Questions for an exam

Science, Biology

Questions for an Exam Answer The chromosome mutations result when the genetic information isaltered during the critical phases of fertilization that can be fatal or have negative influences on the resulting organism. Chromosome mutations can be caused by deletion of gene that will cause some genes to be absent in the resulting organism, by duplication of gene that will cause some genes to be duplicated and in turn the resulting organism will have some extra genetic information, by genetic inversion in which genetic order is altered and the new sequence could either bring advantages to the resulting organism or it may not be able to produce a viable organism or by the translocation of genes. The less dangerous amongst all these kinds of mutations is duplication of gene as it does not impact the actual genetic sequence. Amongst various point mutations, the least disastrous in my consideration is silent mutation as it causes a change in DNA sequence but this change does not impact on the type of protein that is to be produced.

Answer#2

Carbon dioxide is formed as a by-product during Krebs cycle when 6-Carbon molecule renders electrons to NAD+ and converts it into NADH. This Carbon dioxide is then carried via blood to the lungs from where it is exhaled. On the other hand, oxygen is inhaled during respiration as it is consumed during the electron chain as it binds with the free H+ ions to form water. The alternative way of respiration is anaerobic respiration. The anaerobic respiration is not a viable option for organisms to respire as it restricts the generation of FAD+ and NAD+ and may result in halting the whole process of respiration. However, for a limited time the pyruvate may accept electrons

from NADH and thus form lactic acid but respiration can’t be continued for a long time in organisms (Starr 85).

Works Cited

Starr, Cecie. et al. Volume 1 - Cell Biology and Genetics. Cengage Learning, 2012. Print.