

12.3 other patterns of inheritance

answer key

12.3 other patterns of inheritance answer key explores the complex and varied mechanisms by which genetic traits are passed from parents to offspring beyond the classical Mendelian inheritance. This article provides a detailed and comprehensive overview of the diverse inheritance patterns that deviate from simple dominant and recessive allele transmission. Understanding these additional genetic patterns is essential for students, educators, and professionals in genetics, biology, and related fields. This answer key will clarify concepts such as incomplete dominance, codominance, multiple alleles, polygenic inheritance, and sex-linked traits, among others. Moreover, the article emphasizes the significance of these patterns in predicting phenotypic outcomes and genetic disorders. The following sections break down each pattern with clear explanations, examples, and relevant terminology to aid in mastering 12.3 other patterns of inheritance answer key content.

- Incomplete Dominance and Codominance
- Multiple Alleles and Polygenic Inheritance
- Sex-Linked Inheritance
- Environmental Influence on Inheritance
- Epistasis and Gene Interaction

Incomplete Dominance and Codominance

Incomplete dominance and codominance represent two important variations of inheritance that differ from the classical dominant-recessive relationship. These patterns explain the expression of traits when alleles interact in unique ways.

Incomplete Dominance

Incomplete dominance occurs when the heterozygous phenotype is intermediate between the two homozygous phenotypes. Neither allele is completely dominant over the other, resulting in a blending effect. An example is the flower color in snapdragons, where crossing a red-flowered plant (RR) with a white-flowered plant (WW) produces pink-flowered offspring (RW).

Codominance

Codominance happens when both alleles in a heterozygote are fully expressed, without blending. Each allele contributes distinctly to the phenotype. A classic example is the ABO blood group system in humans, where alleles A and B are codominant, resulting in blood type AB when both alleles are present.

- Incomplete dominance: intermediate phenotype
- Codominance: simultaneous expression of both alleles
- Examples: snapdragon flower color, human ABO blood groups

Multiple Alleles and Polygenic Inheritance

Beyond simple two-allele systems, some traits are determined by multiple alleles or multiple genes, creating greater complexity in inheritance patterns.

Multiple Alleles

Multiple alleles refer to the existence of more than two allele forms for a single gene within a population. Although an individual carries only two alleles, the greater pool of possible alleles increases variability. The ABO blood group again serves as a prime example, with three alleles— I^A , I^B , and i —affecting blood type.

Polygenic Inheritance

Polygenic inheritance involves several genes (polygenes) contributing to a single trait, often resulting in continuous variation. Traits such as skin color, height, and weight in humans are polygenic. This pattern creates a wide range of phenotypes rather than discrete categories, reflecting the additive effects of multiple genes.

- Multiple alleles increase genetic diversity
- Polygenic traits show continuous variation
- Examples: ABO blood types, human height, skin color

Sex-Linked Inheritance

Sex-linked inheritance describes the transmission of genes located on sex chromosomes, usually the X chromosome, which influences trait expression differently in males and females.

X-Linked Traits

X-linked traits are genes carried on the X chromosome. Males, having one X chromosome, express the trait if they inherit a recessive allele, while females require two copies. Examples include color blindness and hemophilia, which are more common in males due to their single X chromosome.

Y-Linked Traits

Y-linked inheritance involves genes found only on the Y chromosome, passed from father to son. These traits are rare and usually related to male sex determination and fertility.

- X-linked traits affect males more frequently
- Y-linked traits are inherited father to son
- Examples: red-green color blindness, hemophilia

Environmental Influence on Inheritance

Genetic expression can be modified by environmental factors, which interact with inherited genes to influence phenotypes. This interaction shows that inheritance is not solely determined by DNA sequences but also by external conditions.

Gene-Environment Interaction

Many traits are influenced by both genetic predisposition and environmental factors such as nutrition, temperature, and exposure to chemicals. For instance, hydrangea flower color depends on soil pH, while identical twins can exhibit differences due to environmental influences.

Epigenetics

Epigenetics involves changes in gene expression without altering DNA sequences, often through chemical modifications influenced by the environment. These changes can affect inheritance patterns by turning genes on or off across generations.

- Environment affects gene expression and phenotype
- Examples: hydrangea color, identical twin differences
- Epigenetics alters gene activity without DNA changes

Epistasis and Gene Interaction

Epistasis and gene interaction describe how different genes influence one another's expression, complicating simple inheritance patterns.

