

Ans (3) GISH

GISH stands for Genomic In-Situ Hybridization.

Ans (2) ⇒ Termination genetic Code:-
There are 3 types.

(1) UGA

(2) UAA

(3) UAG

(1)

Ans - (4) Use of PCR:-

⇒ (1) PCR stands for Polymerase Chain Reaction.

⇒ It is the amplification process.

(1) * USES:-

(1) PCR is use for to make the copies of DNA from a small part

of DNA.

Ans-5 CO-DOMINANCE

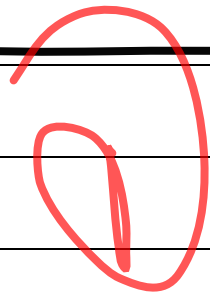
⇒ Co-dominance is the exception of law of dominance or mendel's law.

⇒ It states that single gene contain two or more gene.

⇒ In Co-dominance characters does not mix.

for eg \Rightarrow ABO blood grouping.

Blood group	gene
A	I^A, I^B
B	I^B, I^A
AB	I^A, I^B
O	I^O, I



Ans-①

MENDEL SELECTED PEA
PLANT :-

→ Mendel selected pea plant for his experiment because, ① pea plant is easily cultivated. other plant.

→ Many variations can see in pea plant. closed flower.

③ Main reason is also that Mendel can see the results fast on his experiment. Because Pea plant is grow fastly.

SECTION - B

Ans-⑥

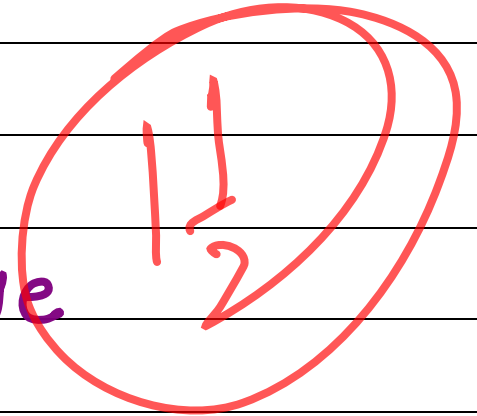
CRIMINAL

SYNDROME:-

* CONTENT:-

Supernormal
poly Y

1. Introduction
2. Sex-linked disease
3. Criminal Syndrome.
 - 3.1 Characters
 - 3.2 Hormones release



* INTRODUCTION

- Criminal Syndrome is a sex-linked disease.
- ⇒ Change in number of chromosome
- ⇒ In Criminal Syndrome there is the change in chromosome number.

⇒ In Criminal Syndrome there are
the addition of Y Chromo
some.

g →

44+XYYY

*

CHARACTERS:-

- ① They are mentally retarded.
- ② They have the short penis &

- Short ~~testis~~.

All syndrome of
Stark except

③ Have High Pitch Volume.

④ They are ~~sterile~~.

super
male
female

* HARMONES RELEASE:

→ ~~FSH~~ Hormone is release more.

→ ~~ANDROGEN~~ is release less.

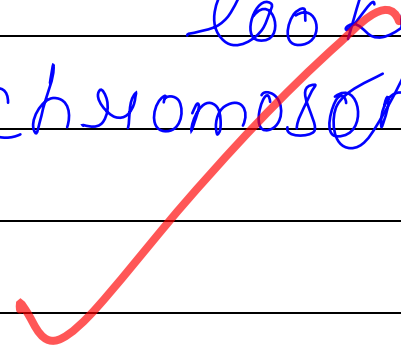
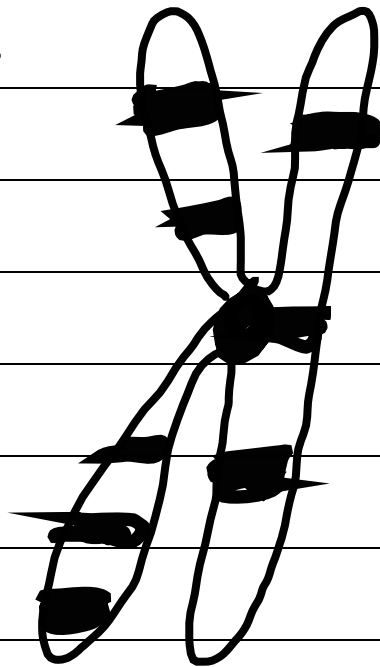
Ans - (7) CYTOGENETIC MAP :-

⇒ Cytogenetic map is the set of chromosomes, where the chromosomes is visualised under high magnification and the stain of chromosomes is seen under the microscope.

