



**C. Fill up the blanks :**

- 9 \_\_\_\_\_ is considered as " father of Human Genetics".
- 10 Gene for Sickle cell anaemia is located on chromosome number \_\_\_\_\_
- 11 Blotting technique used for the analysis of Protein is \_\_\_\_\_
- 12 Small pox vaccine was introduced by \_\_\_\_\_

(12 x ¼ = 3 weight)

**II. Answer all *nine* questions :**

- 13 Define Karyotype .
- 14 Explain Multiple sclerosis .
- 15 Write note on T cells.
- 16 Explain Eugenics.
- 17 What is Barr body ?
- 18 Define Genetic Engineering.
- 19 What are Plasmids ?
- 20 What is Metastasis ?
- 21 Explain Translation.

(9 x 1 = 9 weight)

**III. Answer any *five* questions :**

- 22 Distinguish between Primary lymphoid organs and Secondary lymphoid organs
- 23 Explain Sex determination in Bonellia
- 24 Describe Southern Blotting technique.
- 25 Explain Genic balance theory.
- 26 What is Polygenic inheritance ? Give examples.
- 27 Explain Criss-cross inheritance with an example.
- 28 What are Vaccines ? How they give Immunity to the body ?

(5 x 2 = 10 weight)

**IV. Answer any *two* questions :**

- 29 Briefly explain different types of Cancer .Add a note on various theories about of cancer.
- 30 What are Antibodies ? Explain the structure of IgG antibody.
- 31 Explain different types of immunity .

(2 x 4 = 8 weightage)