Epistasis

Epistasis occurs when one gene masks or modifies the expression of another gene. This interaction can affect phenotypic ratios in offspring and is common in many organisms. For example, coat color in Labrador retrievers is controlled by two genes, where one gene can suppress the expression of the other.

Gene Interaction

Gene interaction refers to multiple genes working together to produce a phenotype, often with complex outcomes. These interactions can be additive or involve suppression, enhancement, or modification of effects.

- Epistasis: one gene masks another
- Gene interaction: genes influence each other's effects
- Examples: coat color in dogs, flower color in plants

Frequently Asked Questions

What are the main types of inheritance patterns discussed in section 12.3 other patterns of inheritance?

Section 12.3 covers several inheritance patterns beyond simple Mendelian genetics, including incomplete dominance, codominance, multiple alleles, and polygenic inheritance.

How does incomplete dominance differ from complete dominance in genetics?

In incomplete dominance, the heterozygous phenotype is a blend or intermediate of the two homozygous phenotypes, unlike complete dominance where the dominant allele completely masks the recessive allele.

What is codominance and can you provide an example from section 12.3?

Codominance occurs when both alleles in a heterozygous organism are fully expressed, resulting in a phenotype that shows both traits simultaneously. An example is the ABO blood group system, where both A and B alleles are expressed in AB blood type.

What role do multiple alleles play in inheritance patterns according to 12.3?

Multiple alleles refer to the existence of more than two allele forms for a gene within a population, increasing genetic diversity. For example, the ABO blood group has three alleles (A, B, and O) that determine blood type.

Can you explain polygenic inheritance as described in the 12.3 other patterns of inheritance?

Polygenic inheritance involves multiple genes contributing to a single trait, resulting in a continuous range of phenotypes, such as skin color or height, rather than discrete categories.

Additional Resources

1. Genetics: Patterns of Inheritance and Beyond

This book provides a comprehensive overview of classical and non-Mendelian patterns of inheritance. It covers fundamental concepts such as dominant and recessive traits, codominance, incomplete dominance, and extends into

mitochondrial inheritance and epigenetics. Detailed answer keys accompany problem sets to aid understanding and self-assessment.

2. Exploring Human Genetics: Inheritance Patterns Explained

Focused on human genetics, this title delves into various inheritance patterns including autosomal dominant, autosomal recessive, X-linked traits, and multifactorial inheritance. It includes real-life case studies and a thorough answer key to help students grasp complex genetic concepts through practical examples.

3. Mendelian and Non-Mendelian Inheritance: A Study Guide

This study guide simplifies Mendelian genetics and introduces students to exceptions such as incomplete dominance, codominance, and polygenic traits. With clear explanations and an answer key for all exercises, it is designed to support learners preparing for exams and quizzes.

4. Patterns of Inheritance in Genetics: Concepts and Questions

A problem-solving oriented book that presents various inheritance patterns through questions and detailed solutions. It covers classical Mendelian genetics and expands to patterns like sex-linked inheritance and mitochondrial DNA transmission, making it ideal for students seeking practice with immediate feedback.

5. Inheritance Patterns: From Basics to Advanced Concepts

This text spans from basic Mendelian inheritance to advanced topics including genomic imprinting and epigenetic effects. Each chapter includes illustrative examples and an answer key that allows readers to test their knowledge and understand complex genetic phenomena.

6. Understanding Genetics: Inheritance Patterns and Applications

This book emphasizes understanding the practical applications of inheritance patterns in medicine and agriculture. It explains genetic disorders, pedigree analysis, and inheritance beyond Mendel's laws, with an answer key to reinforce learning.

7. Genetics Workbook: Twelve Point Three Patterns of Inheritance

Specifically tailored to accompany genetics courses, this workbook focuses on chapter 12.3's patterns of inheritance. It provides exercises, diagrams, and a comprehensive answer key to help students master the material effectively.

8. The Essentials of Inheritance Patterns: A Clear and Concise Guide

Ideal for beginners, this guide breaks down complex genetic patterns into simple concepts. It includes summaries, practice questions, and a detailed answer key to support self-study and review.

9. Advanced Genetics: Exploring Complex Inheritance Patterns

Targeted at advanced students, this book explores polygenic traits, gene linkage, and epistasis. It features challenging questions with answer keys to deepen understanding of intricate inheritance mechanisms beyond basic Mendelian genetics.

