

QUIZ 4 BSB3583

1. Rational design is a way to introduce desired properties into a protein of interest. Describe **TWO (2)** reasons to make specific DNA alterations in the rational design.

(2 Marks)

2. Protein structure is really important for one of the approach of protein engineering. It was reported that in the absence of structure, a structural model of the target protein can be built from the three-dimensional structure of a related protein sharing high sequence homology with the target protein using homology modelling programs.

(a) Identify the most suitable protein engineering approach with above description.

(1 Mark)

(b) For protein engineering approach in (a) target structure or ensemble of structures must be known beforehand. Discuss in details the reason why.

(6 Marks)