

VEER KUNWAR SINGH UNIVERSITY - BUA

B.Sc.

ZOOLOGY (HONOURS)

PART - III

PAPER - VI

FROM

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AND

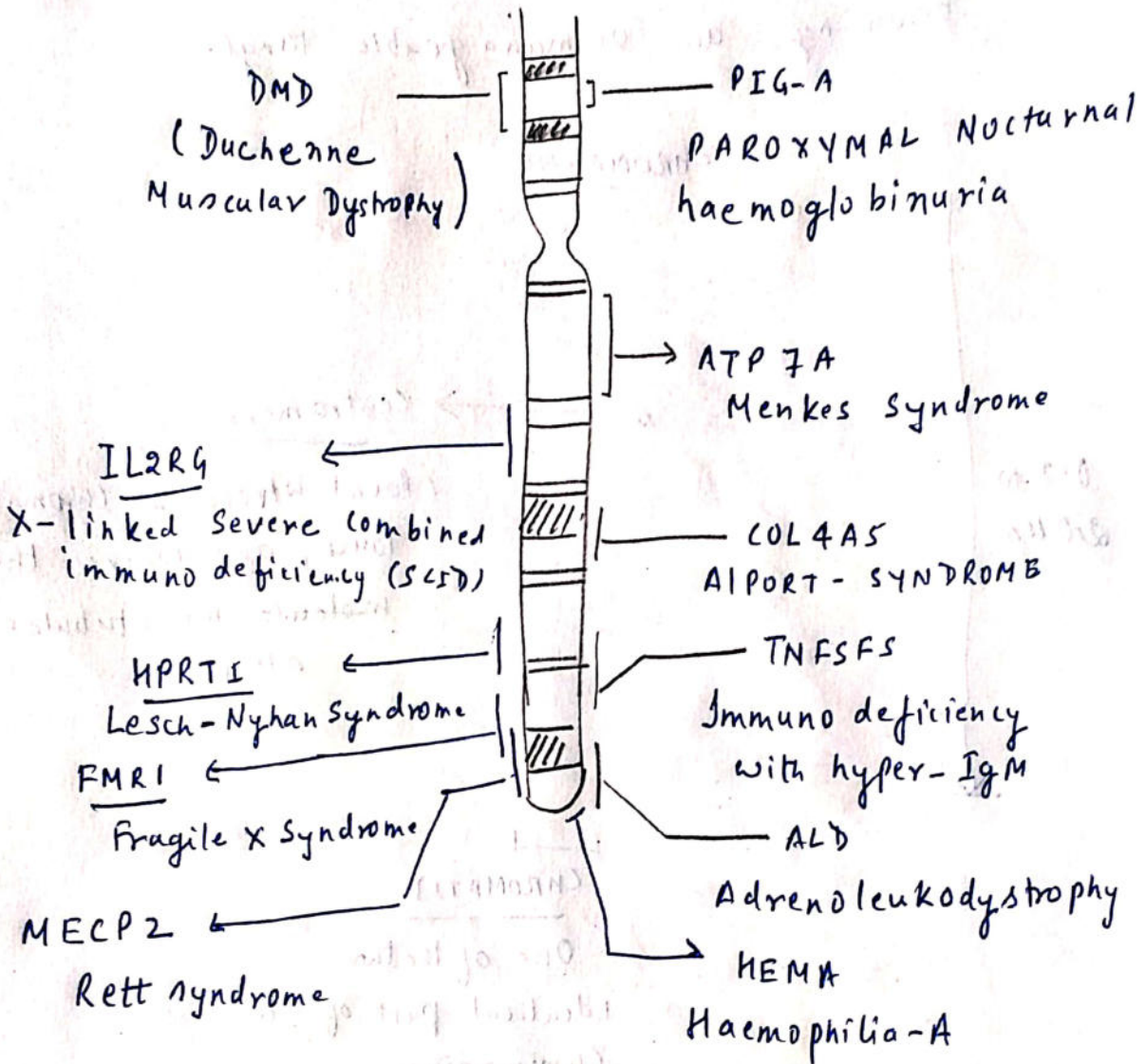
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CHROMOSOME