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12 3 other patterns of inheritance answer key: *CK-12 Biology Teacher's Edition* CK-12 Foundation, 2012-04-11 CK-12 Biology Teacher's Edition complements the CK-12 Biology Student Edition FlexBook.

12 3 other patterns of inheritance answer key: HUMAN ANATOMY AND PHYSIOLOGY-II Mrs. Sakshi Sharma, Mrs. Shweta Sandeep Satkar, Ms. Priyanka D. Yadav, Dr. Ayushi Purohit, Dr. Sourabh Sharma, 2025-05-02 Textbook of Human Anatomy and Physiology – II is a comprehensive guide designed to deepen understanding of human body systems. It begins with an in-depth look at the nervous system, exploring neurons, synapses, and neurotransmitters. The central nervous system section delves into brain structure, spinal cord functions, and reflex activity. In the digestive system, it details the anatomy and roles of major organs like the stomach, intestines, liver, and pancreas. Processes like digestion, absorption, and related gastrointestinal disorders are clearly explained. The energetics chapter introduces ATP production and basal metabolic rate, emphasizing cellular energy dynamics. The respiratory system is presented with focus on lung anatomy, gas transport, and artificial respiration techniques. Anatomy and physiology of the urinary system, including nephrons and kidney functions, are thoroughly discussed. It also explains the micturition reflex and kidney roles in pH regulation and the renin-angiotensin system. The endocrine system section offers detailed insights into hormone mechanisms and glandular disorders. Structures and functions of glands like the pituitary, thyroid, adrenal, and pancreas are carefully outlined. The roles of lesser-known glands like the pineal and thymus are also explored in depth. The reproductive system chapter covers both male and female anatomy, physiology, and reproductive cycles. It explains complex processes like menstruation, fertilization, pregnancy, and parturition. Key reproductive events like spermatogenesis and oogenesis are clearly illustrated. The book ends with a foundational introduction to genetics, touching on chromosomes and DNA. Concepts like protein synthesis and patterns of inheritance help bridge physiology with molecular biology. The language is student-friendly, supported with diagrams and clinical correlations. Each system is explained functionally and structurally, reinforcing learning through physiological context. Ideal for students in health and life sciences, this book builds a strong base in human anatomy and physiology.

12 3 other patterns of inheritance answer key: *Brunner and Suddarth's Textbook of Medical-Surgical Nursing* Mary Jo Boyer, 2010 The perfect companion to Brunner and Suddarth's Textbook of Medical-Surgical Nursing, this exemplary study tool helps you better understand the concepts, techniques, and disease processes detailed in the textbook.

12 3 other patterns of inheritance answer key: Holt Biology Rob DeSalle, Holt Rinehart and Winston, 2008 Holt Biology: Student Edition 2008--

12 3 other patterns of inheritance answer key: Animal Biotechnology Ashish S. Verma, Anchal Singh, 2013-11-04 Animal Biotechnology introduces applications of animal biotechnology and implications for human health and welfare. It begins with an introduction to animal cell cultures and genome sequencing analysis and provides readers with a review of available cell and molecular tools. Topics here include the use of transgenic animal models, tissue engineering, nanobiotechnology, and proteomics. The book then delivers in-depth examples of applications in human health and prospects for the future, including cytogenetics and molecular genetics, xenografts, and treatment of HIV and cancers. All this is complemented by a discussion of the ethical and safety considerations in the field. Animal biotechnology is a broad field encompassing the

polarities of fundamental and applied research, including molecular modeling, gene manipulation, development of diagnostics and vaccines, and manipulation of tissue. Given the tools that are currently available and the translational potential for these studies, animal biotechnology has become one of the most essential subjects for those studying life sciences. - Highlights the latest biomedical applications of genetically modified and cloned animals with a focus on cancer and infectious diseases - Provides firsthand accounts of the use of biotechnology tools, including molecular markers, stem cells, and tissue engineering

