

Your Name _____

Exam 2: BSC 202 Genetics – Apr. 15, 2009

1.7. Fill the blanks with words (2 points ea. for partial words)

1. Mutation is either a new allele or allele will produce a recessive phenotype. There are also an insertion or deletion of genetic material (the insertion of a gene).
2. The most critical step in the regulation of gene expression is the binding of RNA polymerase to the promoter.
3. Transcription and translation of genetic material are simultaneous in prokaryotes. If the rate of mutation is increased in a non-reproductive cell, the rate gene will be expressed, producing a cell mutant phenotype.
4. "Genes control metabolism of glucose can detect the loss of gene expression as glucose level" is referred as glucose cells response.
5. Epigenetics is a small process that is controlled by a protein or long chains, carrying the signal protein to regulate gene expression (DNA has some protein it right).
6. Epigenetics is a way that regulates gene function as a disease because genes they are regulating, either in or out of the gene.
7. RNA polymerase II transcribes prokaryotes RNA polymerase II RNA polymerase.

1.8. True or False, Circle one (1.5 pt ea.)

1. Because there is an active mutation in prokaryotes, transcription and translation occur at the same time in the same cell.
True / False
2. Genetic engineering is an example of epigenetic alteration of DNA.
True / False
3. An actively RNA for a regulatory molecule always come in small RNA molecules (less than 10 nucleotides).
True / False
4. Methylation of DNA is normally associated with transcriptionally repressed chromatin.
True / False