

51. Formation of more complex structure from a simpler structure lead to a simpler structure from a complex structure is an example of [NCERT XI, Pg. No. 153]  
(1) Anabolism (2) Catabolism  
(3) Metabolism (4) All of these
52. The most important form of energy currency in living systems is the bond energy in a chemical called [NCERT XI, Pg. No. 153]  
(1) Adenosine diphosphate (ADP)  
(2) Adenosine diphosphate (ADP)  
(3) Guanosine triphosphate (GTP)  
(4) All of these
53. Which of the following statements is not correct for living state? [NCERT XI, Pg. No. 153]  
(1) As living organisms work continuously, they cannot afford to reach equilibrium  
(2) Living process is a constant effort to maintain equilibrium  
(3) Metabolism provides a mechanism for the production of energy  
(4) Living state and metabolism are synonymous, without metabolism there cannot be a living state
54. The sugar found in polynucleotides is either ribose or \_\_\_\_\_ [NCERT XI, Pg. No. 149]  
(1) Deoxyribose  
(2) 2' Deoxyribose  
(3) 2' Ribose  
(4) None of the above
55. An  $\alpha$  - helix is the example of which type of protein structure [NCERT XI, Pg. No. 150]  
(1) Primary (2) Secondary  
(3) Tertiary (4) Quaternary
56. The 2 strands of polynucleotides are [NCERT XI, Pg. No. 151]  
(1) Parallel (2) Diagonal  
(3) Anti - parallel (4) Spiral
57. The backbone of DNA is formed by \_\_\_\_\_ chain [NCERT XI, Pg. No. 151]  
(1) P - S - P (2) S - P - S  
(3) S - P - P (4) S - S - P
58. One full turn of the DNA helical strand would involve \_\_\_\_\_ [NCERT XI, Pg. No. 152]  
(1) 8 base pairs (10 steps)  
(2) 10 base pairs (10 steps)  
(3) 10 base pairs (8 steps)  
(4) none of the above
59. Triglycerides are fatty acid esters of glycerol, which are formed by the esterification of \_\_\_\_\_ molecule(s) of fatty acids with \_\_\_\_\_ molecule(s) of glycerol. [NCERT XI, Pg. No. 144]  
(1) One, two (2) One, three  
(3) Three, one (4) Two, one
60. At each step of ascent of DNA helical structure, the stand turns \_\_\_\_\_ degrees [NCERT XI, Pg. No. 152]  
(1) 38 (2) 3.8  
(3) 36 (4) 3.6