

lexisnexis short notes multiple choice questions Updated Version

LexisNexis Short Notes Multiple Choice Questions

Introduction

LexisNexis Short Notes Multiple Choice Questions are a popular and effective tool used in various academic and professional fields to facilitate quick learning, revision, and assessment. These questions condense complex concepts into concise points, enabling learners to grasp essential information efficiently. In law, commerce, and other disciplines, MCQs based on LexisNexis short notes serve as a valuable resource for students preparing for exams, professionals updating their knowledge, and educators designing assessments. This article aims to explore the significance, structure, and effective utilization of LexisNexis short notes MCQs, providing comprehensive insights into their role in modern learning.

Understanding LexisNexis Short Notes

What Are LexisNexis Short Notes?

LexisNexis short notes are summarized versions of extensive legal, commercial, or academic texts. They distill core principles, definitions, case law, statutes, and critical commentary into brief, easy-to-understand notes. These short notes are designed to aid quick revision and understanding of complex topics.

Purpose and Benefits

The primary purpose of LexisNexis short notes is to:

- Simplify complex legal or academic concepts
- Provide quick revision material before exams or professional assessments
- Serve as a quick reference guide during practical work
- Enhance memory retention through concise summaries

The benefits include:

- Saving time during revision
- Increasing understanding of core issues
- Facilitating better retention of key points
- Serving as a foundation for solving MCQs and case problems

Structure of Multiple Choice Questions Based on LexisNexis Short Notes

Characteristics of Effective MCQs

MCQs derived from LexisNexis short notes typically share the following characteristics:

- Clear and precise language
- Focused on fundamental concepts
- Designed to test knowledge, understanding, and application
- Include plausible distractors to challenge the test-taker

Components of a Typical MCQ

A well-structured MCQ generally contains:

- Question Stem: The problem statement or question that prompts the response.
- Options (Choices): Usually four or five possible answers, including one correct answer and distractors.
 - Correct Answer: The most appropriate choice based on the short notes.
 - Explanation (Optional): Clarification of why the correct answer is right and others are wrong, aiding in learning.

Types of Multiple Choice Questions in LexisNexis Short Notes

Conceptual MCQs

These questions test the understanding of fundamental principles or definitions.

Example:

Q: What is the primary purpose of a Memorandum of Association?

a) To define the company's internal rules

- b) To outline the company's scope and objectives
- c) To register the company's directors
- d) To appoint auditors

Correct answer: b) To outline the company's scope and objectives

Application-based MCQs

These questions assess the ability to apply principles to practical situations.

Example:

Q: In a contract dispute, the principle of "offer and acceptance" is primarily concerned with which stage?

- a) Formation of the contract
- b) Termination of the contract
- c) Breach of the contract
- d) Performance of the contract

Correct answer: a) Formation of the contract

Case Law/Legal Precedent MCQs

Questions based on landmark decisions or legal precedents summarized in short notes.

Example:

Q: Which case established the principle of "consideration" in contract law?

- a) Carlill v Carbolic Smoke Ball Co.
- b) Currie v Misa
- c) Donoghue v Stevenson

d) Salomon v A. Salomon & Co. Ltd.

Correct answer: b) Currie v Misa

Strategies for Utilizing LexisNexis Short Notes MCQs Effectively

Active Learning Approach

- Attempt MCQs without looking at notes first to test recall.
- Review explanations thoroughly to understand mistakes.
- Create flashcards from MCQs for repeated practice.

Regular Revision

- Incorporate MCQs into daily study routines.
- Use them for quick revision before exams.
- Track progress and focus on weak areas.

Practice with Mock Tests

- Simulate exam conditions using multiple MCQs.
- Time yourself to improve speed and accuracy.
- Analyze performance to identify gaps.

Integration with Broader Study Material

- Use short notes MCQs alongside detailed texts and case laws.
- Deepen understanding by reviewing notes after MCQ practice.
- Use MCQs to reinforce memory of key points.

Benefits of Using LexisNexis Short Notes MCQs in Exam Preparation

Enhances Retention

Repeated exposure to MCQs solidifies memory of key concepts. Short notes condense essential points, making retention easier.

Improves Exam Confidence

Familiarity with question formats and practice with MCQs boost confidence and reduce exam anxiety.

