

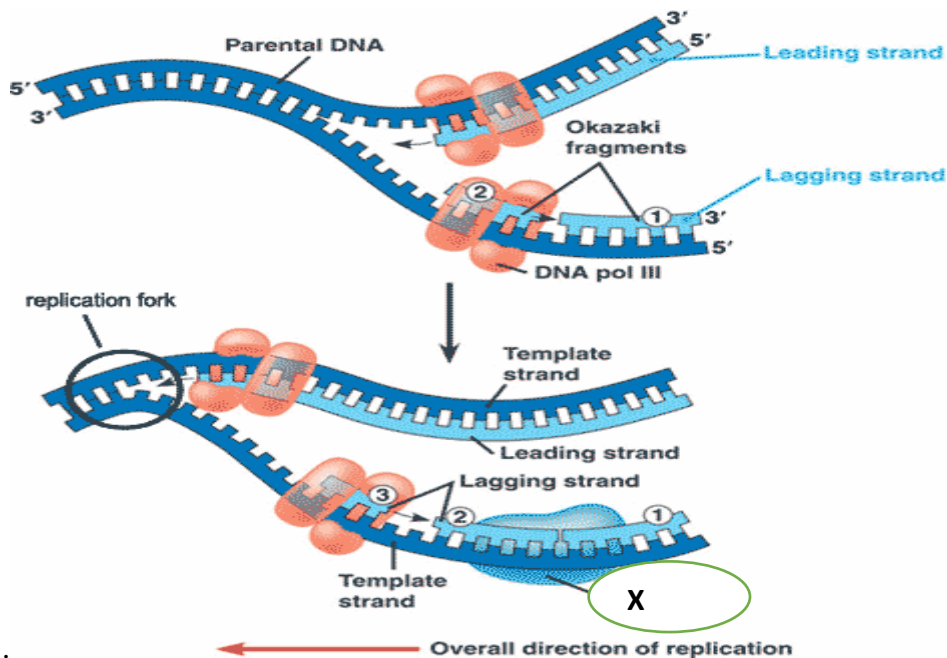
RISHIKUL SANATAN COLLEGE
Y13 BIOLOGY - 2021
TERM 1: COVID 19 EXTENDED HOLIDAY TASKSHEET 1
STRAND 1

Day 1

1. Define the term cistron.
2. The double helix of the complete DNA molecule resembles a spiral staircase structure.
Explain two of the most important properties of DNA molecule.

Day 2

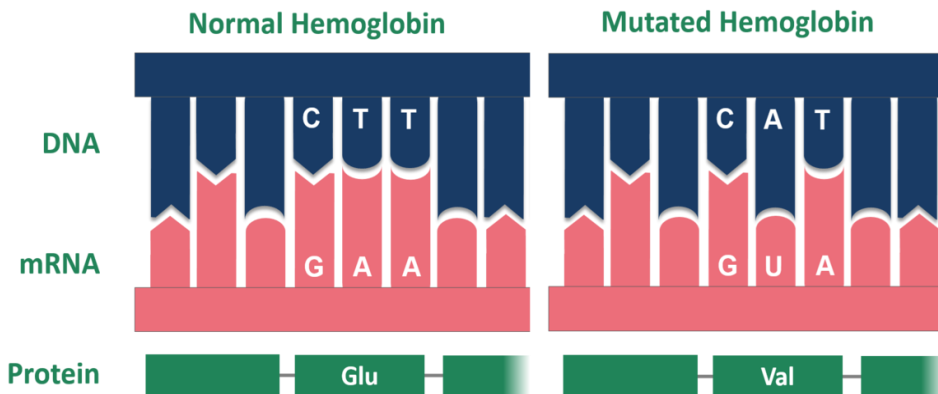
Study the diagram of replication to answer the question given below.