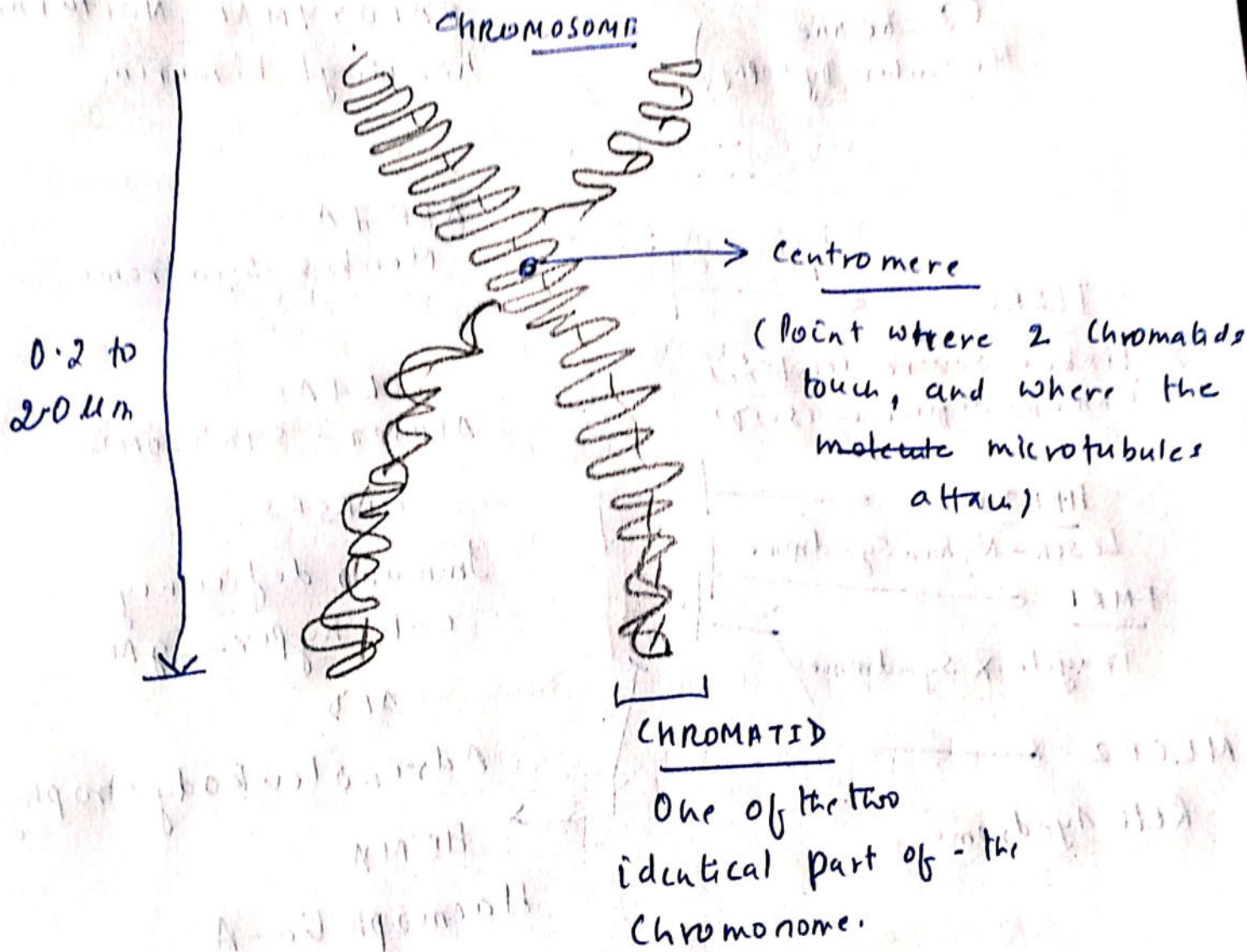
[Dia: Chromosome Map]

