

VEER KUNWAR SINGH UNIVERSITY - ARA

B.Sc.

ZOOLOGY (HONOURS) -

PART - III

PAPER - VI

FROM

DR. RAJESH VERMA
ASSISTANT PROFESSOR

AND

HEAD - U.G. DEPARTMENT OF ZOOLOGY

D. K. COLLEGE - DUMRAON (BUXAR)

Mobile - NO: 094305-10473

email = dr rajesh verma 2020 @ gmail. com .

24.05.2020

B.Sc. - 3rd

Paper - VI

1

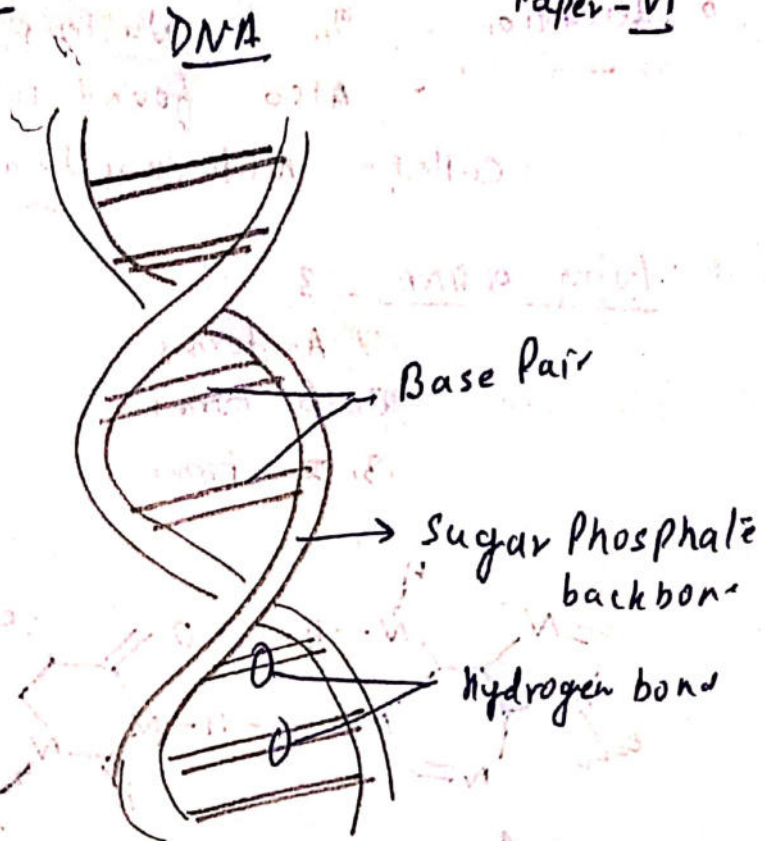
Pairing

A = T

T = A

C = G

G = C

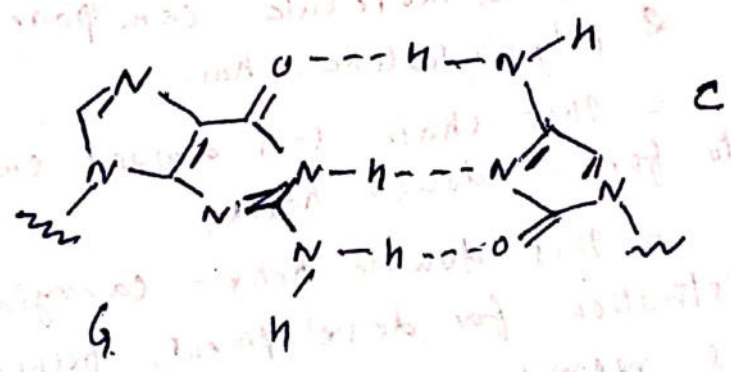
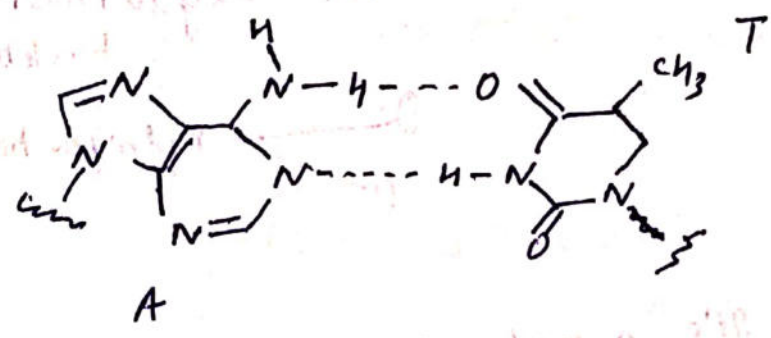


- o DNA = It's a molecule composed of 2 polynucleotide chain = this chain coil around each other to form - double helix = this double helix - carrying genetic instruction for development, functioning, growth and reproduction of all known organism and many viruses.
- o Has 4 chemical Base - Adenine, Guanine, Cytosine, & Thymine
- o The set of - chromosome in a cell makes up its genome - the human genome has approximately - 3 billion base pair of DNA, arranged into - 46 chromosomes.

Location - In the Nucleus
- Also found in - mitochondria
Called - mitochondrial DNA

Form of DNA - 3.

- (1) A-forms
- (2) B-forms
- (3) Z-forms



Minor Groove & Major Groove

In Blood - Present in WBC & not in RBC

Polymerase - is an enzyme - that
synthesize long chain of polymers of
nucleic acid

DNA Polymerase and RNA Polymerase

③

are used to assemble - DNA and template
n strand using base pairing interaction.

DNA-Polymerase -

Family A - ^{DNA} ~~DNA~~ Polymerase I; Pol γ & V

Family B - : DNA Polymerase II, Pol α & ϵ

Family C - DNA Polymerase III \rightarrow holoenzyme

Family X: DNA Polymerase IV (DinB) -
SOS repair polymerase
Pol β , λ , μ .

Terminal deoxy nucleotidyl transferase (TdT)
leads diversality - to antibody
heavy chain

———— b ————— End —

Next DNA Replication