



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Biological Sciences

Class: XI

Date: 28.11.2020

Nucleic Acids

F.M:15

WORKSHEET – 54

(1x15=15)

i) DNA and RNA are

(1) Nucleotides (2) Nucleosides (3) Nitrogenous bases (4) **Nucleic Acids**

ii) Which of the following is not present in a nucleotide?

(1) Nitrogenous bases (2) **Hexose sugar** (3) Phosphate (4) Pentose sugar

iii) Which of the following is not a pyrimidine?

(1) Uracil (2) Thymine (3) Cytosine (4) **Adenine**

iv) 2 amino 6 oxy purine is-

(1) Adenine (2) Thymine (3) **Guanine** (4) Cytosine

v) The deoxy ribose sugar lacks one oxygen at

(1) 3' (2) 5' (3) **2'** (4) 4'

vi) The name of Thymine is

(1) **2,4-di -oxy 5 methyl pyrimidine** (2) 2,4-di -oxy pyrimidine (3) 2-oxy 4-amino pyrimidine (4) All of these

vii) Which of the following is found in between Nitrogenous base and the pentose sugar?

(1) Ester bond (2) **Glycosidic bond** (3) Phosphodiester bond (4) None of these

viii) Adenosine is

(1) Nitrogenous base (2) **Nucleosides** (3) Nucleotides (4) Nucleic Acids

ix) Adenosine + Phosphoric Acid

(1) Adenine (2) **Adenylic Acid** (3) Adenidine (4) Adenosic Acid

x) According to Chargaff's rule,

(1) **A+G=T+C** (2) A/G=T/C (3) A X G= T X C (4) A-T= G-C

xi) One complete turn of the helix has

(1) **34 A** (2) 3.4 A (3) 0.34 A (4) 0.034 A

xii) The number of bases present in one turn of nucleic acids-

(1) 12 (2) **10** (3) 8 (4) 14

xiii) Which of the following is directed outwards?

(1) Major groove (2) **Minor groove** (3) Both (1) and (2) (4) None of these

xiv) The number of Hydrogen bonds present between A and T is

(1) 1 (2) **2** (3) 3 (4) 4

xv) The DNA helix diameter is about

(1) 10 A (2) 30A (3) **20A** (4) 40A

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