 6. Classification of archival documents within archival funds

Problems of classification of documents. Signs of classification. The importance of classification for the rational distribution and use of archival documents. The value of scientific and methodological developments B.I. Anfilova, G.A. Knyazev, I.S. Nazina, Z.N. Dobrova, N.A. Fomina, M.F. Petrovskaya and other archivists to establish the theory of classification of archival documents by collections (funding theory).

The theoretical basis for the classification of documents within the archival fund. The importance of classification for organizing documents within the archive fund and searching for document information. Development N.A. Fomin, K.G. Mityaev, M.F. Petrovsky, K.I. Rudelson and other archivists of the theoretical and methodological foundations of the classification of documents of archival funds.

Organization of documents within the archive fund by ownership forms, types of media, methods and techniques for securing information.

Organization of documents according to their value and access categories. Fund classification units.

Scheme of systematization of cases in the Fund. Signs of grouping storage units within archive funds. Non-Fund organization of documents on special media. Classification of documents in the process of forming cases.

Topic 7. Theory of funding

Study of issues of archival documents funding in Russian literature. Basic concepts of the theory of funding. The types of archival holdings and the organization of work for the funding. Chronological boundaries of the funds. Historical information and its role in funding. Signs of combining documentary complexes of legal entities. Formation of combined archival funds and funds of personal origin. The formation of archival collections. The creation of personal collections.

Topic 8. Theoretical aspects of describing and searching for documentary retrospective information

Coverage of issues related to the description of documentary information in Russian literature. Basic concepts, principles and methods of description theory. The essence of the differentiated approach to the description of document information. Elements describing modern reference tools.

Inventory is a mandatory element of the NSA system. The object of the description to the listing. Preparation of a descriptive article of the inventory. Use description techniques for different groups of documents. Composition of the catalog card description elements. Object of description and preparation of a descriptive article of the guide. The object of the description and making a descriptive article of the index and review.

Topic 9. System of scientific reference apparatus

The problem of creating an NSA system in the literature. Methodical recommendations on preparation of archival reference books. Improving the system of scientific reference apparatus of archives. Efficiency of functioning of the scientific reference apparatus.

A differentiated approach to the description of retrospective information is the methodological basis for building the NSA system. System-forming factors of the NSA system. Structure of the NSA system. Types of archived reference books and their relationship. The creation of flexible information retrieval systems for archives. The problem of compatibility of information arrays and the possibility of integrating them into a single database.

Topic 10. Theoretical bases of examination of the value of documents

Problems of examination of the value of documents in historical literature. Basic concepts of the theory of examination of the value of documents. A system of normative documents and methodological manuals for electronic data PROCESSING. Types, types, structure of lists of standard documents with indication of their storage periods. System of expert bodies. Expert verification commissions, expert commissions, their composition, functions, organization of work.

Theoretical and methodological bases, principles and tasks of examination of the value of documents. Development of criteria for the value of documents, their development and clarification. Features of examination of documents on special media.

Methods of examination. Target complex EDS in archives, its purpose and methodology. Features of the examination of the value of documents of personal origin.

The concept of examination of the value of documents. Discussions of the 1960s and 1980s on the theoretical basis of the examination of the value of documents.

Improving the theory and practice of examining the value of documents in the 1970s and early 1990s. A differentiated approach to evaluating documents of a new type of institution. Scientific and methodological bases of examination of the value of documents. Principles of expertise before the early 1990s and in the modern period of archival science.

Source criticism of documents and its significance for the examination of their value. System approach. Functional analysis. Information analysis. Application of other General scientific and private methods of cognition in the examination.

Topic 11. Theoretical features of using retrospective information

Study of the use of documents in Russian literature. Basic principles and concepts of the theory of using archival documents. Main directions and forms for using archive documents. Forms of using archived documents. Methods of information service for users. Concepts of information comfort. The problem of effective use of archival documents: economic, technical, social and legal.

Topic 12. Theory and practice of working with electronic documents in archives

Automation of archival business and foreign archival thought: historiography of the problem. Organizational bases of Informatization of archival cases. Legal basis for Informatization of archival business. Informatization of the archive industry: concept, program, planning. Application of automated technologies in the field of document accounting and ensuring their safety. Airs. Automated technologies for organizing the use of retrospective information.