12 3 other patterns of inheritance answer key: *Anthropology Question Bank UGC NTA NET Assistant Professors* Mocktime Publication, 101-01-01 Chapter 1. Introduction to Anthropology & Research Foundations: History, development, aim, and scope of Anthropology; its relationship with other sciences; different branches of Anthropology (including Linguistic Anthropology) and their interrelationship; Research (in context of UGC NTA NET Exam Subject Anthropology) Chapter 2. Fieldwork Traditions & Core Methods: Fieldwork and fieldwork tradition; Ethnography, Observation, Interview, Case Study, Life History, Focus group, PRA (Participatory Rural Appraisal), RRA (Rapid Rural Appraisal), Genealogical Method. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 3. Advanced Field Methods & Data Collection: Schedules and Questionnaires, Grounded Theory, Exploration and Excavation, GIS (Geographic Information Systems). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 4. Statistical Analysis & Interpretation Techniques: Statistics: concept of variables, sampling, measures of central tendency and dispersion; Parametric and nonparametric bivariate and multivariate (linear regression and logistic regression) statistical tests; Techniques of Analysis: Content analysis, Discourse analysis, and Narratives. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 5. Theories of Evolution & Primate Radiation: Lamarckism, Neo-Lamarckism, Darwinism, Neo-Darwinism, Synthetic theory, neutral theory of molecular evolution; Concept of cladogenesis and anagenesis, punctuated equilibrium, selection; Trends in Primate radiation. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 6. Primate Diversity & Characteristics: Primate classification and distribution of extinct and extant species; Characteristics of primates: morphological (hair), skeletal (cranial, post cranial, dental, brain), physical (opposability of thumb), locomotion (quadrupedalism, brachiation and bipedalism) and posture, Primate social behaviour; Extant Primates Distribution, characteristics and classification: Prosimii (Tarsiioidea, Lorisioidea, Lemuroidea), Anthropoidea (Ceboidea, Cercopithecoidea, Hominoidea); Morphological and anatomical characteristics of Human, Chimpanzee, Gorilla, Orangutan and Gibbon. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 7. Fossil Primates & Early Hominin Evolution: Fossils of extinct Primates Oligocene-Miocene fossils - Parapithecus; Gigantopithecus, Aegyptopithecus, Dryopithecus, Ramapithecus and Sivapithecus; Pre-hominid groups: Sahelanthropus tchadensis (Toumai), Orrorin tugenensis, Ardipithecus ramidus; Early Hominids: Australopithecus afarensis, Australopithecus ramidus, Australopithecus africanus, Australopithecus (Paranthropus) boisei, Australopithecus (Paranthropus) robustus, Australopithecus bahrelghazali; Early Transitional Human: Homo habilis. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 8. Homo Erectus, Archaic & Modern Humans: Hominid Evolution Characteristics and distribution of Homo erectus in general, Special reference to the fossil evidences discovered from Africa (Turkana boy), Asia (Java man and Peking man), Europe (Dmanisi), Homo floresiensis (Dwarf variety); Characteristics of Archaic sapiens with special reference to Europe (Homo heidelbergensis), Africa (Rhodesian Man), Asia (China, Jinniushan; India, Narmada Man); Neandertal man: Distribution, salient features and phylogenetic position; Characteristics of anatomically Modern Homo sapiens with special reference to Africa (Omo), Europe (Cro-magnon, Chancelade, Grimaldi), Asia (Jinniushan) and Australia (Lake Mungo); Dispersal of modern humans: Out of Africa hypothesis, Multiregional hypothesis, Partial Replacement hypothesis. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 9. Modern Human Variation & Indian Populations: Modern Human Variation: Typological Model, Populational Model and Clinal Model; overview of Classification proposed by Blumenbach, Deniker, Hooton, Coon, Garn and Birdsell; Ethnic Classification and distribution of Indian Populations: H.H.

