

HEREDITY AND EVOLUTION

Question 1: Alternative forms of a gene are called _____.

1. loci
2. multiples
3. chromosomes
4. alleles

Answer: 4

Question 2: Heredity or inheritance of specific traits became clearer due to

1. Lamarck's theory
2. Mendel worked on garden peas
3. Darwinism
4. Neo-Darwinism

Answer: 2

Question 3: Which of these is homozygous recessive?

1. Ss
2. ss
3. SS
4. s

Answer: 2

Question 4: What will be the genotypic ratio of the cross between Rr and rr?

1. 1:2:1
2. 3:1
3. 1:1
4. 1:1:1

Answer: 3

Question 5: What will be the genotypic ratio of the cross between Rr and Rr?

1. 1:1
2. 3:1
3. 1:2:1
4. 1:1:1

Answer: 3

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Question 6: The offspring resulting from a cross between two pure homozygous recessives would be _____.

1. 50% homozygous recessive and 50% homozygous dominant
2. 75% homozygous recessive and 25% heterozygous dominant
3. 75% homozygous recessive and 25% homozygous dominant
4. 100% homozygous recessive

Answer: 4

Question 7: On what cellular structures are genes in eukaryotes carried?

1. Endoplasmic reticulum
2. Nuclear membrane
3. Chromosomes
4. Mitochondria

Answer: 3

Question 8: Which of the following sentences is true about the evolutionary process?

1. There is no real 'progress' in the idea of evolution.
2. humans are unique, a totally new type of organism.
3. progress is nature's religion.
4. Evolution of life forms was rapid in the beginning ages.

Answer: 1

Question 9: Microevolution takes place due to

1. somatogenic variation
2. blastogenic variation
3. continuous variation
4. Successive variation

Answer: 2

Question 10: In man the chromosome number is 46. How many chromosomes are present in man's muscle cells?

1. 23
2. 46
3. 69
4. variable

Answer: 2

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Question 11: The difference between Homo sapiens and the Homo erectus was ____.

1. Homo sapiens originated in Africa while Homo erectus was in Asia
2. Homo eructus were much smaller in size than homo sapiens.
3. Homo eructus stayed in Africa while Homo sapiens did not
4. The size of their brain of Homo eructus was smaller to homo sapiens

Answer: 4

Question 12: The component of a chromosome that controls heredity is ____.

1. proteins
2. histones
3. DNA
4. RNA

Answer: 3

Question 13: Speciation takes place when variation occurs with

1. mood changes
2. death of an organism
3. changes due to accidents
4. geographical isolation

Answer: 4

Question 14: Number of chromosomes in a human male is _____.

1. 23
2. 23 pairs
3. 22 pairs + XY
4. 22 pairs

Answer: 3

Question 15: By studying analogous structures we look for _____.

1. similarities in appearance and function but different in structure
2. similarities in appearance bur differences if functions
3. Similarities in organ structure
4. Similarities in cell make up

Answer: 1

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Question 16: _____ was a predecessor of Darwin's and developed the theory of acquired characteristics.

1. Weismann
2. Mendel
3. Malthus
4. Lamarck

Answer: 4

Question 17: Which of these is not a living fossil?

1. Archaeopteryx
2. Duck-billed platypus
3. Lungfish
4. Frog

Answer: 1

Question 18: Which of the following are not examples of analogous structures?

1. Wings of bat and butterfly
2. Wings of bat and forelimb of cattle
3. Thorn and spine
4. Tendril of Lathyrus and tendril of Gloriosa

Answer: 2

Question 19: The scientist who cut off the tails of mice of successive generations to prove Lamarck's theory wrong was _____.

1. Weismann
2. Haeckel
3. Darwin
4. Wallace

Answer: 1

Question 20: Human being belongs to the species of_____.

1. Homo erectus
2. Homo habilis
3. Homo sapiens
4. Hominidae

Answer: 3

Question 21: Links between organisms that show branching pattern of evolutionary relationships are shown by_____.

1. living fossils
2. comparative embryology
3. phylogenetic trees
4. two fossil layers

Answer: 3

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Question 22: Speciation is the evolutionary process by which _____.

1. a new gene pool is formed
2. evolutionary paths of species converge
3. hybrids species form
4. Shows up differences in physical traits

Answer: 1

Question 23: Non geographic speciation can be found in _____.

1. parapatric speciation
2. peripatric speciation
3. allopatric speciation
4. sympatric speciation

Answer: 1

Question 24: Evidences of evolutionary relationships is found in _____.

1. atmosphere
2. fossils
3. ocean beds
4. rocks

Answer: 2

Question 25: In dogs the chromosome number is 78. How many chromosomes are present in the dog sperm?

1. 78
2. 39
3. cannot determine from this information
4. variable

Answer: 1

Question 26: Homologous chromosomes which are similar in both the sexes are called _____.

1. sex chromosomes
2. autosomes
3. allosomes
4. androsomes

Answer: 2