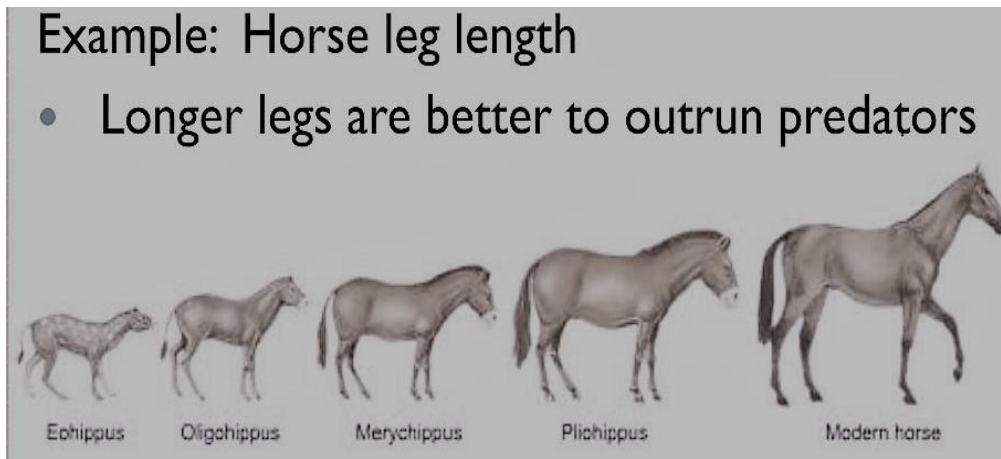
- (i) Name enzyme X and briefly state its role.
- (ii) Why is the process of DNA replication known as semi conservative.

Day 3

1. Explain the type of mutation that has occurred to the haemoglobin gene.



2. Study the illustration below and answer the question as follows.



Explain the type of natural selection shown above.

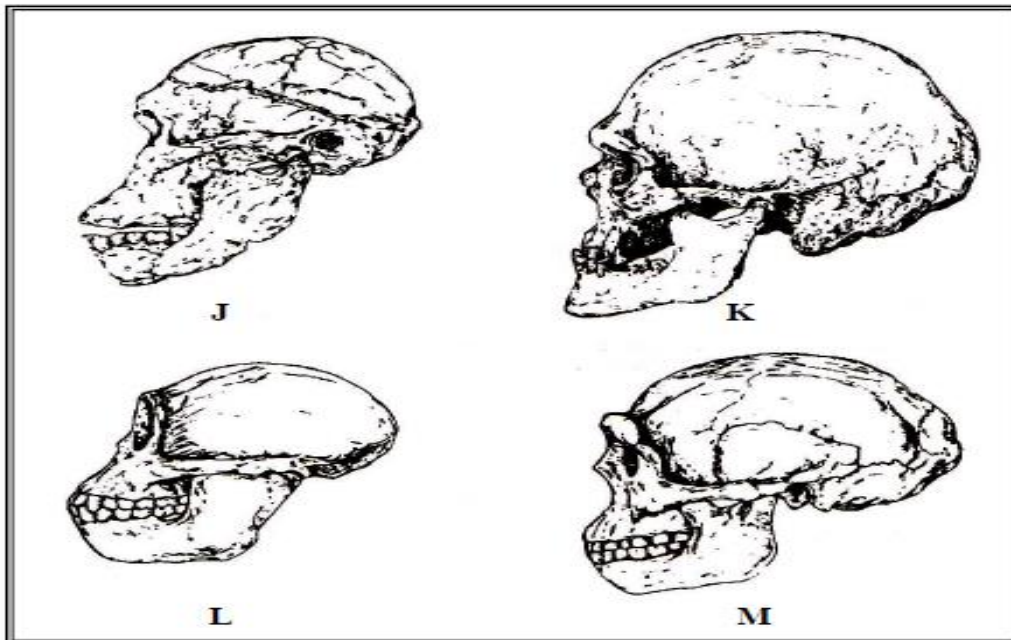
Day 4

Sensitivity to low concentrations of the bitter chemical PTC (phenyl thiocarbamide) in humans is determined by a single autosomal gene. The gene has two alleles: T for tasters and t for non-tasters.

In a large population, 64% were found to be tasters. Calculate the frequency of dominant allele (T).

Day 5

Study the diagrams given below to answer the questions.



- (i) Write the order of skulls from the most primitive to the most advanced.
- (ii) Most primates are arboreal. State the term arboreal.

THE END