

IV. 次の英文を読んで以下の設問に答えなさい。

The rediscovery of Mendel's laws of heredity in the opening weeks of the 20th century sparked a scientific quest to understand (a) the nature and content of genetic information that has propelled biology (A) the last hundred years. The scientific progress made falls naturally (B) four main phases, corresponding roughly (C) the four quarters of the century. The first established the cellular basis of heredity: the chromosomes. The second defined the molecular basis of heredity: the DNA double helix. (b) The third unlocked the informational basis of heredity, with the discovery of the biological mechanism by which cells read the information contained in genes and with the invention of the recombinant DNA technologies of cloning and sequencing by which scientists can do the same. The last quarter of a century has been marked by a relentless drive to decipher first genes and then entire genomes, spawning the field of genomics.

(出典: the human genome 特集号, *Nature*, 2001.)

注) heredity: 遺伝、relentless: 執拗な・徹底的な、decipher: 解読する、spawn: 生む、genomics: ゲノミクス・ゲノム科学

問1. 下線部(a)をよく説明できる意味の漢字を2文字で示しなさい。(3点)

問2. 本文中の(A)~(C)に入る最も適当な前置詞を書きなさい。(各3点)

問3. 下線部(b)を和訳しなさい。(8点)