102-2 遺傳學 隨堂測驗 06　姓名 _____ 學號 _____

1. Please write down the complete word of the abbreviation “DNA”. (20 points)

2. Please explain the meaning of two words ‘antiparallel’ and ‘complementary’ for the secondary structure of DNA (40 points).

3. Please draw a ‘transcription unit’ and its corresponding translation regions on a genomic DNA sequence. You need to label the following terms on this diagram: (1) promoter region; (2) protein-coding region; (3) terminator; (4) start codon; (5) RNA transcription region; (6) introns & exons; (7) directions of RNA transcribing; (8) 5’UTR.　You are allowed to add more annotations to make your answer clearly (40 points).