



First Practical Examination, 4th Stage Students, 2nd Semester 2021-2022

Maximum Marks: 100

Q1) Answer the following branches:

- A) Why should be careful with the Phenol, Acrylamide, and Ethidium bromide? (15 Marks)
B) Count the five piston positions of the micropipette? (10 Marks)

Q2) Answer the following branches:

- A) Count the 3 stage process of DNA delivery to host cell? (12 Marks)
B) Draw the diagram of principle steps in the transformation? (13 Marks)

Q3) What are the purpose use of extraction (lysis) buffer, SDS and Ethanol in the DNA extraction methods? (25 Marks)

Q4) Answer the following branches:

- A) How many grams of EDTA would you need to prepare 20mL of a (0.5 M) solution of it? For your information; Molecular weight of EDTA is 372.24 g/mol. (13 Marks)
B) Calculate how many mL of the (1.0 M) stock solution of Tris-HCl are needed to prepare 50 mL of the (50 mM) solution of it. (12 Marks)

ALL THE BEST

Mr. Hemin Hussein Ali
Practical Lecturer
Department of Animal Resources