



ST. JOSEPH STUDY CENTRE

12th STD: Mid Term Test-1

BIOLOGY

Timing: 1 Hr 30 mins / Total Marks: 50

BIO – BOTANY

I. Answer any 3 of the following questions:

[3 x 2 = 6]

1. List any two strategy adopted by bisexual flowers to prevent self-pollination.
2. Name the rediscovers of Mendelian principles.
3. Define linkage.
4. What are mutagens? Mention the types.

II. Answer any 3 of the following questions:

[3 x 3 = 9]

5. List out the functions of tapetum.
6. Explain the law of Dominance in monohybrid cross.
7. Write the salient features of Sutton and Boveri.
8. What is gene mapping? Write its use.

III. Answer any 2 of the following questions:

[2 x 5 = 10]

9. With suitable diagram explain the structure of Ovule.
10. Describe dominant epistasis with an example.
11. Explain the mechanism of crossing over.

NOTE: SEPARATE PAPER FOR BOTANY AND ZOOLOGY

BIO - ZOOLOGY

I. Answer any 3 of the following questions:

[3 x 2 = 6]

1. How is juvenile phase different from reproductive phase?
2. What are holandric genes?
3. Explain spermatogenesis.
4. What is inhibin? State its functions.

II. Answer any 3 of the following questions:

[3 x 3 = 9]

5. What is parthenogenesis? Give two examples from animals.
6. What are the applications of karyotyping?
7. Name the hormones produced from the placenta during pregnancy.
8. Mention the symptoms of phenylketonuria.

III. Answer any 2 of the following questions:

[2 x 5 = 10]

9. Explain the genetic basis of ABO blood grouping in man.
10. Describe the structure of human ovum with a neat labelled diagram.
11. Explain male heterogamety.

-----ALL THE BEST-----

Test should be written under the supervision of your parents and get the answer paper signed from them.

No corrections should be made after the test timings. We expect your honesty.

Test Papers have to be submitted after the completion of all the 4 tests.

Submission Date of Test Papers: 27th July, 28th July, 29th July

Timings: 9.30 AM – 1.00 PM / 5 PM- 8 PM