Identifies Knowledge Gaps

Practicing MCQs highlights areas requiring further study, allowing targeted revision.

Promotes Critical Thinking

Application-based MCQs encourage analytical thinking, going beyond rote memorization to understanding.

Limitations and Precautions

While LexisNexis short notes MCQs are valuable, they should be used judiciously:

- Limited Depth: Short notes do not cover every nuance; supplement with detailed texts.
- Question Quality: Poorly constructed MCQs can mislead; always verify answers and explanations.
- Over-Reliance: Dependence solely on MCQs may neglect practical application skills and in-depth understanding.

To maximize benefits, combine MCQ practice with other study methods such as essays, case analysis, and discussions.

Conclusion

LexisNexis Short Notes Multiple Choice Questions are an indispensable resource for students and professionals seeking efficient and effective ways to master complex legal, commercial, or academic subjects. Their structured, concise format makes them ideal for quick revision, self-assessment, and exam preparation. By understanding their structure, utilizing them strategically, and supplementing with comprehensive study materials, learners can significantly enhance their knowledge retention, analytical skills, and exam performance. As education continues to evolve with digital tools, LexisNexis short notes MCQs remain a vital component in the modern learner's toolkit, bridging the gap between theoretical knowledge and practical application.

LexisNexis Short Notes Multiple Choice Questions: A Comprehensive Guide for Legal Students and Professionals

Introduction

LexisNexis short notes multiple choice questions have become an integral part of legal education and professional development in the digital age. They serve as an efficient tool for students preparing for competitive exams, law graduates aiming to test their knowledge, and seasoned professionals seeking to sharpen their understanding of complex legal concepts. This article delves into the significance of these MCQs, their structure, advantages, and effective strategies to utilize them for maximum benefit.

Understanding LexisNexis Short Notes Multiple Choice Questions

What are LexisNexis Short Notes MCQs?

LexisNexis, a prominent provider of legal research tools, offers a plethora of study materials, including short notes and multiple choice questions tailored for law students and legal practitioners. These MCQs are concise, focused questions designed to test knowledge across various legal subjects such as Constitutional Law, Criminal Law, Contract Law, and more.

Features of LexisNexis Short Notes MCQs

- Conciseness: Each question is crafted to encapsulate essential legal principles within a single sentence or paragraph.
- Clarity: Options are formulated to reflect common misunderstandings, thereby enhancing conceptual clarity.
- Coverage: They encompass a broad spectrum of topics, ensuring comprehensive preparation.
- Update-Driven: Reflect recent amendments, case laws, and statutory changes, maintaining relevancy.

The Structure of LexisNexis Multiple Choice Questions

Typical Format

Most MCQs in LexisNexis study modules follow a standard structure:

- Question Stem: Presents a factual scenario, legal principle, or problem statement.
- Options (A, B, C, D): Usually four choices, with one correct answer and distractors designed to challenge the test-taker's understanding.

Example

Question: Which of the following is NOT an essential element of a valid contract?

- A) Offer
- B) Acceptance
- C) Intention to create legal relations
- D) Promise to perform a future act

Correct Answer: D) Promise to perform a future act

This structure allows learners to quickly assess their grasp of specific legal principles.

Significance of LexisNexis MCQs in Legal Education

- Enhancing Conceptual Clarity

Legal concepts often involve nuanced interpretations. Short notes MCQs distill these complexities into manageable questions, reinforcing core principles and encouraging critical thinking.

- Exam Preparation and Self-Assessment

For students preparing for competitive exams like CLAT, AIBE, or judiciary exams, MCQs provide a simulated environment for practice, enabling self-assessment and identifying areas requiring further study.

- Time Management Skills

Practicing MCQs helps learners develop quick decision-making skills, crucial for timed examinations where efficiency is key.

- Updating Knowledge Base

Given the dynamic nature of law, MCQs that incorporate recent judgments and statutory amendments keep learners informed about current legal trends.

Effective Strategies to Use LexisNexis Short Notes MCQs

- Active Reading and Critical Analysis

Rather than passively reading questions and options, actively analyze each question:

- Identify the core legal principle involved.
- Understand why each distractor is incorrect.
- Reflect on the reasoning behind the correct answer.

- Regular Practice

Consistency is vital. Set daily or weekly targets to solve a set number of MCQs, which helps in retention and builds exam stamina.