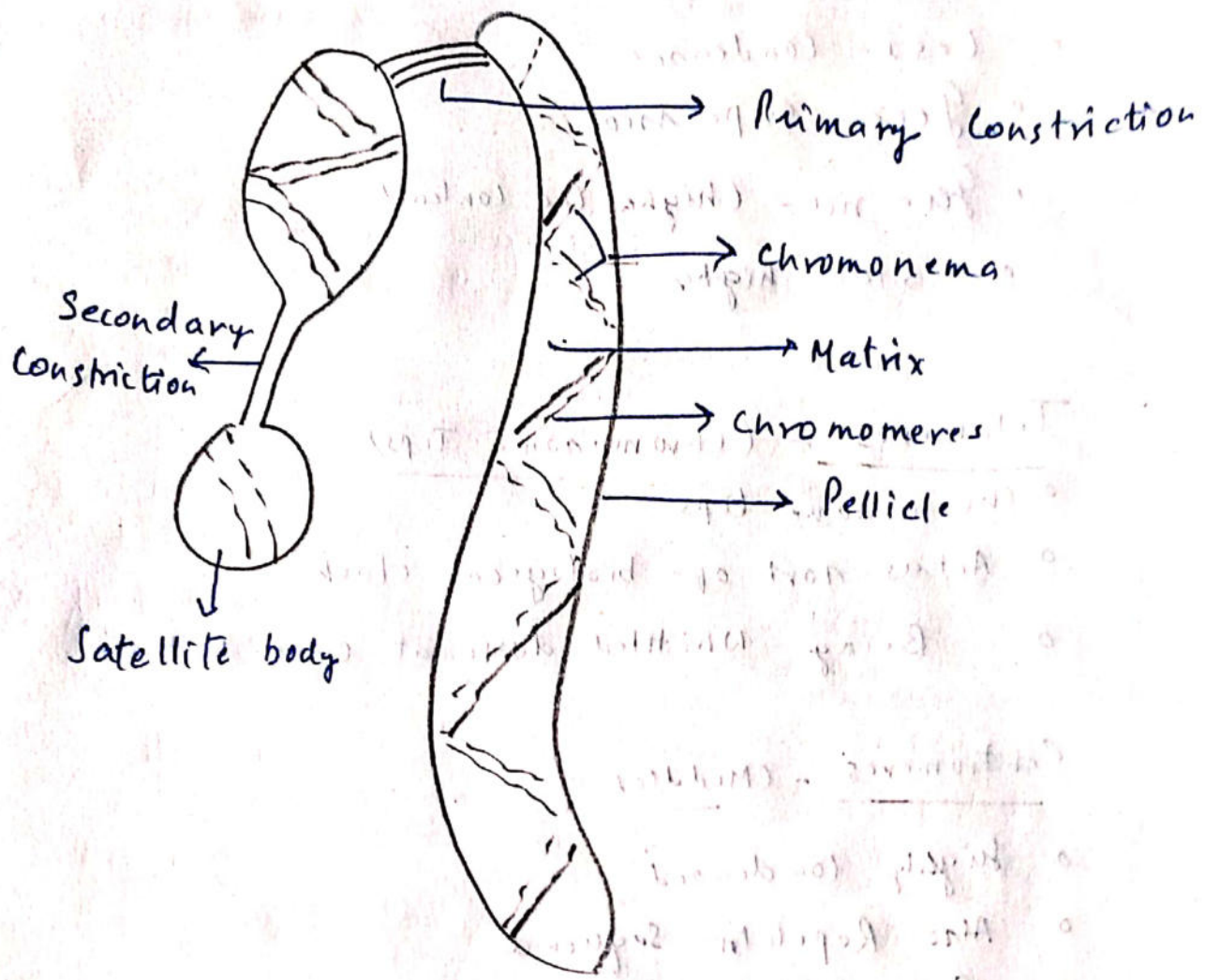
Chromosome → It's a DNA-molecule with part of or all of genetic material (genome) of an organism.

- Most of eukaryotic chromosome include packaging proteins which aided by CHAPERONE proteins, bind to and

(2)

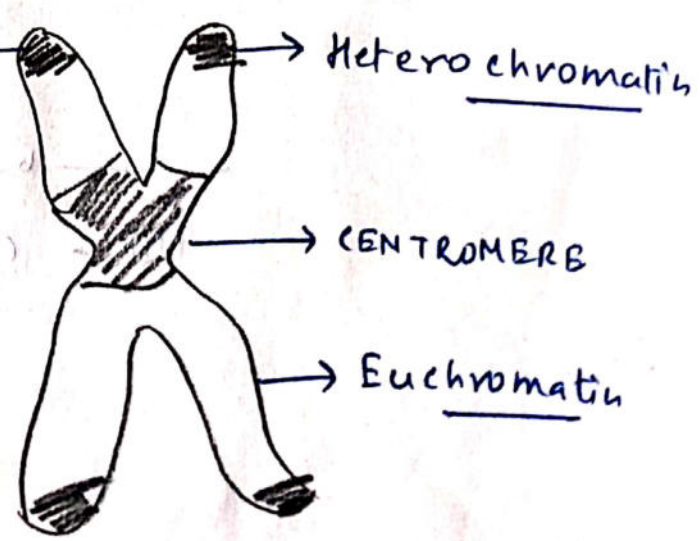
condense the DNA-molecule to prevent it from becoming an unmanageable tangle.





[Structure of chromosome]

- ① Heterochromatin -
- More condensed
 - Silenced gene - (Methylated)
 - Gene Pool. (~~is~~ High AT content)
 - stain darker



(1)
Euchromatin

- o Less - Condensed
- o Gene - Expression
- o Gene rich - (higher GC content)
- o Stain higher

Telomeres - (Chromosome Tips)

- o Chromosome tips
- o Act as sort of - biological clock
- o Being whittled down at each - Mitosis

Centromeres - (Middle)

- o Slightly condensed
- o Also Repetitive sequence
- o Region where spindle fibres attach
- o Pulling chromatids apart during - Mitosis

_____ b _____

Next - class - DNA - Model

R.V. 1/1/2020