



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



WORKSHEET - 5

Class: X

Sub: Life Science

Date: 28.06.2021

Topic: Ch 2 Continuity of Life: Chemical components of chromosome

F.M. : 15

Choose the correct option:

(1x15=15)

- Chromatin is composed of DNA, RNA and _____.
a) protein b) carbohydrate c) fat d) none of these
- Purified chromatin isolated from interphase nuclei consists of about ____% RNA.
a) 30-40 b) 50-65 c) 10-30 d) 0.5-10
- DNA is made up of molecules called _____.
a) nucleosides b) nucleotides c) nitrogen bases d) sugar groups
- Example of a purine is _____.
a) Uracil (U) b) Thymine (T) c) Guanine (G) d) Cytosine (C)
- Each base pair is formed from two complementary nucleotides bound together by _____ bonds.
a) nitrogen b) oxygen c) hydrogen d) none of these
- The deoxyribose sugar in DNA is a _____ sugar.
a) pentose b) hexose c) septose d) none of these
- The DNA gets its polarity from _____ of the sugar.
a) location b) structure c) bonding d) numbering system
- The linkages between nucleotides occur between the _____ positions on the sugar group.
a) 2' and 3' b) 5' and 3' c) 1' and 4' d) 1' and 5'
- Each nucleotide contains a _____ group, a sugar group and a nitrogen base.
a) phosphate b) carbonate c) sulphate d) nitrate
- Histones constitute about ____% of the total chromosomal protein.
a) 55 b) 60 c) 78 d) 80
- Euchromatin contains _____ genes and is considered as the active part.
a) structural b) repetitive c) both d) neither
- _____ regions of chromosome invariably contain heterochromatin.
a) Telomeric b) Chromatid c) Centromeric d) Satellite
- Nucleotides are arranged in ____ long strands that form a double helix spiral.
a) two b) three c) four d) five
- The functions of heterochromatin are -
a) helps in gene regulation b) protection of chromosome integrity c) both d) neither

15. A nitrogen base pair in DNA is -

- a) Adenine (A) with Guanine (G) b) Cytosine (C) with Thymine (T) c) G with C d) A with T

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