- Review and Revise

Post-practice, thoroughly review explanations provided for each answer. Focus on questions you answered incorrectly to avoid repeating mistakes.

- Group Discussions

Engage in study groups to discuss tricky questions. Explaining concepts to peers solidifies understanding and exposes you to alternative viewpoints.

- Incorporate Supplementary Materials

Use LexisNexis short notes alongside case laws, statutory texts, and commentaries for a holistic grasp of legal issues.

Benefits of Using LexisNexis Short Notes MCQs

- Time-Efficient Learning

Their concise format allows for quick revision, which is particularly helpful during exam preparation when time is limited.

- Objective Testing

MCQs eliminate subjective bias, providing a clear measure of knowledge and understanding.

- Versatility

They can be used across various platforms?online portals, printed notes, or mobile apps?facilitating flexible learning.

- Confidence Building

Regular practice with well-crafted MCQs boosts confidence, reduces exam anxiety, and improves overall performance.

Challenges and Solutions

- Over-Reliance on MCQs

Challenge: Relying solely on MCQs may neglect in-depth understanding required for essay-type questions and practical application.

Solution: Complement MCQ practice with descriptive questions, case law analysis, and essay writing.

- Ambiguity in Options

Challenge: Sometimes, options may appear ambiguous or overly tricky.

Solution: Focus on understanding the reasoning behind each choice and consult detailed explanations provided by LexisNexis.

- Keeping Content Updated

Challenge: Law is constantly evolving; outdated questions may mislead learners.

Solution: Use the latest editions and updates from LexisNexis to ensure current knowledge.

The Future of LexisNexis MCQs in Legal Education

Integration with Technology

Advancements in AI and machine learning are paving the way for adaptive learning platforms. Future iterations of LexisNexis MCQ modules may feature personalized quizzes, instant feedback, and analytics to track progress.

Gamification for Engagement

Incorporating gamified elements can make practice sessions more engaging, motivating learners to achieve mastery.

Broader Accessibility

Mobile apps and online portals ensure that students from diverse backgrounds can access high-quality legal practice questions anytime and anywhere.

Conclusion

LexisNexis short notes multiple choice questions are a vital resource for anyone involved in legal studies or practice. Their structured approach to testing knowledge, combined with detailed explanations and current content, makes them an invaluable tool for effective learning. By adopting diligent practice strategies and integrating these MCQs into a comprehensive study plan, learners can significantly enhance their understanding and performance in legal examinations and professional assessments. As legal education continues to evolve, leveraging technology-driven resources like LexisNexis MCQs will remain essential in cultivating competent, confident legal minds ready to meet the challenges of modern law practice.

QuestionAnswer What is the primary purpose of LexisNexis Short Notes Multiple Choice Questions? To provide concise summaries and practice questions for legal studies and exam preparation. Which areas of law are most commonly covered in LexisNexis Short Notes MCQs? Common areas include Contract Law, Criminal Law, Constitutional Law, and Property Law. How can students benefit from using LexisNexis Short Notes MCQs regularly? They can improve their understanding of key legal concepts, enhance exam readiness, and identify areas needing further study. Are LexisNexis Short Notes MCQs suitable for all levels of legal education? They are primarily designed for undergraduate and postgraduate law students, but can also be helpful for

preparatory exams and competitive tests. Do LexisNexis Short Notes MCQs include explanations for answers? Some editions provide detailed explanations to help students understand the reasoning behind each answer. Can LexisNexis Short Notes MCQs be used as a sole study resource? It is recommended to use them alongside comprehensive textbooks and case law for thorough preparation. What makes LexisNexis Short Notes MCQs a popular choice among law students? Their concise format, coverage of important topics, and alignment with syllabus requirements make them highly effective. Are updated editions of LexisNexis Short Notes MCQs available regularly? Yes, publishers release updated editions to ensure the content reflects current laws and legal developments. Where can students access LexisNexis Short Notes Multiple Choice Questions? They are available through official LexisNexis publications, academic bookstores, and online legal resource platforms.

