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**SVS 321 B-15**  
**B.Sc. Vth Semester Degree Examination**  
**Zoology**  
**(Genetics)**  
**Paper : Z.5.2**

Time : 3 Hours

Maximum Marks : 80

**Instructions to candidates:** 1. Answer all the questions

2. Draw diagrams wherever necessary

**SECTION-A**

**I** Answer the following in one word or one sentence

**(15×1=15)**

- 1) Exons
- 2) Diploid
- 3) Holandric genes
- 4) XXY syndrome
- 5) Intersex
- 6) Mutation
- 7) r-DNA
- 8) Virulent
- 9) Plasmid
- 10) Recon-gene
- 11) Chiasma
- 12) Transduction
- 13) Terminator codon
- 14) Chromosomal aberrations
- 15) Rh-factor.

**SECTION-B**

Answer any **five** of the following in brief

**(5×5=25)**

- 16) Ultra structure of chromosome
- 17) Inheritance of ABO blood groups in human
- 18) Alkaptonuria
- 19) Enzymes of DNA replications
- 20) Genic balance theory
- 21) Wobble hypothesis
- 22) Test cross

**SECTION-C**

**III** Write explanatory note on any **four** of the following

**(4×10=40)**

- 23) Structure of DNA
  - 24) Application of Genetic engineering in medicine
  - 25) Molecular basis of mutation
  - 26) Mechanism of transcription
  - 27) Theories of linkage and crossing over
  - 28) Chemistry of Nucleic acids.
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