



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



SOLUTION – 3

Class: X

Sub: Life Science

Date: 21.06.2021

Topic: Ch 2 Continuity of Life: Types of chromosomes and its relation with DNA and gene

F.M. : 15

Choose the correct option:

(1x15=15)

1. The character of all living organisms results from the interaction of _____.
a) environment b) genes **c) both** d) neither
2. The chromosomes are located within each cell's _____.
a) nucleus b) mitochondria c) cytoplasm d) golgi body
3. Chromosomes are long thread-like structures made up of _____ molecule and protein.
a) nucleotide b) nucleoside c) RNA **d) DNA**
4. The four nitrogenous bases of nucleotide are -
a) adenine (A), guanine (G), cytosine (C) and uracil (U). **b) adenine, guanine, cytosine and thymine (T).** c) A, C, T and U. d) A, T, U and G.
5. Every species has a _____ number of chromosomes.
a) same b) different **c) fixed** d) none of these
6. _____ represent long, thin strands of the DNA-protein complex.
a) Chromosome b) Gene c) Nucleus **d) Chromatin**
7. Humans have _____ pairs of chromosomes present in every body cell.
a) 22 **b) 23** c) 44 d) 46
8. In males, the Y chromosome is _____ the X chromosome.
a) smaller than b) bigger than c) same length as d) none of these
9. Paired autosomes of human are numbered according to _____.
a) shape **b) size** c) both d) none of these
10. In sexually reproducing organisms, the number of chromosomes in the body cells is _____.
a) diploid b) triploid c) haploid d) none of these
11. Each pair of autosomes is _____ similar and considered as homologous pairs.
a) physiologically b) functionally **c) structurally** d) b and c
12. All chromosomes contain a large number of _____ arranged in a definite sequence.
a) proteins b) DNA c) RNA **d) genes**
13. In a karyogram, _____ chromosomes are placed next to each other.
a) homologous b) partially homologous c) non-homologous d) none of these

14. Only the ____ cells have haploid numbers due to meiosis.
a) **sex or germ** b) somatic c) both d) neither
15. ____ is the molecule that carries the genetic information in all cellular forms of life and some virus.
a) Chromosome b) Nucleus c) RNA **d) DNA**

Shreya Basu