3. List of references.

Main:

1. Концепция развития архивного дела в Республике Казахстан на 2001-2005 годы // <https://tengrinews.kz/zakon/>
2. Концепция развития архивного дела в Республике Казахстан на 2007-2009 годы // <https://tengrinews.kz/zakon/>
3. Автократов В.Н. Теоретические проблемы отечественного архивоведения. - М.: Изд-во РГГУ, 2001. - 396 с.
4. Булюлина Е.В. Теория и методика архивоведения: учеб. пособие / Е.В.Булюлина: М-во образования и науки Рос. Федерации, Волгогр. гос. ун-т, 2012. -145 с.
5. Малышева С.Ю. Основы архивоведения: учеб. пособие / С.Ю. Малышева. - Казань: Татар. Республ. изд-во «Хэтер», 2002. – 169 с.

Additional:

1. Сборник нормативно-правовых актов, научно-методических документов в области архивного дела (1991- 2001). Под общей ред. доктора ист. наук К.Л. Есмагамбетова. – Астана, 2002.
2. Адельгужин А.А. Нормативная правовая база документирования и архивного дела // Қазақстанда іс қағаздарын жүргізу – Делопроизводство в Казахстане. -2007. -№ 1(1). -С. 60-66.

Discipline "**Organization and planning of scientific research**"

Topic 1. The role of knowledge at the present stage of development of society. The main stages of the development of science

Analysis of the current stage of world development. Justification of the need for scientific knowledge and solutions to fundamental and applied problems.

Determination of the place of science and scientific services as a branch of the non-production sphere in the national economic system. The concepts of "scientific", "scientific and technical" and "innovative" activities.

Topic 2. Classification and sectoral structure of science. Scientific potential of the state and the effectiveness of its use

Characteristics of industry-wide and complex problems of the development of science. Social, natural, technical and applied sciences.

Topic 3. Organization of science management: domestic and foreign experience

Organizational structure and features of science financing in the Republic of Kazakhstan. Academy of Sciences of the Republic of Kazakhstan and branch Academies. Industry, university and industrial science. The need and features of the development of private (non-state) science in a market economy.

Topic 4. Methods of scientific research and their application in solving problems in social and humanitarian spheres

Evolution of development of scientific research methods. Statement of a scientific problem and substantiation of the goal, subject, object of research. General characteristics of empirical, theoretical and experimental research methods.

Topic 5. The structure of research work. Intellectual property protection

Necessity and basic requirements for planning the systematization of scientific research. The content and procedure for registration of scientific and informational abstracts, scientific articles and its theses, monographs, dissertations, scientific reports, final qualifying work of a research nature.

The order of planning and organization of research work of teachers and students at the university. Choice of directions of scientific research. Requirements for the topic of research work.

Assessment of the prospects of scientific research. The structure of research, theoretical and experimental work. Protection of intellectual property created in the course of scientific research.

Topic 6. Information search, design and presentation of research results

Information retrieval methods. Scientific and technical literature, reviews, monographs, periodicals, conference proceedings, reports on research and development work.

Information search on the Internet. Methods for creating and presenting a scientific report. Graphic presentation methods.

Topic 7. Methodology of theoretical and experimental research

Laws and forms of thinking. Methodology of theoretical and experimental research.

Topic 8. Methods of mathematical and statistical planning and processing of experimental results. Modeling in scientific research

Elements of mathematical statistics and its applications. Correlation and regression analysis methods. Mathematical foundations of experiment planning. Mathematical methods for experiment optimization. Modeling and similarity. Types of models. Physical similarity and modeling.

Topic 9. Basics of invention and patenting

Intellectual property as an object of legal protection. Features of the Patent Law of the Republic of Kazakhstan. Objects of inventions. Invention criteria, novelty, inventive step, practical applicability. Registration of patent rights. Drawing up and submitting an application.