Risley; B. S. Guha; S. S. Sarkar; Linguistic distribution of ethnic groups. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 10. Human Genetics Study Methods & Cytogenetics: Methods of studying Human Genetics: Cytogenetics, Mendelian Genetics, Twin Genetics, Sib Pair methods, Population Genetics, Molecular Genetics; Cytogenetics: cell cycle, standard karyotyping and banding techniques (G, C and Q), chromosomal abnormalities, fluorescent in situ hybridization, Lyon's hypothesis, importance of telomere and centromere; Linkage and chromosome mapping, genetic imprinting. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 11. Modes of Inheritance & Polygenic Traits: Modes of inheritance: Autosomal (dominant, recessive, codominance), sex linked, sex influenced, sex limited, modifying genes, suppressor genes, selfish gene, multiple allelic inheritance, multifactorial inheritance (stature and skin colour), polygenic (dermatoglyphics- Finger-ball Pattern types, Dankmeijer's Index, Furuhashi's Index and Pattern Intensity Index, Total Finger Ridge Count, Absolute Finger Ridge Count, Palmar formula and mainline index, transversality, atd angle and flexion creases). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 12. Population & Molecular Genetics: Population genetics: Hardy-Weinberg equilibrium, definition and application; mating patterns (random, assortative and consanguineous), inbreeding coefficient, genetic load, genetic isolate, genetic drift, genetic distance); genetic polymorphism (balanced and transient); Molecular genetics: DNA, RNA, genetic code, protein structure and synthesis, concepts of RFLPs, VNTRs, STRs, and SNPs, Mitochondrial DNA, genic and genomic mutations. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 13. Human Growth, Development & Maturation: Human Growth, development and maturation: definition, concepts; Basic principles of growth; phases of growth: Prenatal and postnatal (growth and development of different body parts, subcutaneous tissues and physiological variables); Growth curves: Velocity, Distance, Acceleration and Scammon's Growth curve; Catch up and Catch down growth; Aging and senescence with special reference to somatic, skeletal and dental maturation. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 14. Factors in Growth, Study Methods & Body Composition: Factors affecting growth: Genetic and Environmental; Secular trends in growth; Methods of studying human growth: Longitudinal, Cross-sectional, Mixed longitudinal, Linked longitudinal; Body composition: Bone mass, body mass, percentage of body fat, segmental fat, body age. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 15. Human Adaptation & Somatotyping: Human Adaptation: Allen's and Bergmann's rule; Human Adaptability Programme; human adaptation to heat, cold, high altitude; Somatotyping: Concept, Development (Kretschmer, Sheldon, Parnoll, Heath-Carter) and its application. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 16. Demography & Anthropological Demography: Demography: Multidisciplinary nature of demography and its relation with other disciplines; Relationship between demography and anthropological demography; Fertility (concept and determinants), Morbidity and mortality (concept and determinants), Migration (concept and determinants), Selection intensity. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 17. Prehistoric Archaeology Concepts, Paradigms & Dating: Concept of prehistoric archaeology; ethno-archaeology, experimental archaeology, environmental archaeology, settlement archaeology, cognitive archaeology, geo-archaeology, action archaeology; Theoretical paradigms - descriptive to scientific period to interpretative period; Dating: Typology, seriation, geo-archaeological, obsidian hydration, chemical dating of bones, oxygen isotope, fluorine estimation, dendrochronology, radio-carbon, fission track, thermoluminescence, potassium-argon, varve clay, cross dating, amino acid racemization, palaeomagnetic. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 18. Paleoenvironment & Site Formation: Paleoenvironment: Major geological stages (Tertiary, Quaternary, Pleistocene, Holocene); Major climatic changes during Pleistocene and post Pleistocene periods, glacial and interglacial periods, ice age, pluvial and inter-pluvial climatic phases; Evidences of quaternary climatic changes (moraines, varve, river terraces, loess, sea level changes, beach sequences, sea core, fluvial deposits, palynology, palaeontology); Site formation. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 19. Lithic Tool Typology & Technology: Lithic tool typology and technology: Lower Palaeolithic

