NEET ANSWER KEY & SOLUTIONS

SUBJECT :- CHEMISTRY

CLASS :- 12th **PAPER CODE :- CWT-11**

CHAPTER :- BIOMOLECULES

ANSWER KEY

1.	(C)	**2.**	(B)	**3.**	(A)	**4.**	(B)	**5.**	(B)	**6.**	(D)	**7.**	(A)
8.	(A)	**9.**	(D)	**10.**	(D)	**11.**	(C)	**12.**	(A)	**13.**	(A)	**14.**	(B)
15.	(A)	**16.**	(C)	**17.**	(D)	**18.**	(B)	**19.**	(C)	**20.**	(A)	**21.**	(A)
22.	(B)	**23.**	(A)	**24.**	(B)	**25.**	(D)	**26.**	(A)	**27.**	(C)	**28.**	(B)
29.	(B)	**30.**	(B)	**31.**	(D)	**32.**	(C)	**33.**	(B)	**34.**	(A)	**35.**	(D)
36.	(B)	**37.**	(B)	**38.**	(C)	**39.**	(C)	**40.**	(D)	**41.**	(A)	**42.**	(D)
43.	(A)	**44.**	(D)	**45.**	(D)	**46.**	(A)	**47.**	(D)	**48.**	(A)	**49.**	(B)
50.	(B)												

SOLUTIONS

SECTION-A

1. (C)

Sol. Peptide bond $\left(\begin{array}{c} -N-C- \\ | \quad \| \\ H \quad O \end{array}\right)$ is characteristic of proteins.

2. (B)

Sol. The process of formation of RNA from DNA is called transcription.

3. (A)

Sol. Amylase is an enzyme which hydrolyses starch

4. (B)

Sol. Secondary structure of protein.

5. (B)

Sol. Myoglobin & Haemoglobin

6. (D)

Sol. In DNA double helical structure adenine is paired with thymine & cytosine is paired with guanine.

7. (A)

Sol. Ptyalin of saliva acts in slightly acidic medium because chemical pH value is slightly acidic in mouth.

8. (A)

Sol. Vitamin C

9. (D)

Sol. Vitamin B_{12}

10. (D)

Sol. 1. Polysaccharides are amorphous, insoluble in water and tasteless.

2. Raffinose on hydrolysis gives glucose, fructose and galactose

3. Monosaccharides cannot be hydrolysed to simpler compounds

11. (C)

Sol. Tollen's & fehling's solution both are used for testing of glucose

12. (A)

Sol. Saccharic acid

13. (A)

Sol. Due to different spatial arrangement of (–H & –OH) group at C–1 carbon of glucose form anomer.

14. (B)

Sol. Glucose occurs in form of furanose which is five membered ring.

15. (A)

Sol. Lactose

16. (C)

Sol. Starch may be called amylum. Water solution of starch give blue colour with iodine solution.

17. (D)

Sol. Starch is hydrolysed by enzyme amylase present in saliva.

18. (B)

Sol. Human stomach does not contain cellulase enzyme while stomach of cattle, sheep contains this enzyme

19. (C)

Sol. Amino acids are classified as α, β, γ and δ amino acids. α -amino acids are obtained on hydrolysis of proteins. They are generally represented by three letter symbol.

20. (A)

Sol. α –amino acids are optically active except glycine

21. (A)

Sol. Zwitter ion consist of equal positive & negative charge.

22. (B)
Sol. pH of 5.5 to 6.3: neutral amino acid.

23. (A)
Sol. In acidic condition more protonation will occur while more deprotonation will occur in alkaline condition

24. (B)
Sol. Shorter peptides are known as oligopeptides whi le longer peptides are known as polypeptides.

25. (D)
Sol. In amino acid nomenclature triple letter method is used in which Gly, Ala & Phe are used for glycine, alanine, phenyl alanine respectively.

26. (A)
Sol. β sheet secondary structure is made up of intermolecular H–bond.

27. (C)
Sol. haemoglobin is globular protein which carry oxygen in our body.

28. (B)
Sol. Prosthetic group are essential for enzyme reaction so they are already attached before the reaction

29. (B)
Sol. In conjugated proteins non-protein component is essential for their functionality & known as prosthetic group.

30. (B)
Sol. DNA is present in nucleus

31. (D)
Sol. Complete hydrolysis of DNA or RNA yields ribose in RNA, deoxyribose in DNA, heterocyclic nitrogenous purines base and heterocyclic nitrogenous pyrimidines.

32. (C)
Sol. DNA helices can be rotated in both direction

33. (B)
Sol. messenger RNA (m–RNA)

34. (A)
Sol. Proteins

35. (D)
Sol. Glycolipid does not contain nitrogen

SECTION-B

36. (B)
Sol. Non-steroids peptide hormone.

37. (B)
Sol. Insulin decrease glucose concentration in blood.

38. (C)
Sol. Thyroid

39. (C)
Sol. Deficiency of riboflavin causes dark red tongue (glossitis) and fissuring at corners of mouth and lips.

40. (D)
Sol. Vitamin K is phylloquinone, soluble in oils and fats and its deficiency lengthens the blood clotting.

41. (A)
Sol. Thyroid gland

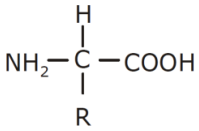
42. (D)
Sol. Hydrolysis of raffinose gives glucose, fructose and galactose.

43. (A)
Sol. Thyroxine is 3,5,3', 5'-tetra iodothyronine. It is secreted by follicular cells of thyroid glands.

44. (D)
Sol. During denaturation secondary and tertiary structures of protein is destroyed but primary structures remains intact.

45. (D)
Sol. Beri-Beri

46. (A)
Sol. Sucrose

47. (D)
Sol. 

48. (A)
Sol. Sugar – Ribose nitrogen base - adenine, guanine, cytosine uracil

49. (B)
Sol. Insulin is a hormone to regulate blood sugar level.

50. (B)
Sol. Biuret test is given by only peptide linkage.