3. List of references.

Main:

1. Методы и средства научных исследований: Учебник/А.А.Пижурин, А.А.Пижурин (мл.), В.Е.Пятков - М.: НИЦ ИНФРА-М, 2015. - 264 с.: 60x90 1/16 <http://znanium.com/bookread2.php?book=502713>

2. Методология научного исследования: Учебник / А.О. Овчаров, Т.Н. Овчарова. - М.: НИЦ ИНФРА-М, 2014. - 304 с.: - ISBN 978-5-16-009204-1 <http://znanium.com/bookread2.php?book=427047>

3. Основы научных исследований (Общий курс): Учебное пособие / В.В. Космин. - 2-е изд. - М.: ИЦ РИОР: НИЦ ИНФРА-М, 2014. - 214 с.: ISBN 978-5-369-01265-9 <http://znanium.com/bookread2.php?book=487325>

Additional literature:

1. Основы научных исследований / Б.И. Герасимов, В.В. Дробышева, Н.В. Злобина и др. - М.: Форум: НИЦ Инфра-М, 2013. - 272 с.:ISBN 978-5-91134-340-8 <http://znanium.com/bookread2.php?book=390595>

2. Кравцова, Е. Д. Логика и методология научных исследований [Электронный ресурс]: учеб. пособие / Е. Д. Кравцова, А. Н. Городищева. - Красноярск: Сиб. федер. ун-т, 2014. - 168 с. - ISBN 978-5-7638-2946-4 - Режим доступа: <http://znanium.com/catalog.php?bookinfo=507377>

3. Процесс формирования научного знания (онтологический, гносеологический и логический аспекты): Монография / В.И. Кондауров. - М.: НИЦ ИНФРА-М, 2013. - 128 с.: <http://znanium.com/bookread2.php?book=41317>

Discipline «**Organization and modernization of the library fund**»

Topic 1. Fundamentals of library fund formation

Fundamentals of library fund formation. Formation of the library fund: essence, purpose, significance. Grigoriev Yu. V. and the emergence of the theory of library fund formation. Contribution of N. S. Kartashov, Yu. N. Stolyarov to the development of the law on compliance of library goals with consumer needs. Content of the formation of the library fund. Current trends in the formation of the Library Fund of libraries of the Republic of Kazakhstan.

Topic 2. Theory of library fund formation.

Processing of the theory of selection in the works of N. A. Rubakin, L. B. Khavkina, K. N. Derunov, A. A. Pokrovsky. Selection of documents: from the first to the second. Selection quality criteria. The final selection criterion is the minimum labor time spent. Individual selection criteria. Completeness of the library fund: more, less, sufficient and relative. Information and documentary completeness of the library's collection. The core of the library fund: composition, volume, updating. The core of the public library fund, scientific and special library fund.

Topic 3. The formation of the library fund as a technological cycle.

Definition of the concept of "library fund". The purpose and criteria for the formation of the library fund. General characteristics of the cycle "formation of the library fund" and its block diagram. Basic technological concepts. Requirements for the organization of the cycle. Document path in the library: characteristics of processes and performers.

Advantages of the automated technology of library fund formation.

Properties of the library fund. Connections of the library fund. System functions of the library fund. Formation of the library fund as a technological cycle. Electronic document in the library collection. Formation of the library fund as a technological cycle. Technological structure of the cycle "formation of the library fund". Requirements for the technology of forming the library fund. Processing technology.

Topic 4. Placement, storage and delivery of library documents

General provisions. Volume-spatial composition of the storage facility. Placement of the fund with free access to it. Placement of the fund in the store storage facility. Arrangement of the library fund. Delivery of documents according to user requirements. Theory of preservation of the library fund. Checking the library stock. Preservation of the library fund. The concept of conservation fund science. Basic concepts National policy for the Preservation of the library Stock. Responsibility of officials for the preservation of the library fund. Technology for protecting the library stock in the storage department. Prevention and prevention of threats. Education of the culture of fund management. Control of fund management. Legal and financial protection of the foundation.

Topic 5. Library fund management

Subject and object of library fund management. Library fund management as a set of management and technological management of the formation of the library fund. Hierarchical structure of library fund management. Federal and local levels of government. Legislative acts that ensure the creation and development of library collections. Managing the library stock of a particular library.