Related keywords: LexisNexis, short notes, multiple choice questions, legal research, law students, legal studies, exam preparation, legal notes, MCQs, jurisprudence

Genetics problem solving enrichment activity multiple alleles

Genetics Problem Solving Enrichment Activity Multiple Alleles

Genetics problem solving enrichment activity multiple alleles provides students and enthusiasts with an engaging way to deepen their understanding of complex inheritance patterns beyond simple Mendelian genetics. When dealing with multiple alleles, the genetic landscape becomes more intricate, often involving more than two alleles for a single gene locus, which leads to a broader spectrum of phenotypic variation. This enrichment activity not only enhances problem-solving skills but also fosters critical thinking about real-world genetic diversity. Through carefully designed activities, learners can explore how multiple alleles interact, how genotype combinations influence phenotypes, and how these principles apply to human traits and various species.

Understanding Multiple Alleles in Genetics

Definition and Significance

Multiple alleles refer to the existence of more than two allelic forms of a gene within a population. Unlike simple dominant-recessive inheritance involving two alleles, multiple alleles introduce a broader range of genetic combinations, resulting in more diverse phenotypes. For example, the ABO blood group system in humans is a classic example of multiple alleles, with three alleles (IA, IB, and i) that produce four blood types.

Examples of Multiple Alleles

- **ABO Blood Group:** I^A , I^B , i
- **Coat Color in Rabbits:** C (full color), cch (chinchilla), ch (himilayan), c (albino)
- **Human Leukocyte Antigen (HLA) System:** Multiple alleles contribute to immune response diversity

Designing a Problem Solving Enrichment Activity

Objectives of the Activity

- Enhance understanding of inheritance involving multiple alleles
- Develop skills in predicting genotypic and phenotypic ratios
- Encourage application of Punnett squares and probability concepts
- Foster critical thinking about genetic diversity and its implications

Materials Needed

- Problem scenarios involving multiple alleles
- Punnett square templates or grid paper
- Genotype and phenotype charts
- Calculators or probability tools (optional)

Sample Enrichment Activity Structure

Step 1: Introduction to the Gene System

Begin with a brief review of multiple alleles, illustrating with the ABO blood group. Present the alleles and their associated phenotypes to set the stage for problem solving.

Step 2: Presenting the Problem Scenario

For example: "In a certain population, the alleles for blood type are I^A , I^B , and i . A man with blood type AB marries a woman with blood type O. What are the possible blood types of their children? What are the probabilities?"

Step 3: Guided Solution Approach

- Determine the genotypes of the parents (man: $I^A I^B$, woman: ii)
- Set up a Punnett square crossing these genotypes
- Identify all possible genotypic combinations of offspring
- Translate genotypes into phenotypes (blood types)
- Calculate the probabilities for each blood type

Step 4: Extension Activities

- Ask students to consider what happens if the couple has a different blood type combination
- Explore how the presence of multiple alleles influences genetic diversity
- Discuss implications for blood transfusions and compatibility

In-Depth Examples of Multiple Alleles Problems

Example 1: ABO Blood Group Inheritance

Suppose a woman with blood type B (genotype $I^B I^B$ or $I^B i$) marries a man with blood type A (genotype $I^A I^A$ or $I^A i$). Determine the possible blood types of their children, considering the different genotypes possible for each parent.

Solution Approach

- Identify all possible parental genotypes based on blood types
- Use Punnett squares to find offspring genotypic combinations
- Calculate the likelihood of each blood type phenotype

Example 2: Coat Color in Rabbits

A rabbit with chinchilla coat color (C^{ch}) mates with a Himalayan (ch) rabbit. The genes involved are multiple alleles with specific dominance hierarchies. What are the possible coat colors in their offspring?

Discussion Points

- Understanding dominance hierarchy among multiple alleles
- Predicting phenotypic ratios based on parental genotypes
- Implications for breeding and genetic diversity

Strategies for Effective Problem Solving with Multiple Alleles

1. Recognize All Possible Alleles and Genotypes

Begin by listing all alleles involved and their dominance relationships. Recognize heterozygous and homozygous combinations for each parent.

2. Use Punnett Squares Strategically

For multiple alleles, Punnett squares can become large; consider using dihybrid or trihybrid crosses or employing probability calculations for complex cases.

3. Apply Probability Principles

Understand how to combine probabilities for independent events, especially when multiple alleles are involved. Use multiplication and addition rules as needed.

4. Interpret Genotypic and Phenotypic Ratios

Translate genetic combinations into observable traits, considering dominance, codominance, and incomplete dominance where relevant.

