भाग-1

3322355

M 1378336 8

नामांकन संख्या

अनुक्रमांक (अंकों में)

अनुक्रमांक (शब्दों में)

परीक्षार्थी का पूरा नाम Jyoti

हस्ताक्षर Jyoti

कक्ष निरीक्षक का नाम Jyoti

परीक्षार्थी द्वारा सम्पूर्ण विवरण भरा गया है।

R

2018-

भाग-2

M.Sc. Internal

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

Ch. Charan Singh University, Meerut

01/5/19

निम्नलिखित विवरण परीक्षार्थी द्वारा स्वयं भरा जाए (To be filled by the Examinee)

परीक्षा का नाम (Name of Exam) M.Sc वर्ष 20 (Year 20.....) 2019 भाग/सेमेस्टर (Part / Semester) IIed sem

विषय (Subject) Genetics प्रश्न-पत्र/पाठ्यक्रम (Paper /Course) Zoology VI पेपर कोड नं. (Paper Code No.) H-2063

परीक्षा का दिन (Day of Examination) Thursday दिनांक (Date) 2 may 2019

प्राप्तांक एवं पूर्णांक परीक्षकों द्वारा भरे जायें

पूर्णांक (Max. Marks)

प्रश्नों की क्रम संख्या	a/I	b/II	c/III	d/IV	e/V	f/VI	g/VII	h/VIII	i/IX	j/X	योग
1	1	1	1	1							4
2											
3	3	2½									5½
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

9½ = 17

22

प्राप्तांक

(शब्दों में)	अंकों में

जाँचकर्ता के हस्ताक्षर एवं तिथि

परीक्षक के हस्ताक्षर एवं तिथि

भाग-3

2018-

R

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आवश्यक निर्देशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

(परीक्षार्थी द्वारा भरा जाए)

परीक्षा का नाम M.Sc भाग/सेमेस्टर IIed sem

विषय Genetics

प्रश्न पत्र Zoology VI दिनांक 2 may 2019

परीक्षार्थी का अनुक्रमांक (Roll Number)

उत्तर-पुस्तिका क्रमांक KM-I-01-

कालेज कोड 018

(परीक्षार्थी की श्रेणी)

- संस्थागत ●
- व्यक्तिगत ○
- बैक पेपर ○
- अंक सुधार ○
- भूतपूर्व ○
- एकल विषय ○

नामांकन संख्या (Enrollment Number) M 1378336 8

पेपर कोड H-2063

परीक्षार्थी का पूरा नाम Jyoti

कक्ष निरीक्षक का नाम

Section - c

Ans-9 Mendalean principals

Summary

(1) Definetion of heridety.

2. Definetion of the genetics.

(3) Heridety chdracteys.

(4) Mendel law.

(1) **Definition of heredity** ⇒ · Heredity is the word Use for those character which are transfer Parents to next off spring this Process is called Heridity characters. transfer

(2) Genetic Characters ⇒ Those characters which are getup to Off spring by the parents is called Genetic characters.

Hereditary Characters ⇒ The word heredity is refer to the Genetic those characters which are coded some the gene through transfer DNA Ex- into gene to DNA and which are transfer into the next generation. By DNA is called Hereditary Characters

(4) Mendel's law =

- **Mendal experiments** => Is a english scientist which done effort to know of the Genetic characters How transfers Percents to next generation.
- The gungalen scientist which is discovered of Genetic characters.
- Therefore the fathers of the genetic IS know mendal

Mendal law

There are have tree law of mendal.

(1) Law of dominence ✓

(2) Low of Assorments ✓

(3) Low of Inclepandant ✓

Important

Experiment = mendal get pea plant for the his experiment

Because pea plant are easyly grow

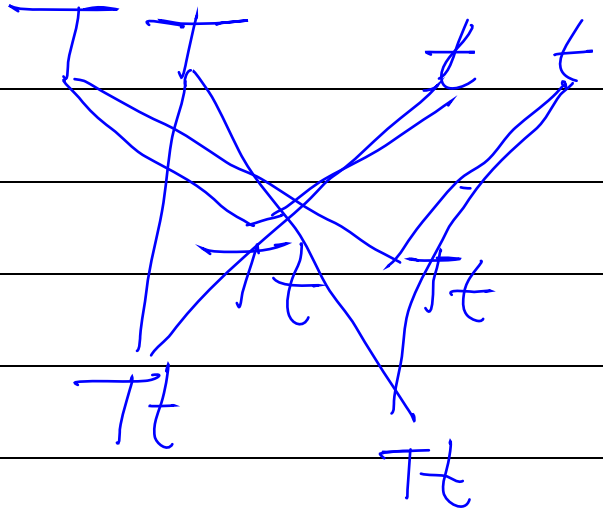
In the less space and give pure result which is have pure (more generations.

