

QUIZ 1 BSB3583

1. Describe **TWO (2)** general attributes of homologous and heterologous enzymes production.

(4 Marks)

2. Discuss the limitation of using *Escherichia coli* and *Pichia pastoris* as a heterologous expression system for enzyme production from eukaryotic cell.

(7 Marks)

3. A researcher from one research institute has decided to produce an enzyme in a heterologous production system that inherits an efficient secretory system.
 - (a) Using the information given above, identify and explain the type of heterologous production involved and the advantages of using this type of production.

(8 Marks)

 - (b) Predict what would happen if the researcher decided to use heterologous production system with absent of secretory system and discuss **TWO (2)** disadvantages of using this type of production.

(5 Marks)

 - (c) Give **ONE (1)** example of heterologous production system that inherits an efficient secretory system and the special attributes of that system.

(7 Marks)

END OF QUESTION