Common Challenges and Solutions

Challenge 1: Large Punnett Squares

Solution: Break down the problem into smaller parts, analyze each parent separately, and then combine probabilities rather than constructing massive grids.

Challenge 2: Understanding Genotype-Phenotype Relationships

Solution: Create clear charts that map genotypes to phenotypes, including cases of codominance and incomplete dominance.

Challenge 3: Complex Crosses with Multiple Alleles

Solution: Use probability calculations and Punnett square tools or software that can handle multi-allelic scenarios efficiently.

Conclusion and Educational Implications

Implementing a genetics problem solving enrichment activity focused on multiple alleles offers a comprehensive way to deepen understanding of genetic inheritance beyond simple models. Such activities promote analytical thinking, reinforce core concepts, and prepare students for more advanced genetics topics. By engaging in these problem-solving exercises, learners develop the ability to interpret complex inheritance patterns, appreciate genetic diversity, and apply their knowledge to real-world biological and medical contexts. Ultimately, mastery of multiple alleles enhances overall genetics literacy and encourages curiosity about the rich complexity of inheritance in living organisms.

Genetics problem solving enrichment activity multiple alleles is a vital component in advanced genetics education, offering students an opportunity to deepen their understanding of complex inheritance patterns beyond basic Mendelian ratios. These activities serve as a bridge from foundational concepts to real-world applications, allowing learners to explore the intricacies of multiple alleles, codominance, incomplete dominance, and polygenic traits through engaging problem-solving exercises. By incorporating enrichment activities focused on multiple alleles, educators foster critical thinking, analytical skills, and a more nuanced appreciation of genetic diversity and inheritance mechanisms.

Introduction to Multiple Alleles in Genetics

Multiple alleles refer to the presence of more than two allelic forms of a gene within a population. Unlike simple Mendelian inheritance, which typically involves two alleles per gene, multiple alleles introduce a richer complexity, resulting in diverse phenotypic expressions. Examples such as human blood group systems (ABO), coat colors in rabbits, and certain human traits exemplify how multiple alleles influence phenotype variability.

Understanding multiple alleles is crucial because:

- It explains the variation observed within populations.
- It sheds light on the inheritance of traits that do not follow simple dominant-recessive patterns.
- It provides insight into the genetic basis of diseases and phenotypes with multiple possible expressions.

Enrichment activities centered around multiple alleles challenge students to analyze, interpret, and predict inheritance patterns, thereby deepening their conceptual grasp and problem-solving skills.

Features of Effective Multiple Alleles Problem Solving Activities

Designing effective enrichment activities involves several features that promote engagement and learning:

- Real-world relevance: Incorporating traits like blood groups encourages students to connect concepts with human biology.
- Progressive difficulty: Starting with basic Punnett square exercises and advancing to complex pedigrees or population studies.
- Variety of question types: Combining multiple-choice, short-answer, and problem-solving questions to cater to different learning styles.
- Data interpretation: Including exercises that require analyzing genetic data, such as allele frequencies in populations.
- Collaborative components: Group activities or discussions to promote peer learning and critical analysis.

These features ensure that students not only memorize facts but also develop analytical and reasoning skills essential for advanced genetics.

Problem Solving Strategies for Multiple Alleles

Effective problem solving in multiple alleles involves systematic approaches:

Understanding the Genetic System

- Identify the alleles involved and their dominance relationships.
- Recognize whether the inheritance pattern involves codominance, incomplete dominance, or simple dominance.

Constructing Punnett Squares

- Use Punnett squares to visualize possible offspring genotypes.
- For multiple alleles, this may involve larger grids, such as three- or four-allele systems.

Calculating Phenotypic Ratios

- Determine the likelihood of various phenotypes based on genotype combinations.
- Consider the dominance, codominance, or incomplete dominance relationships.

Analyzing Population Data

- Use allele frequency data to predict genotype and phenotype distributions.

- Apply Hardy-Weinberg equilibrium principles when relevant.

Common Types of Problems in Multiple Alleles Enrichment Activities

Engaging activities encompass a range of problems, including:

Genotypic and Phenotypic Predictions

- Predict the offspring phenotype ratios from specific parental genotypes.
- Example: Crosses involving ABO blood groups.

Blood Group Inheritance

- Understanding the codominant nature of I^A and I^B alleles and the recessive i allele.
- Solving for possible blood types in offspring given parental blood types.

