Ch.5/Doc.4: Chromosomal Mutation
Ch.5/Doc.5: Prenatal Diagnosis

NOTE: A part of ch.5/doc.4 is previously explained in ch.1/doc.2, so revise the related notes.

1) Draw a concept map concerning the different kinds of mutation & including in it examples on the different kinds of chromosomal mutation.

2) Define each of the following types of chromosomal structural mutations: "Deletion", "translocation", "duplication", & "inversion".

3) Pro.1 Compare the karyotypes of doc.a & c/ P.98 of your textbook.

4) Pro.2

   a. Analyze doc.b/ P. 98 of your textbook.

   b. What can you conclude?

5) Pro.3 Write the chromosomal formula (karyotype) of the syndromes represented in doc.e & doc.f /P. 99 of your textbook.

6) Draw a concept map which lists the different causes for chromosomal gonosomal numerical abnormalities.

7) Pro.4 Based on doc.g/ P.100 of your textbook, illustrate, in a diagram, meiosis & fertilization processes which led to a Klinefelter Syndrome.

8) Draw a table which represents all the possible cases that are at the origin of having offsprings with the following chromosomal mutations: Klinefelter, Monsomy X, & XYY.

9) In the case of Trisomy 21 Translocation, illustrate meiosis taking place in a carrier parent. Then, draw a table showing the results of fertilization between this carrier & a normal parent.

10) Pro.5 Specify the type of mutation observed in doc.h/ P.100 of your textbook. Indicate the percentage of abnormal gametes produced by this individual.

11) Pro.1 After reading document 5 paragraphs on P.101 & 102 of your textbook, identify which one of the three given prenatal diagnosis methods is the best.

12) Pro.2 Specify the genotypes of the family studied in doc.b/ P.102 of your textbook.

13) Pro.3 Indicate the importance of prenatal diagnosis.