# **NEW STANDARD ACADEMY**

### SEMRI KOTHI SUPER MARKET, RAEBARELI

### CLASS 11(BIOLOGY) DPP (Academy)

- 1. Who give the term enzyme and firstly crystallize an enzyme.
- 2. How do enzymes increase the rate of a chemical reaction? what factor affect the reaction rate?
- 3. Why enzymes are called biocatalysts
- 4. What is Holoenzyme
- 5. Define (i) Apo enzyme (ii) Co-facter
- 6. How many majer classes of enzyme give the name
- 7. What is feedback inhibition
- 8. Define turn over number with example
- 9. What is isoenzyme give the example
- 10. What is combative inhilution give the example
- 11. What is noncompetitive inhibition give the example
- 12. What is oxidoreductase. give the example
- 13. What is difference between DNA and RNA.
- 14. What is active site of enzyme explain it
- 15. Give the difference between Nucleoside and nucleotide.
- 16. What is km value give the importance?
- 17. What is phosphodiester bond in DNA?
- 18. Why enzyme are called biocatalyst?
- 19. What is activation energy of chemical reation in elation ot enzyme
- 20. What is zwitter ion explain it.

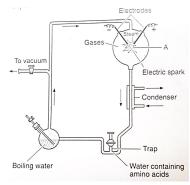
# **NEW STANDARD ACADEMY**

### SEMRI KOTHI SUPER MARKET, RAEBARELI

#### **CLASS 12 (BIOLOGY) DPP (Academy)**

- Are the thorn of Bougainvillea and tendril of cucurbita homologous or analogous? What type of evolution has brought such similarity in them?
- 2. State the significance of biochemical similarities among diverse organisms in evolution
- 3. Write the basic of origin of variations in organisms as described by Hugo de vries.
- 4. State two postulates of oparin and Haldane's theory with reference to the origin of life.
- 5. What is 'fitness of an individual' according to Darwin?
- 6. Mention the contribution of S.L Miller's experiments to origin of life
- 7. Convergent evolution leads to analogous structures. Explain with with the help of an example.
- 8. Divergent evolution leads to homologous structures. Explain with the help of an example.
- 9. List the two main propositions of oparin and Haldane.
- 10. How do palaeontological evidences support evolution of organisms on earth?
- 11. Explain adaptive radiation with the help of suitable example.
- 12. Wings of birds and wings of butterflies contribute to locomotion. Explain the type of evolution such organs are a result of.
- 13. Select two pairs from the following which exhibit divergent evolution. Give reasons for your answer.
  - i) Forelimbs of cheetah and mammals
  - ii) Flippers of dolphins and penguins.
  - iii) Wings of butterflies and birds.
  - iv) Forelimbs of whales and mammals.
- 14. Darwin observed a variety of beaks in small black birds inhabiting Galapagos Islands. Explain what conclusion did he draw and how?

- 15. Explain adaptive radiation and convergent evolution by taking example of some of Australian marsupials and Australian placental mammals.
- 16. State the theory of biogenesis. How does miller's experiment support this theory?
- 17. Given below is a diagrammatic representation of the experimental setup used by S.L Miller for his experiment.



- i) Write the names of different gases contained and the conditions set for the reaction in the flask A.
- ii) State the type of organic molecule he collected in the water at B
- iii) Write the conclusion he arrived at.
- 18. How did industrialization play a role in natural selection of light and dark coloured moth in England?
- 19. Natural selection operates when nature selects for fitness. Explain
- 20. How does hardy- weinberg equation explain genetic equilibrium?