Activities of methodological centers to assist in the acquisition, development and storage of the library fund.

Topic 6. Structuring the library fund.

The concept of the structure of the library fund, its significance for creating an optimal mode of storage and use of documents that make up the library fund.

Readers' library fund. Service library fund. Interlibrary (exchange) fund Reserve Fund. Trading fund. Archive library fund. Insurance fund. Local History Foundation. The National Foundation.

Building the structure of the library fund in accordance with the presence of structural divisions of the library (storage, subscription fund, etc.).

Structuring the library fund according to the relations with the contingent of users, their socio-demographic characteristics, and the degree of use of the library fund. Active fund. A passive fund. A depository fund.

Topic 7. Documentary resource of information service

The emergence and development of scientific and technical information centers. Features of information centers and their functioning in libraries. Creation and development of the scientific and technical information system of the Republic of Kazakhstan.

Topic 8. Formation and modeling of the library fund

The essence and significance of library stock modeling. Definition of the concept of "library fund model". Documents on thematic and typological modeling. Technology for creating a standard typological model of the fund. Model types: optimal and simulation. Characteristics of the main types of models of the library fund: descriptive, bibliographic, mathematical, graphic, thematic and typological (structural). Methodology for creating a thematic and typological model of the foundation. Theory of descriptive models K. N. Derunov, K. A. Rubakina, O. S. Chubaryan.

Topic 9. Reception, accounting and library processing of documents

Receiving and initial processing of documents. Accounting for the library stock: the essence, meaning, and functions. Accounting requirements. Accounting units. Characteristics of total and individual accounting, their specifics, forms and methods. Trends in the development of accounting. Advantages of automated accounting

technology. Accounting and processing of the library fund. Placement and delivery of documents of the library fund. Library document processing, its types.

Topic 10. Placement and arrangement of the library fund

Definition of the concept of "placement of the library fund". The tasks of the placement and the requirements for it. Influence on the placement of architectural and planning solutions of library buildings (premises) and the degree of mechanization of communications.

The history of the placement of library funds.

The method of placement, their options, advantages and disadvantages. The relationship between the placement option and the volume of the fund. Placement of the fund in open access, its features, options, norms and organization. Definition of the concept of "arrangement of the library fund". The tasks of the placement and the requirements for it.

Topic 11. Interaction of library collections

The system of library funds of the Republic of Kazakhstan, its hierarchical nature. The essence of fund acquisition coordination and its significance. Prerequisites and conditions for the coordination of recruitment. Semantic and formal signs of coordination. Types and levels of coordination. The method of coordination of recruitment. Unified Fund of the Central Bank of Russia: essence, purpose, features, structure. The composition of the fund of the central library and the structural divisions of the CBS. Methods of acquisition and organization of the use of the unified fund of the Central Bank of Russia. Definition of the concept of "unified library fund".

Topic 12. The essence and significance of depository storage of library funds.

Development of the theory of depository storage. The depository library and its functions. Domestic system of depository storage of library funds. Methodology for the formation of a depository fund. Selection of documents for depository storage and technology of their transfer to the depository library. The work of the depository library with the accepted documents. Organization of the depository fund and organization of its use. Repository storage of library collections.

Topic 13. Study of the library fund

Definition of the concept of "study of the library fund". Study of the fund as a source of information for its management. Study of external and internal factors affecting the library stock.

The study of the fund as a basis for secondary selection. The purpose of secondary selection and its significance. The need for secondary selection. Development of the theory of secondary selection in domestic and foreign library science. Methods of studying the library fund.

Calculation of indicators of book availability, readability, circulation, percentage of request satisfaction. Accounting for failures as an indicator of the quality of the formation

of the fund. Comparison of the bounce rate and the turnover rate. Calculation of the circulation of specific publications as an indicator of the degree of their use. Bibliographic methods of studying the foundation. Sociological methods of studying the foundation.

