

MOD1-SOC102-Human Genetics/ Genetic Screening

1. This is a method of cell division in which the two daughter cells have an equal number of chromosomes to each other and to the parent cell.
 - a. mitosis
 - b. meiosis
 - c. pinocytosis
 - d. cotyledosis

2. Cell division, wherein , each daughter nucleus receives half the number of chromosomes typical of somatic cells, is referred to as:
 - a. Mitosis
 - b. Pinocytosis
 - c. Meiosis
 - d. haploidosis

3. When 2 sperm fertilize one egg, this results in:
 - a. triploidy
 - b. tetraploidy google definition says two times the number of chromosomes
 - c. Tetralogy of Fallot
 - d. aneuploidy

4. Which condition occurs when there is a failure of the first cleavage division of the zygote resulting in cells that contain 92 chromosomes?
 - a. aneuploidy
 - b. triploidy
 - c. tetraploidy
 - d. monosomy 45x

5. Trisomy 13 is characterized by:
 - a. mental retardation
 - b. congenital heart defects
 - c. cleft palate and lip
 - d. all of the above

6. Diploid is defined as:
 - a. having two sets of chromosomes
 - b. a molecule having separated charges of equal and opposite signals
 - c. having half the number of chromosomes found in the somatic cells of an organism
 - d. a result of meiosis

7. The most common type of Trisomy is:
- Trisomy 21
 - Trisomy 13
 - Trisomy 22
8. Aneuploidy is the addition or loss of one chromosome
- true
 - false
9. Structural chromosomal abnormalities can include:
- deletions
 - translocations
 - isochromosomes
 - all of the above
10. The loss of chromatin from a chromosome is called:
- microdeletion
 - deletion
 - translocation
 - a and b only
11. Autosomal dominant inheritance describes diseases that:
- affect individuals when they receive only one defective copy of the gene from either parent
 - affect individuals when they receive two defective copies of the gene, one from each parent
 - affect males only
 - affect females only
12. All these autosomal dominant disorders can be detected by genetic screening, except:
- testicular feminization
 - Huntington's disease
 - Hunter Syndrome
 - BOR Syndrome
13. All below is true of a teratogen, except;
- it is an infectious agent that affects the fetal development
 - a disease that can permanently alter fetal morphology
 - it has a mitochondrial inheritance
 - it has less power to harm the fetus from developmental periods between 9-38 weeks

14. The maximum teratogenic period in fetal development is
- 3-8 wks
 - week 1
 - 2-10 weeks
 - 10-18 wks
15. Which disease can have a teratogenic affect on the fetus?
- rubella
 - herpes
 - HIV
 - All of the above
16. Non-viral infections do not have a teratogenic effect on the fetus.
- true
 - false
17. Nicotine is a category D drug.
- true
 - false
18. Which of these mothers needs counseling for genetic screening?
- a woman with a high risk medical history
 - a woman of advanced maternal age
 - a woman with abnormal lab results
 - all of the above
19. Which is true about chorionic villus sampling?
- it is performed in the first trimester
 - the villi is removed from the placenta with a needle
 - a and b
 - it is only done in the second trimester
20. The mechanisms of amniocentesis include:
- removing chorionic villi from the placenta
 - removing fluid from the uterine cavity
 - puncturing the cord with a needle
 - transfusion of fluid to the amniotic sac
21. Chorionic villi sampling is _____ reliable
- 97-98%
 - 99%
 - 75%

d. there is no data to support this