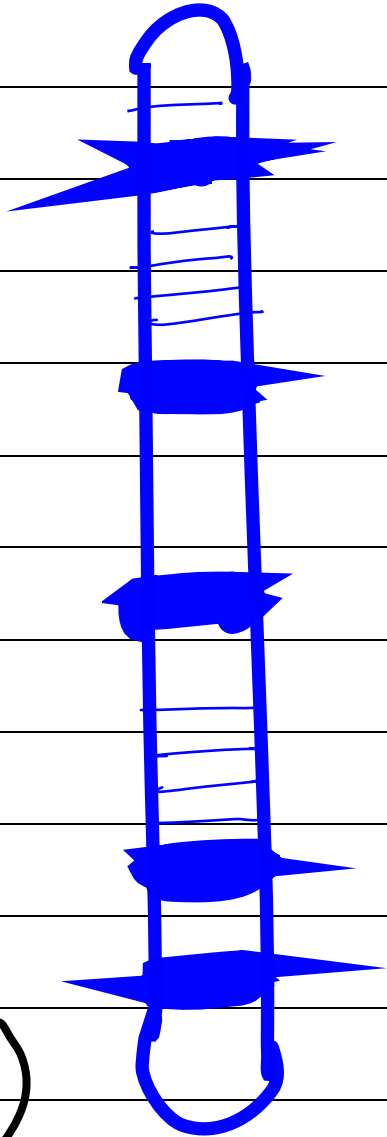
⇒ In this process, chromosome
seen clearly on high magnification.

⇒ Chromosome stain look like
bands on chromosomes.

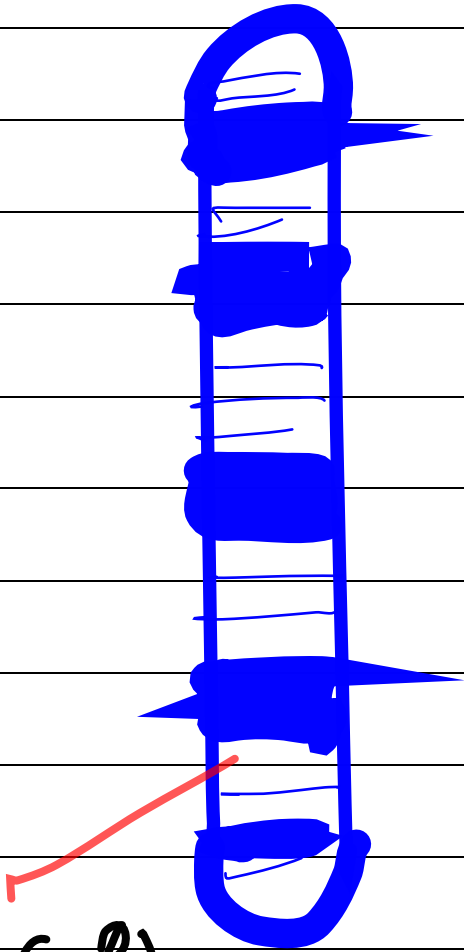
For eg ⇒



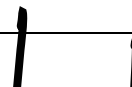
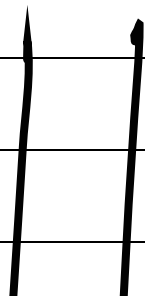
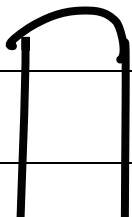
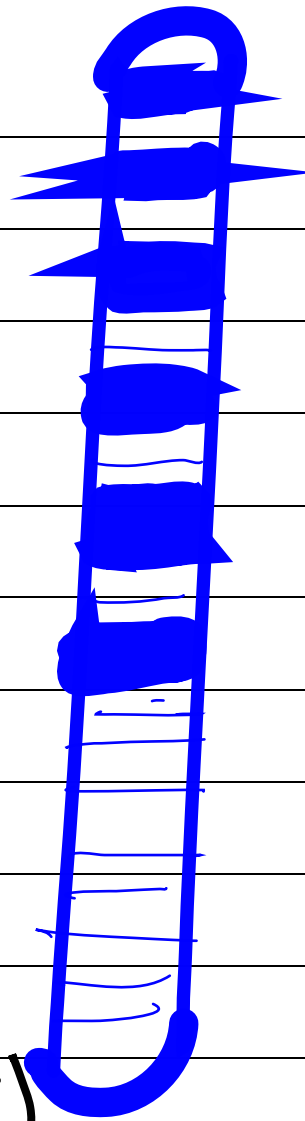
(A)