(pebble tools, chopper and chopping tools, bifaces, handaxes and cleavers); Middle Palaeolithic (Clactonian, Levalloisian and Mousterian flakes, discoid cores, tortoise core, fluted core, scrapers, point); Upper Palaeolithic (blade, knife, blunted back, borer, burin, points); Mesolithic (microliths); Neolithic (ring stone, grind stone, celt, adze). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 20. European Lithic Cultures & Near East Neolithic: Overview of Lithic Cultures of Europe: Lower Palaeolithic: Acheulian culture; Middle Palaeolithic: Mousterian culture; Upper Palaeolithic: Perigordian, Chatelperronian, Gravettian, Aurignacian, Solutrian, Magdalenian; Mesolithic: Azilian, Tardenoisian, Maglamosian, Kitchen Midden, Natufian; Early Farming Cultures and Neolithic of the Near East: Sites like Jericho, Jarmo, Çatal Huyuk, Shanidar. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 21. Indian Palaeolithic Cultures: Lower Palaeolithic Period in India Pebble tool culture: Soan Acheulian culture: Madrasian (Kortalayar Valley), Attirmpakkam, Didwana, Belan Valley, Bhimbetka, Chirki-Nevasa, Hunsgi, Krishna Valley; Importance of Hathnora, Narmada valley; Middle Palaeolithic period in India: Belan valley, Bhimbetka, Nevasa, Narmada valley; Upper Palaeolithic period in India: Renigunta, Billa Surgam, Patne, Bhimbetka, Son and Belan Valleys, Visadi, Pushkar, Gunjan Valley. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 22. Indian Mesolithic & Neolithic Periods: Mesolithic period in India: Mesolithic economy and society; Post Pleistocene environmental changes; Development in microlithic technology, composite tools and bows and arrows; Sites include Bagor, Tilwara, Langhnaj, Adamgarh, Bagor, Chopani Mando, Bhimbetka, Sarai Nahar Rai, Birbhanpur; Neolithic Period in India: Economic and social consequences of food production; Settlements, population growth, craft specializations, class formation and political institutions; Sites like Burzahom, Gufkral, Ahar, Gilund, Nagada, Kayatha, Navdatoli, Eran, Nevasa, Chandoli, Daimabad, Inamgaon, Prakash, Maski, Brahmagiri, Sangankallu, Tekkalkota, Piklihal, Nagarjunakonda, Daojali Hading, Kuchai, Sarutadu. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 23. Prehistoric Art, Indus Civilization & Pottery Traditions in India: Prehistoric Cave art from India: Bhimbetka, Adamgarh; Indus Civilization: Expansion of village sites; Development of metal technology, art and writing; Architecture and city planning; Stages and theories of decline; Sites like Amri, Kot Diji, Kalibangan, Mohenjodaro, Harappa, Lothal, Dholavira, Rakhigarhi; Pottery and Traditions: Ochre Coloured Pottery (OCP), Black and Red ware, Painted Grey Ware (PGW), Northern Black Polished Ware (NBP); Distribution of the pottery types and period. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 24. Bronze/Copper Age, Iron Age & Megaliths in India: Bronze/Copper Age: General characteristics, distribution, people; Iron Age and Urban Revolution: General characteristics, distribution, people; Megaliths: concept and types (menhir, dolmen, topical, cist, cairn circle, sarcophagi). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 25. Core Concepts in Social Anthropology (Culture & Society): Conceptual Understanding of Social Anthropology: Culture: Attributes, Holism, Universals, Acculturation, Enculturation, Transculturation, Culture Change, Culture Shock, Cultural Relativism, Civilization, Folk-Urban Continuum, Great and Little Tradition, Cultural Pluralism and World-View; Society: Groups, Institutions, Associations, Community, Status and Role; Incest; Endogamy and Exogamy; Rites of passage. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 26. Social Institutions (Family & Marriage): Social Institutions: Family: Definitions, universality of the family; Typological and Processual methods of studying the family; Types of family – conjugal-natal, consanguineal, nuclear, joint, extended; Rules of residence – Patrilocal, Matrilocal, Ambilocal, Bilocal, Neolocal, Avunculocal, Virilocal, Amitalocal, Uxorilocal; Functions of family, Trends of change – urbanization, globalization, industrialization, feminist movements; Marriage: Definition, universality, types and functions (monogamy, polygamy – polyandry, polygyny, hypogamy, hypergamy, levirate, sororate); Preferential and Prescriptive types; Types and forms of marital transactions – bride price and dowry; Marriage as exchange. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 27. Social Institutions (Kinship, Economic & Legal Anthropology): Kinship: Definition, Descent, kinship terminology, matrilineal puzzle; Joking and avoidance; moiety, phratry, clan and lineage; Types of kinship systems; Economic Anthropology: Definition and relationship with Anthropology and

