BIOLOGY

THIRUVANANTHAPURAM EDUCATIONAL DISTRICT



Standard X

6. The Paths Traversed by Life

1.

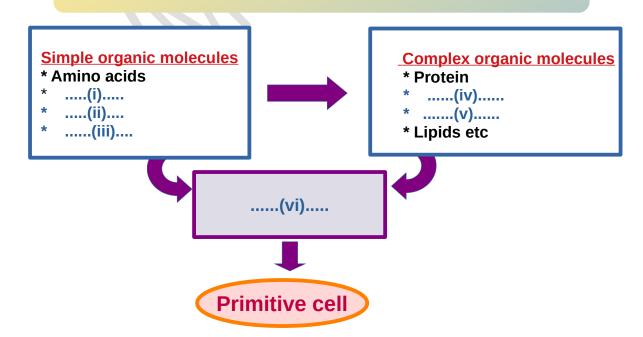
Life is originated in the primitive earth as

A result of chemical evolution that took place in the oceans.

Analyse the statement and answer the following questions.

- a. What is chemical evolution?
- **b.** Who are the proponents of this theory?
- c. Which are the gases present in the atmosphere of primitive earth?
- **d.** Name the source of energy that led to the chemical reaction of these gases.
- e. Complete the following flow chart showing the steps of chemical evolution.

Condensation of water vapour present in the atmosphere And the resulting incessant rain led to the formation of oceans.



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2. "Finches were one among the organisms observed and closely studied by Darwin in the Galapagos Islands."

Analyse the illustration showing the different types of finches and answer the following questions.



- **a.** Which peculiarity of the finches did he consider for his studies?
- **b.** How did the variation occur and what was the result of the accumulation of these variations through generations?
- **c.** Whose ideas were also incorporated by Darwin to formulate the **Theory of Natural selection**?
- **d.** Give the name of the text book in which he published his theory?

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3. Complete the flow chart based on the principles of Darwin's Natural selection theory.

