

BOWEN UNIVERSITY, IWO
DEPARTMENT OF BIOLOGICAL SCIENCES

2010/2011 SECOND SEMESTER EXAMINATION

MCB 410: INDUSTRIAL MICROBIOLOGY
PRACTICAL EXAMINATION

Attempt all questions.

Time: 1hr 30 mins.

1. Specimens X and Y are clarified extracts from homogenized food samples. Determine the protein content of each extract using reagents PQ and FO provided. State your technique clearly. Which food extract would be advisable to incorporate as a food protein supplement?
2. You are provided with multiple tubes of MacConkey broth inoculated with 10 ml, 1ml and 0.1ml of a water sample to be used in a beer processing plant.
 - (i) Record your observations.
 - (ii) Using the MPN table supplied, estimate the number of coliform bacteria contained in the water sample.
 - (iii) Based on your results, as the quality control officer, what recommendation(s) would you give the production manager?