Population Genetics

- Calculating allele frequencies in a population.
- Predicting the distribution of blood groups across generations.

Pedigree Analysis

- Tracing inheritance patterns over generations for traits with multiple alleles.
- Identifying carriers and predicting inheritance probabilities.

Sample Enrichment Activity: Blood Group Inheritance

One classic example used in enrichment activities involves the ABO blood group system:

Problem:

Parents are heterozygous for blood type A ($I^A i$) and heterozygous for blood type B ($I^B i$).

- What are the possible blood types of their children?
- What is the probability that a child will have blood type AB?

Solution Approach:

- Write the parental genotypes: $I^A i$ and $I^B i$.
- Cross the alleles using a Punnett square:
- Possible gametes from parent 1: I^A , i
- Possible gametes from parent 2: I^B , i

Constructing the Punnett square yields genotypes:

- $I^A I^B$ (blood type AB)
- $I^A i$ (blood type A)
- $I^B i$ (blood type B)
- ii (blood type O)

Phenotypic ratios: 1 AB : 1 A : 1 B : 1 O

Probability of blood type AB: $1/4$ or 25%.

This problem exemplifies how multiple alleles and codominance influence inheritance and phenotypic outcomes.

Benefits of Using Enrichment Activities for Multiple Alleles

Integrating problem-solving activities focused on multiple alleles offers several educational benefits:

- Enhanced conceptual understanding: Students grasp the complexity beyond simple dominant-recessive patterns.
- Critical thinking development: Analyzing data and solving multi-step problems fosters analytical skills.
- Preparation for advanced topics: Such as population genetics, molecular genetics, and genetic counseling.
- Engagement and motivation: Interactive problems make learning more dynamic and enjoyable.

Challenges and Considerations

While enrichment activities are highly beneficial, they also present certain challenges:

- Complexity of problems: Multi-allelic systems can be mathematically intensive, potentially overwhelming some students.
- Prerequisite knowledge: Requires a solid understanding of basic genetics principles.
- Time constraints: Comprehensive activities may require significant classroom time or homework.

To address these, educators should scaffold problems appropriately, provide clear instructions, and offer supplementary resources.

Conclusion

Genetics problem solving enrichment activity multiple alleles is a cornerstone of advanced genetics education, providing students with the tools to explore complex inheritance patterns in a variety of biological contexts. By engaging students in activities that involve constructing Punnett squares, analyzing allele frequencies, and interpreting pedigrees, educators promote a deeper understanding of genetic diversity and mechanisms. These activities not only reinforce core concepts but also develop critical problem-solving skills essential for future scientific endeavors. While challenges exist, thoughtful design and implementation of multiple alleles enrichment exercises can significantly enhance learning outcomes, making genetics both accessible and intellectually stimulating.

QuestionAnswer What is an example of a trait controlled by multiple alleles in humans? Blood type is an example, with three alleles: A, B, and O, which combine to produce different blood types. How do multiple alleles influence genetic diversity in a population? Multiple alleles increase genetic variation by allowing more than two allele options at a locus, leading to diverse phenotypes within a population. What is a common method to solve genetics problems involving multiple alleles? Using Punnett squares and the principles of probability to analyze possible allele combinations and predict genotype and phenotype ratios. How do codominance and incomplete dominance relate to multiple alleles? They are patterns of inheritance where heterozygotes express traits that are intermediate or simultaneously show both alleles, adding complexity to multiple allele systems. Why is understanding multiple alleles important in medical genetics? It helps in understanding the inheritance of traits like blood types and genetic disorders, which can influence diagnosis, treatment, and genetic counseling. Can you explain how to determine the genotype frequencies in a population with multiple alleles? By applying Hardy-Weinberg equilibrium principles and allele frequency data, you can calculate the expected genotype frequencies for multiple alleles. What enrichment activities can help students better understand multiple allele inheritance? Interactive simulations, creating their own Punnett square problems, and analyzing real-world genetic data can deepen understanding of multiple alleles and inheritance patterns.

Related keywords: genetics, problem solving, enrichment activity, multiple alleles, inheritance, genetic variation, allelic combinations, Punnett square, genotype, phenotype

Read the full article online: [GENETICS PROBLEM SOLVING ENRICHMENT ACTIVITY
MULTIPLE ALLELES](#)