**Question Bank-5**

**Course- B.Sc. Biotechnology 6th Semester, B.Sc. CBZ 6th Semester, B.Sc. Biotechnology (H) 4th Semester & B.Sc. Botany (H) 4th Semester**

**Subject: Molecular Biology; Topic: Post Translational Modifications; Protein Synthesis Inhibitors**

1. **Multiple Choice Questions:**
2. Protein inhibitors work at different stages of translation as initiation, elonkation and termination.  
   a) True  
   b) False
3. Name the inhibitor which blocks translation in both prokaryotes as well as eukaryotes?  
   a) Chlorophenicol  
   b) Tetracycline  
   c) Puromycin  
   d) Streptomycin
4. Which of the following inhibitor block translation in eukaryotes?  
   a) Cyclohexamine  
   b) Tetracycline  
   c) Puromycin  
   d) Streptomycin
5. Name the drug which inhibits the initiation step of translation.  
   a) Cyclohexamine  
   b) Tetracycline  
   c) Ricin  
   d) Streptomycin
6. Aminoglycosides acts on……   
   a) 30s ribosomal subunits  
   b) 40s ribosomal subunits  
   c) 50s ribosomal subunits  
   d) None of the above
7. Which of the following is not a type of post translational modification?  
   a) Proteolysis  
   b) Protein folding  
   c) Glycosylation  
   d) Lipid addition
8. The amino acid is the signal sequence in any polypeptide chain for \_\_\_\_\_\_\_\_\_\_\_\_  
   a) Protein activity  
   b) Glycosylation site  
   c) Proteolytic site  
   d) Site for lipid addition
9. Glycosylation is the addition of \_\_\_\_\_\_\_\_\_\_\_ to the protein.  
   a) Carbohydrate  
   b) Lipid  
   c) Fat  
   d) Minerals
10. Prenylation adds prenyl groups to the \_\_\_\_\_\_\_\_\_\_\_ amino acid residues.  
    a) Methionine  
    b) Cystine  
    c) Threonine  
    d) Arginine
11. What is a 'proteotypic' peptide?
12. A post-translationally modified peptide
13. A stable isotope-containing peptide
14. A peptide which is unique to a specific protein
15. A peptide which is typical of all other peptides
16. **Short Questions**
17. Name the types of post translational modifications.
18. Comment on ubiquitination.
19. Comment on trimming of proteins with suitable example.
20. What are inhibitors of protein synthesis?
21. Differentiate between the action mechanism of chloramphenicol and tetracycline.
22. Discuss mechanism of inhibition of protein synthesis by Diphtheria toxin.
23. **Long Questions**
24. What do you mean by post translational modification? Discuss its significance.
25. Discuss the types of covalent attachments as post translational modification.
26. Discuss macrolides and its mechanism of inhibition of protein synthesis.