

# TEST BANK

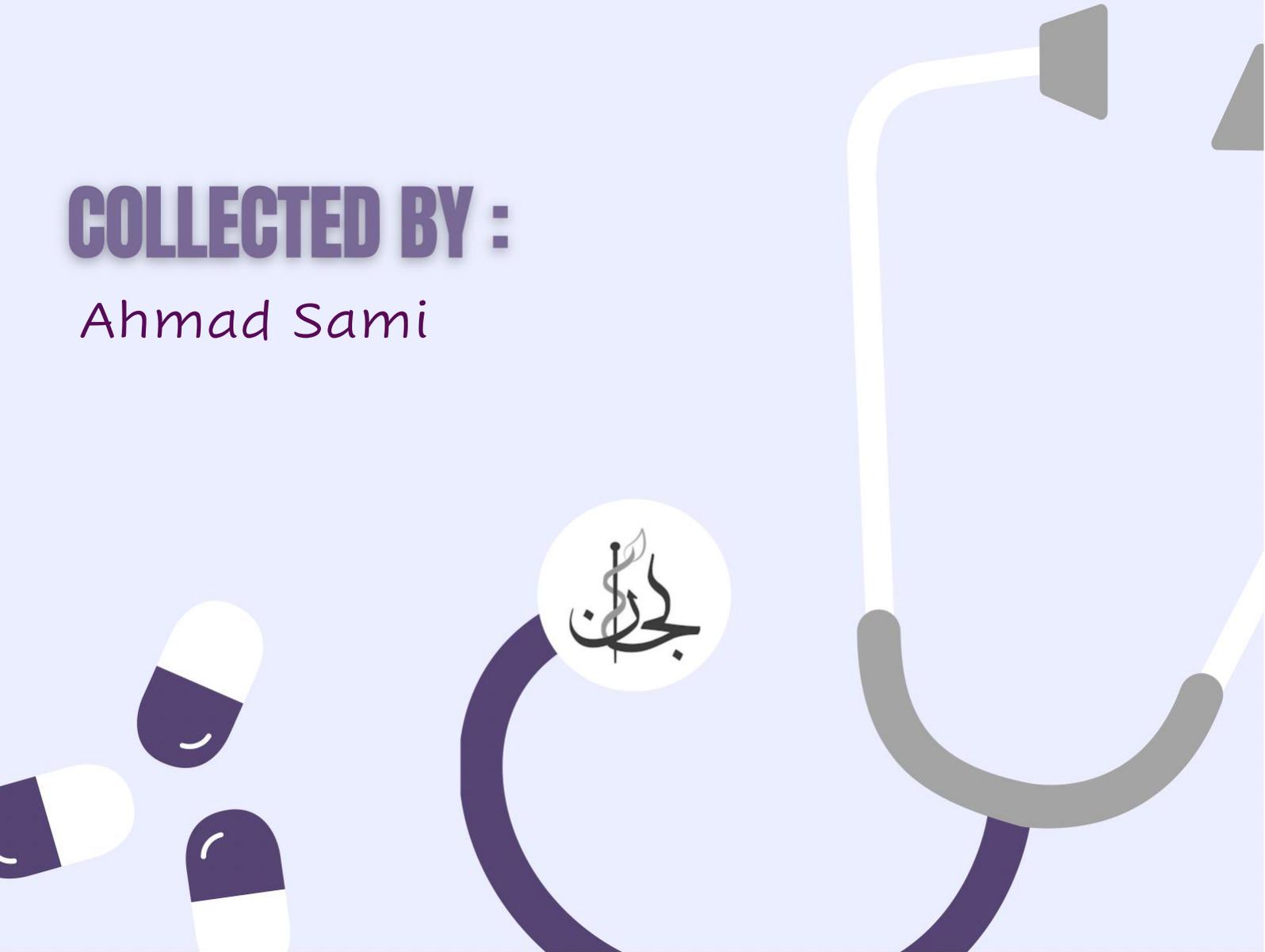
Doctor 2019

## SUBJECT:

Genetics Mid 019

## COLLECTED BY :

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# Genetics MID 019

1) How many Barr bodies in genotype (XX)

Ans:1

For questions 2+3) If the mother is carrier for color blindness, while the father doesn't show the disease... answer questions 2+3:

2) what's the probability to have an affected male?

Ans: 50%

3) what's the probability to have an affected female?

Ans: 0%

4) chromosomal analysis of down syndrome:

Ans: maternal meiosis 1

5) least likely to live?

Ans: 69, xxx

6) number of chromosomes and chromatids at the end of meiosis 1?

Ans: 23 chromosomes 46 chromatids

7) what is the probability that a boy was inherited his Y chromosome from his mother's father?

Ans: 0

8) what is the predicted gender of an individual who has a karyotype of XXY?

Ans: male

9) the correct order of the phases of the cell cycle according to their period is:

Ans: g1-->s-->g2--> pmat

10) longest phase in the cell cycle

Ans: interphase

**11) responsible for recombination**

Ans: chiasma

**12) if a kind of animals have ( $2n = 6$ ), how many possible arrangements it can make?**

Ans:  $2^3 = 8$

**13) a long question talking about well grown fetus + large placenta, and asks about the possible mutation?**

Ans: diandry

**14) if a cell has 8 chromosomes, at the end of meiosis 1 what is the expected no. of chromosomes?**

Ans: 4

**15) which chromosome carries rRNA genes on its p arm?**

Ans: 15

**16) most probable choice of a sperm ?**

Ans: 23,x

**17) if you have a T-lymphocyte and you want to do a G banding for it, what is the correct sequence of the steps?**

Ans: phytohemagglutinin --> colcemid --> hypotonic --> fixative --> trypsin

**18) which of the following mutations will have two chromosomes at least?**

Ans: balanced translocation

**19) what is the mutation in (cri du chat)?**

Ans: deletion in 5p

**20) what is the mutation in CML?**

ANS : t(9,22)

**21) A woman with Robertsonian translocation between chr. 14 and 21 married from a normal man , which of the following will be a LIVE OFFSPRING?**

Ans: one copy of 14, two copies of 21, one Robertsonian chromosome

22) ———state that each homologous chromosome will separate and appear in a different daughter cell, such that each gamete receives one allele for a given trait.,———states that chromosomes are aligned at the metaphase plate independently of each other

Ans: Law of Segregation, Law of Independent Assortment

23) which of the following is correct about G positive (dark )and G negative( light) areas?

Ans: G negative areas have more genes than G positive areas

24)A child with Polydactyly and Cleft lip has?

Ans: trisomy 13

25) which of the following has ovaries?

Ans: XY with deletion in SRY

26) The most common cause of triploidy is:

Ans: Egg Fertilized by 2 sperms

27) \*\*\*a woman with Robertsonian translocation has a karyotype of (46,xx,-14,-21,t(14q,21q) )married from a normal man 46,XY ,which one of the following has the LEAST probability to be a child of them?

A-46 xx

B-47 xx +21

C-46 xy -14 (14q,21q)

D-46 xy -21 (14q,21q)

E-45,XY

Ans :B (We're not very sure)

28) which chromosome the deletion of p arm will not have clinical appearance?

Ans: 15

29) Which of the following is the most probable live individual?

Ans:47 xx+21

Note: Pedigrees aren't collected in this file, as they're hard to remember exactly, but all of them were so easy & straight forward.