

**B.Sc. in Export Agriculture
Faculty of Animal Science & Export Agriculture
Uva Wellassa University**



**End Semester Examination – December 2009 – January 2010
Year III Semester I**

Basic Genetics (EAG 311- 2)

Instructions:

Answer all questions

No. of questions : Three (03)
No. of pages : One (01)
Time : One hour (1 hour)
Total marks allocated : 60%

Part II

1. Answer the followings;
 - 1.1. What is a quantitative trait?
 - 1.2. How does a quantitative trait behave in a population?
 - 1.3. How does Natural Selection apply on quantitative traits?

(20 marks)

2. Discuss;
 - 2.1. What is polyploidy?
 - 2.2. Contrast Autopolyploidy and Allopolyploidy
 - 2.3. Describe formation of Autotetraploids and Amphidiploids
 - 2.4. What is the use of Autotetraploids and Amphidiploids in Agriculture?

(25 marks)

3. Write short notes on;
 - 3.1. Processing of mRNA transcript in eukaryotic cells
 - 3.2. Multigene families
 - 3.3. Degeneracy of genetic codons

(15 marks)