29.07.2019   BIOLOGY TT   Marks: 25
STD: X [MAJ, AWE, CAP, EXC]

I. Answer the following questions: 1x5=5

1. Changes in ____ during reproduction are the basic events in evolution.

2. Selection of swollen part of cabbage lead to the development of ____.

3. The more closely organisms are related the more recently they will have a common ____.

4. ____ gave the theory of evolution.

5. Assertion: Sex of a human child is determined by mother and not father.

   Reason: Father is heterogametic.

   a) Both assertion and reason are correct.

   b) Reason is correct, assertion is incorrect.

   c) Reason is incorrect, assertion is correct.

   d) Both assertion and reason are incorrect.

III. Answer the following questions: 3x5=15

6. Differentiate between homologous organs and analogous organs.

7. Do genetic combination of mother plays a significant role in determining the sex of a new born?

8. Write about the following terms.

   i) Micro Evolution   ii) Speciation
   iii) Species

9. Differentiate between Acquired traits and inherited traits

10. Write about Artifical selection method in Evolution of cabbage.

III. Answer in detail: 1x5=5

11. a) Explain about Natural selection with example

    b) Write any three ways how evolution and classification are interlinked.

Std: X   MATHS TT
(CUTE, BLIS, DAZ)   MARKS: 25

I. Answer the following: 4x1=4

1. Sum of first n terms of an AP =

2. What is the sum of first n natural numbers?

3. Find the sum of first 20 terms of the AP 3,3,3,3,.____

4. What is the sum of first n terms of the AP, a, a+d, a+2d,....l?

II. Answer the following: 2x2=4

5. If a=3, n=8, s=192. Find d.

6. Find 2+7+12+...... to 10 terms.

III. Solve: 3x3=9

7. The sum of the first 8 terms of an AP is 100 and the sum of its first19 terms is 551. Find the first term and the common difference of the AP.

8. If 12th term of an AP is -13 and the sum of its first four term is 24, what is the sum of its first 10 terms?

9. Find the sum of all numbers between 250 and 1000 which are exactly divisible by 3.

IV. Solve: 4x2=8

10. A man repays a loan of ₹32,500 by paying ₹200 in the first month and the increased payment by ₹150 every month. How long will it take him to clear the loan?

11. If the p th term of an AP is $\frac{1}{q}$, and the q th term is $\frac{1}{p}$,

    Show that the sum of pq term is $\frac{(pq+1)}{2}$