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Q1. Who studied transposable elements for the first time?

Ans. Barbara McClintock

Q2. Which special protein is encoded by transposase?

Ans. Transposase

Q3. Give two examples of cut and paste transposons?

Ans. IS elements and P elements

Q4. Hobo- elements are present in which organism?

Ans. Drosophilla

Q5. Which mechanism of transposition is followed by Tn 3-elements?

Ans. Replicative Transposition

Q6. Give an example of retrovirus like elements

Ans. Copia elements in Drosophilla

Q7. What is the name given to those transposable elements which contain a non mobile DNA sequence flanked by IS elements?

Ans. Transposon element/composite transposon

Q8. Give two examples of transposon present in maize.

Ans. Spm dt elements

Q9. Which disorder is produced due to high rate transposition of P element in Drosophilla?

Ans. Hybrid dysgenesis

Q10. Give a prominent example of SINEs

Ans. Alu sequences

Q11. Give a prominent examples of LINEs

Ans: LI Sequences

Q12. From where are the clones derived during chromosomes walking?

Ans. Genomic library

Q13. What are the main types of genome maps?

Ans. Genetic, Cytogenetic and physical maps

Q14. Which type of genome maps are most accurate

Ans. Physical maps

Q15. Which type of enzymes are used for preparation of restriction maps

Ans. Centimorgan (CM)

Q16. Give names of two molecular markers?

Ans. Minisatellites and Microsatellites

Q17. What is the unit of distance in a physical map?

Ans. Base pairs (bp)

Q18. Which type of enzymes are used for preparation of restriction maps?

Ans. Restriction Endonucleases

Q19. What do you mean by PFGE?

Ans. Pulse field gel Electrophoresis

Q20. What is the term given to labeled DNA or RNA molecules which are used to identify the target genes?

Ans. Probes/ Molecular probes