

Grading Exam 2: Multiple Choice and Essays 1 & 3

Multiple Choice:

1. F
2. A
3. D
4. C
5. B

Essay 1:

Transcription – 7 pts

- _ occurs in the nucleus of the cell
- _ DNA has genetic information/code
- _ a complementary copy, mRNA, is made

Translation – 7 pts

- _ mRNA travels to ribosome
- _ ribosome is site of protein synthesis
- _ tRNA brings correct amino acids to ribosome and attaches them with codon-anticodon pairing
- _ the string of amino acids is a protein

Example – 6 pts

- _ ACG (in DNA) transcribes to UGC (in mRNA)
- _ the amino acid called for is cysteine
- _ a valid mutation is in the third base (for example, UGU in the mRNA or ACA in the DNA)

Essay 3:

15 pts – f_i estimate

- _ have a number for f_i
- _ have a consistent reasoning for your number
- _ when describing factors important in determining your f_i , describe HOW they affect your estimate
- _ when describing factors important in determining your f_i , describe WHY they are important
- _ must include likelihood of developing monomers & polymers!

5 pts – Most difficult step for developing life at the level of a virus

- _ many people forgot to answer this part of the question
- _ as long as you had an answer that made any sense, you were given credit