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SVIS-N-311 A-17
B.Sc. VIth Semester Degree Examination
Botany
(Cell Biology, Genetics, Plant Breeding and Plant Propagation)
Paper : 6.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- 1) *Answer all the questions*
- 2) *Diagram will enhance the value of Answer*

I. Answer any Ten from the following in two or more sentences. (10×2=20)

1. Define Eukaryotic cell, with an example
2. What is plasmodesmata? Mention its function.
3. Define Telocentric chromosome.
4. What is chemical composition of cell wall?
5. What is inter specific hybridization
6. What are terminator codons? Name any two of them.
7. Define Epistasis.
8. Define triplet codon.
9. What is Bud grafting?
10. What are chromosome puffs
11. Name any two enzymes in nucleoplasm
12. Draw Labelled diagram of t-RNA.

II. Answer any Four of the following questions. (4×5=20)

13. Explain the functions of chromosomes
14. Describe the structure and functions of Nucleus.
15. Explain the incomplete dominance.

16. What is mutation? Explain the Spontaneous mutation.
17. Write the Aims and objectives of plant breeding.
18. Describe the structure of Golgi complex with a neat labelled diagram.

III. Answer any **Four** of the following questions.

(4×10=40)

19. Explain semi - conservative method of DNA Replication.
20. Explain Aneuploidy with example
21. Give a detailed account of Mendels laws of inheritance
22. Describe the structure and functions of Endoplasmic reticulum.
23. Explain the mechanism of Translation in protein synthesis.
24. In Pea plant Tall (T) is dominant over dwarf (t) Round seeds (R) is dominant over wrinkled (r) seeds. When homozygous tall plant with round seed is crossed with homozygous dwarf plant with wrinkled seeds. What will be the genotype and phenotype of F₁ and F₂ generations?

