

Class: X Sub: Life Science Date: 21.06.2021

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

## F.M.:15 gene 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

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