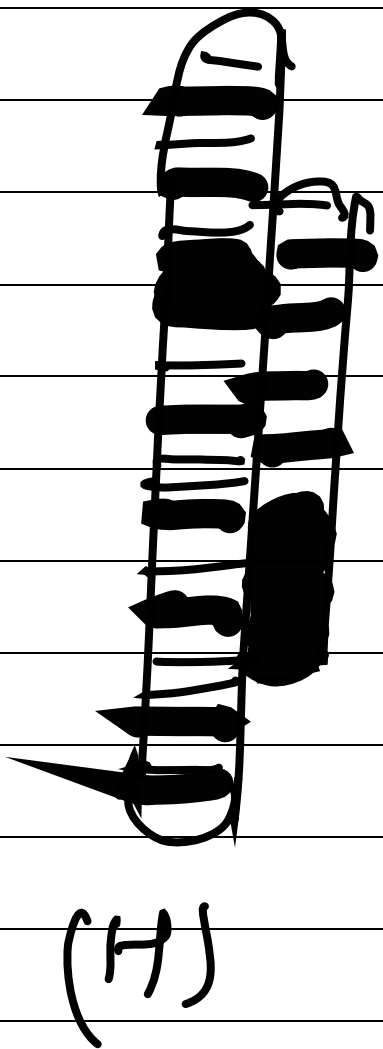
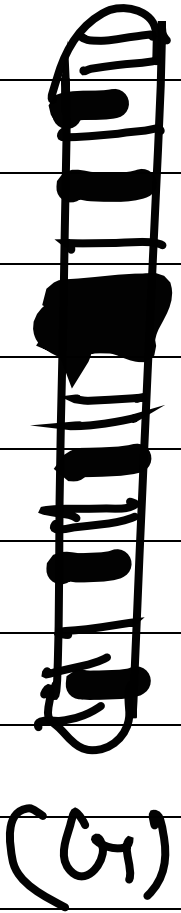
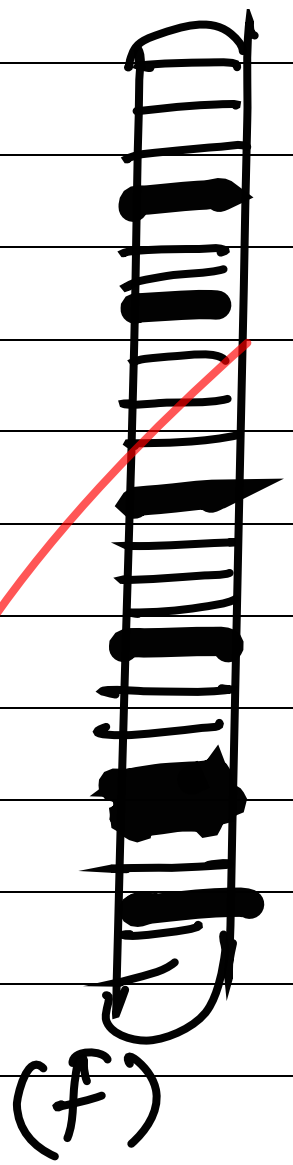
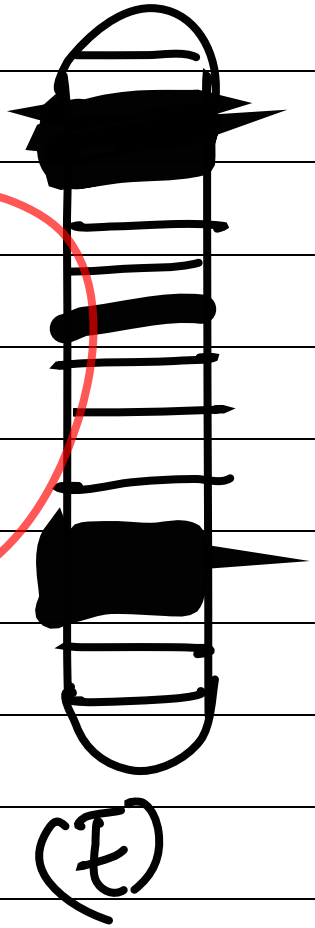
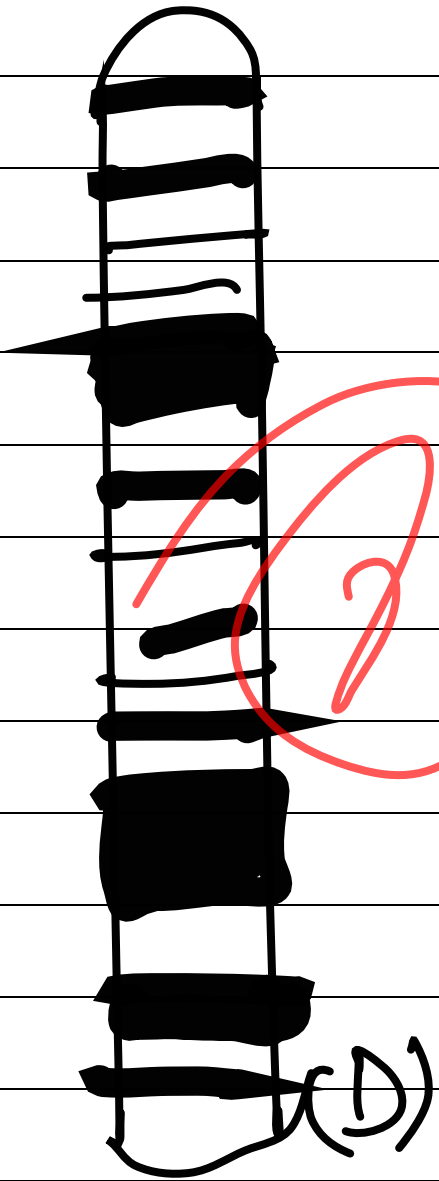