Economy; Theories (Malinowski, Formal, Substantivist, Marxist); Livelihoods, Subsistence, Principles of production, distribution, consumption; division of labour in hunting-gathering, pastoral, swidden and agricultural communities; Exchange, reciprocity, gifts and barter systems; Kula, Potlatch and Jajmani – Anthropological explanations; Legal Anthropology: Anthropology of Law, Social Sanctions. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 28. Political Organization, Religion, Belief Systems & Social Change: Political Organization: Definitions, political processes in band, tribe, chiefdom and state systems; Conflicts and social control; Nations and Nation-state, democracy; Religion and Belief Systems: Definitions, animism, animatism, manaism, bongaism, totemism, taboo; Religious specialists – witch, shaman, priest, medicine-man, sorcerer; Magic – definitions, types, approaches; Rituals; Social Change: Basic ideas and concepts (Assimilation, Integration, Syncretism, Dominance and Subjugation), Approaches. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 29. Classical Anthropological Theories: Theories in Social Anthropology: Evolutionism – Tylor, Morgan, Fraser, Maine, McLennan; Diffusionism – Three schools (Austro-German, British, American); Historical Particularism – Boas; Functionalism – Malinowski; Structural-Functionalism – Radcliffe-Brown, Firth, Fortes, Eggan, Parsons. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 30. Mid-20th Century Anthropological Theories: Structuralism – Levi-Strauss; Culture and Personality/Psychological Anthropology – Mead, Benedict, DuBois, Linton, Kardiner, Whiting and Child; Cultural Ecology, Environmental Anthropology, Neo-evolutionism (Leslie White, Julian Steward, Marshall Sahlins). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 31. Later 20th Century Anthropological Theories I: Cultural Materialism – Marvin Harris; Symbolic Anthropology – Victor Turner, Raymond Firth, Mary Douglas; Cognitive Anthropology – Roy D'Andrade, Stephen Tyler, Ward Goodenough. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 32. Contemporary & Critical Anthropological Theories: Deep Ethnography, Interpretive Anthropology – Clifford Geertz; Anthropology and Gender – Leela Dube, Renato Rosaldo, Marilyn Strathern, Zora Neale Hutson; Postmodernism, Poststructuralism, Postcolonialism – Foucault, Derrida, Bourdieu; Ethnicity – Barth, Jeffery, Weber. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 33. Development of Indian Anthropology & Social Concepts: Stages in the Development of Indian Anthropology Concepts: Social Stratification (eg. Caste), Scheduled Caste (SC), Dalit, OBC, Nomadic Groups; Revivalist/Nativist movements, Peasant movements (Malabar and Telengana movements). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 34. Tribal Studies in India & Constitutional Safeguards: Tribe, Scheduled Tribe (ST), Particularly Vulnerable Groups (PVTGs), Tribal movements (Birsa and Naga movements), Tribal Development, Distribution; Constitutional Safeguards for SC and ST, Inclusion and Exclusion. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 35. Indian Village Studies, Local Governance & Theoretical Ideas: Indian Village and Village Studies in India (S.C. Dube, McKim Marriott, Weiser, Scarlett Epstein, M.N. Srinivas, F.G. Bailey); Panchayati Raj Institutions and other traditional community political organizations, Self-Help Groups (SHGs); Theoretical ideas: Sanskritization, Westernization, Modernization, Globalization, Sacred Complex, Nature-Man-Spirit Complex. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 36. Early Indian Anthropologists & Their Contributions: Early Indian Anthropologists and their contributions: G.S. Ghurye, B.S. Guha, S.C. Roy, Iravati Karve, L.P. Vidyarthi, S.C. Dube, M.N. Srinivas, N.K. Bose, Surajit Sinha, D.N. Majumdar, S.R.K. Chopra, Verrier Elwin, S.S. Sarkar, Dharani Sen, T.C. Das, P.C. Biswas. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 37. Applied & Specialized Anthropological Fields: Concepts and Theories: Applied Anthropology, Action Anthropology, Engaged Anthropology, Experimental Anthropology, Urban Anthropology, Public Anthropology, Public Archaeology, Anthropology of Development, Medical Anthropology, Visual Anthropology, Genomic Studies, Genetic Screening and Counseling, Forensic Anthropology, Food and Nutritional Anthropology, Ergonomics, Kinanthropometry, Business Anthropology. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 38. Community Development Projects & Intervention Processes: Community Development Projects (Rural, Urban and Tribal); Revisits, Re-studies, Reinterpretations, Intervention, Research Process and Social

Impact Assessment (SIA). (in context of UGC NTA NET Exam Subject Anthropology) Chapter 39. Anthropological Approaches in Community Studies & Issues: Anthropological approaches in community studies: public health, education, nutrition, land alienation, bonded labour, housing, alternative economy, livelihood, gender issues, relief, rehabilitation and relocation, identity crisis, communication, training and management, aging and the aged. (in context of UGC NTA NET Exam Subject Anthropology) Chapter 40. Development Strategies, NGOs & Empowerment: Development Strategies (Plan/Sub Plan); Role of NGOs in Development; Anthropology and NGOs; Empowerment of Women, LGBT groups. (in context of UGC NTA NET Exam Subject Anthropology)

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