

CHAPTER-3 | Human Development

QUIZ
PART-02

1. Which pair lists the two broad factors influencing development?
- Heredity and environment
 - Biology and technology
 - Parenting and diet
 - Schooling and peers

(A)

Explanation : Development is influenced by heredity and environment as the two broad determinants.

2. What does heredity primarily involve?
- Cultural traditions passed down socially
 - Transmission of traits across generations through genes
 - Skills learned through schooling
 - Behaviors shaped by peer groups

(B)

Explanation : Heredity refers to traits passed from one generation to the next and is governed by genes.

3. Which statement best defines environment in development?
- Only the physical surroundings in early childhood
 - The genetic blueprint of a person
 - All external conditions—family, culture, education—that affect development
 - The biological mechanism of inheritance

(C)

Explanation : Environment includes all external conditions that influence development, such as family, culture, and education.

4. Which option best describes the principle of heredity?
- Traits are shaped only by schooling
 - Traits change randomly across a lifetime
 - Traits are passed through a biological mechanism across generations
 - Traits depend solely on nutrition

(C)

Explanation : The principle states that traits are transmitted biologically from one generation to the next.

5. What is genotype?
- Observable characteristics shaped by experience alone
 - The genetic makeup or inherited potential
 - A set of learned behaviors
 - The cultural background of an individual

(B)

Explanation : Genotype is the genetic makeup that represents inherited potential.

6. What is phenotype?
- The set of genes carried by an individual
 - The environment shared by family members
 - Observable traits resulting from genotype interacting with environment
 - A learned skill acquired through practice

(C)

Explanation : Phenotype reflects the observable expression resulting from both genetic makeup and environmental influences.

7. Which statement captures how inherited traits are expressed?
- Genes alone determine all observable traits
 - Environment alone determines all observable traits
 - The environment shapes how inherited traits are expressed
 - Traits are unaffected by either genes or environment

(C)

Explanation : Environmental conditions influence the expression of genetically inherited traits.

8. Which of the following is an example of environmental influence on development?
- Eye color inherited from parents
 - Blood type
 - Language spoken at home
 - Genetic disorder

(C)

Explanation : Language spoken at home is an external, contextual factor and thus an environmental influence.

9. Which relationship among key terms is accurate?
- Genotype = environment; phenotype = genes
 - Genotype + environment → phenotype
 - Phenotype + environment → genotype
 - Environment + phenotype → genotype

(B)

Explanation : Observable traits (phenotype) arise from the interaction between genetic makeup (genotype) and environment.

10. Which comparison correctly distinguishes genotype from phenotype?
- Genotype is observed directly; phenotype is always hidden
 - Genotype is inherited potential; phenotype is its observable expression
 - Genotype changes with schooling; phenotype never changes
 - Genotype is cultural background; phenotype is biological heritage

(B)

Explanation : Genotype denotes inherited potential, while phenotype denotes the observable outcomes of that potential in context.