(B)



(C)





STAINS OF CHORO - MOSOMES :-

SECTION - C

Ans- (ii) GENETIC DISORDER :-

CONTENT :-

1. Introduction

2. Types of Genetic Disorder.

2.1 Autosomal Disorder

2.2 Sex-linked Disorder.

3. Autosomal disorder

3.1 Colour Blindness

3.2 Down Syndrome

3.3 Haemophilia

3.4 Patau Syndrome

3.5 Phenylketonuria

4. Sex-linked disease

4.1 Klinefelter's Syndrome

Syndrome
Single gene
or different

Sex
linked
disorders

- 4.2 Super Male ✓
 4.3 Super Female ✓
 4.4 Turner Syndrome ✓

I. INTRODUCTION :-

single gene can transfer, but Syndrome can't transfer

- Genetic disorders are the genetic disease which can transfer from one generation to another.
- Genetic disorder are of two types =

① Autosomal disorder.

② Sex-linked disorder.

(1) Autosomal Disorder :-

→ Autosomal disease is the Autosomal chromosomal disease.

→ In Autosomal disorder there are the abnormality the the autosomal Chromosomes.

→ It may be addition of chromosomes.

=

Or, reduction of chromosomes.

→ It is not related with the sex chromosome.

→ In Autosomal chromosomes there are any alteration in the chromosomes.

* AUTOSOMAL DISORDER :-

(1) Haemophilia :- X linked

→ It is a autosomal disorder.

⇒ Haemophilia was first cure
Queen Victoria. Royal

⇒ Haemophilia mainly occurs in females

⇒ In Haemophilia, Blood is not clotted
 there is no Coagulation of blood
 in injury.

⇒ Human can die if not give any
 medical treatment to Haemophilia
 person, when it is injured.

(2) Colour Blindness :-

⇒ It is a autosomal disease.

⇒ That person who is cured from colour blindness, than can not identify the Green or Red colour.

⇒ Retina is affected in this syndrome.

Causes of Retinitis -

(3) PHENYLKETURONIA:-

⇒ It is a autosomal disease.

⇒ In Phenylketonuria Chromosome

No. 12 is affected.

⇒ Mutation in chromosome No. 12

Affect

⇒ It affect kidney & liver

* SEX-LINKED DISEASE ^{Disorders}

① Klinefelter Syndrome :-

→ It is a sex-linked disease.

→ Mutation in sex chromosomes.

→ In this, have 47 chromosomes.

* CHARACTERS :-

$XXY + AA$

① Short penis & testis

②

webbed-neck

→ turns

③

Mentally retarded

④

High pitch volume

⑤

less hairy on body

3-2

SHORT TIME

Ases - ①

GENETIC ENGINEERING

CONTENT:

- ① Introduction!
- ② Brief explanation of genetic engineering.
- ③ Applications of Genetic Engineering.
4.1 Vaccine

4.3 Medicine

4.3 Lymphocyte

4.4 Somatic-cell.

* Vaccines

⇒ used to make ~~many~~ types of vaccine

⇒ Many antibodies are made with the help of genetic engineering.

⇒ It is very helpful in medical science.

⑨ Medicine :-

⇒ Many types of medicines are

⇒ Genetic engineering ~~not~~ helped in making medicine.

* Lymphocytes :-

~~##~~ Somatic - Cell



⇒ Genetic engineering is very helpful in medical aspects.

1