Topic 14. Preservation of the library fund

The role and significance of the preservation of library collections. Federal Law "On Librarianship" on the preservation of funds. Regulatory documents for the storage of funds. Legal responsibility for the safety of the fund.

Characteristics of the concepts of "preservation", "storage", "protection" of the library fund.

Fund storage technology. Functions of the storage department.

Factors of preservation of the fund: social, physico-chemical, biological. Restoration and preservation of documents. Reformatting documents. Fire safety of the foundation.

Topic 15. Methodology and organization of the electronic library fund

Goals and objectives of creating a fund on electronic media

3. List of references

Main:

1. Земсков, А.И., Шрайберг Я.Л. Электронные библиотеки [Текст] : учебник для вузов.–М., 2012. -351 с.
2. Модернизация библиотечного дела. Манифест: Как привлечь внебюджетные средства, статья фандрайзером[Текст]: Принципы и практика развития библиотеки / М. Бакленд, В. Стил. – Москва: ОГИ, 2001. – 279 с.
3. Морева, О.Н. Документные фонды библиотек и информационных служб[Текст]. - СПб.: Профессия, 2010.- 398 с.
4. Соболенко, Н. П. Учет документного фонда библиотеки [Текст] : учеб.-практ. пособие. - М. : Литера, 2010. - 144 с.
5. Стародубова, Н. З. Менеджмент формирования и учета библиотечных фондов [Текст]: науч.-метод. пособие. - М.: Либерия-Бибинформ, 2011. – 157 с.
6. Столяров Ю.Н. Библиотехнический фонд правовой документации: преподавание. практично. пособие.-М.: Либерия. 2003. – 245 с.
7. Столяров Ю.Н. Документный ресурс[Текст]: учеб. пособие.- М.: Либерия-Бибинформ. - 2014. - 224 с.

8. Столяров Ю.Н. Документный ресурс[Текст]: учеб. пособие.- М.: Либерей-Библинформ. - 2014. - 224 с.
9. Столяров Ю.Н. Защита библиотечного фонда[Текст]: учеб.пособие. - М.: ФАИР-Пресс, 2006. - 504 с.
10. Столяров Ю.Н. Документный ресурс[Текст]: учеб. пособие.-М.: Либерей-Библинформ .- 2014. 224 с.
11. Терешин В.И. Библиотечные фонды[Текст]: учебник.- М.: Профессия.-2015.- 174 с

Additional:

1. Бердигалиева Р.А. Модернизация библиотек Казахстана - в руках молодых! [Текст] // Молодые в библиотечном деле. – 2008. - № 2-3. - С. 3-9
2. ГОСТ 7.83-2001 Электронные издания. Основные виды и выходные сведения [Текст] // Стандарты по библиотечному делу: сб. - СПб., 2002. - С 6.
3. Дубровина Л.А. Модернизация библиотек на основе документного фонда[Электронный ресурс] // <https://www.twirpx.com> (05.05.2022 г.).
4. Морева, О.Н. Организация библиотечного фонда[Текст]: учебно-практическое пособие.– СПб, 2013 . -128 с.
5. Литвинова, Н.Н. Электронные документы: отбор, использование и хранение [Текст] // Библиотека. - 2005. - N 6. - С.6-9.
6. Майстрович Т.В., Казаков В.Г. Электронный документ как объект библиотечного дела: постановка проблемы [Текст] // Российский научный электронный журнал "Электронные библиотеки". - 2003. - Т.6,. - Вып.4.
7. Майстрович Т.В. Проблемы формирования фонда электронных документов [Текст] // Науч. и техн. б-ки. - 2000.- № 10. - С.39.
8. Пашин А. Библиотечно-документный фонд в цифровом мире[Электронный ресурс] // <https://www.ozon.ru>(05.05.2022 г.).
9. Сапаргалиев Е.Б., Султанаев А.К. Модернизация библиотек на основе внедрения новых информационных технологий(НИТ) [Текст] // Национальная библиотека: люди, факты, работа. - 2000.- С.233-242.
10. Хахалева, Н.И. Формирование библиотечного фонда в электронной среде: концептуальный подход[Текст] // Библиотековедение. - 2006. - N 3. - С.38-41.