- In the more quantitive.

Law of domenance => Mendal discovered the in the law of dominence only one characters. These get generation (tall) and (dwarf) on the plant height.

- Tall is the dominance character.
- dwarf is the recessive character.

- P_1 is the parent alleles and f_1 is the offspring of the P_1.



Through the cross fertilization on

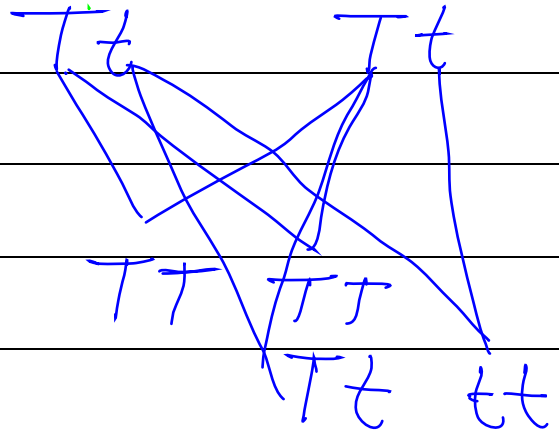
dominance character is

The tall

Because all plant is the tall.

f_1 generation back cross fertilization

F_1



In the $f_{(2)}$ generation have

Genotypes ratio = 2:2

Phenotype = 3:1

2) Law of assortment ⇒ In the 2nd law of mendel discovered two characters of the pea plant

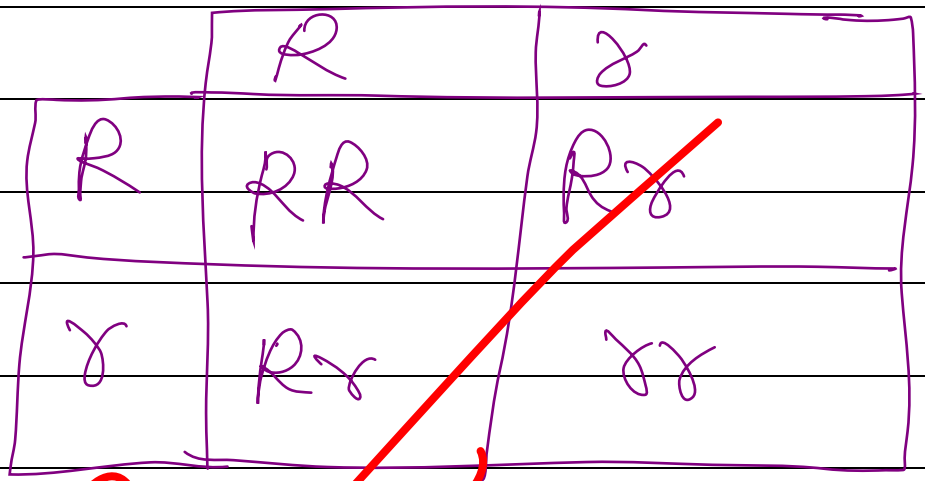
(1) flower colour

(2)

	T	t
T	TT	Tt
t	Tt	tt

3:1 — dwarf plant, tall plant

White and red flowers



	R	r
R	RR	Rr
r	Rr	rr

Pink flowers

3 : 1 — white flowers

Phenotype

Ref. 2

(3) Law of Independent

(1) In the law the mendel discovered 4 character of the pea plant

	Domenance	recessive
(1) seed shape	rounded	wrinkled
(2) Sheed colour	yellow	green
(3) Pode shape	green	yellow
(4) Pode colour		
(5) Flowe position	Terminal	Axis.

Result is = 3:3:9:1

9

Ans-9 Numerical alteration of Chromosome

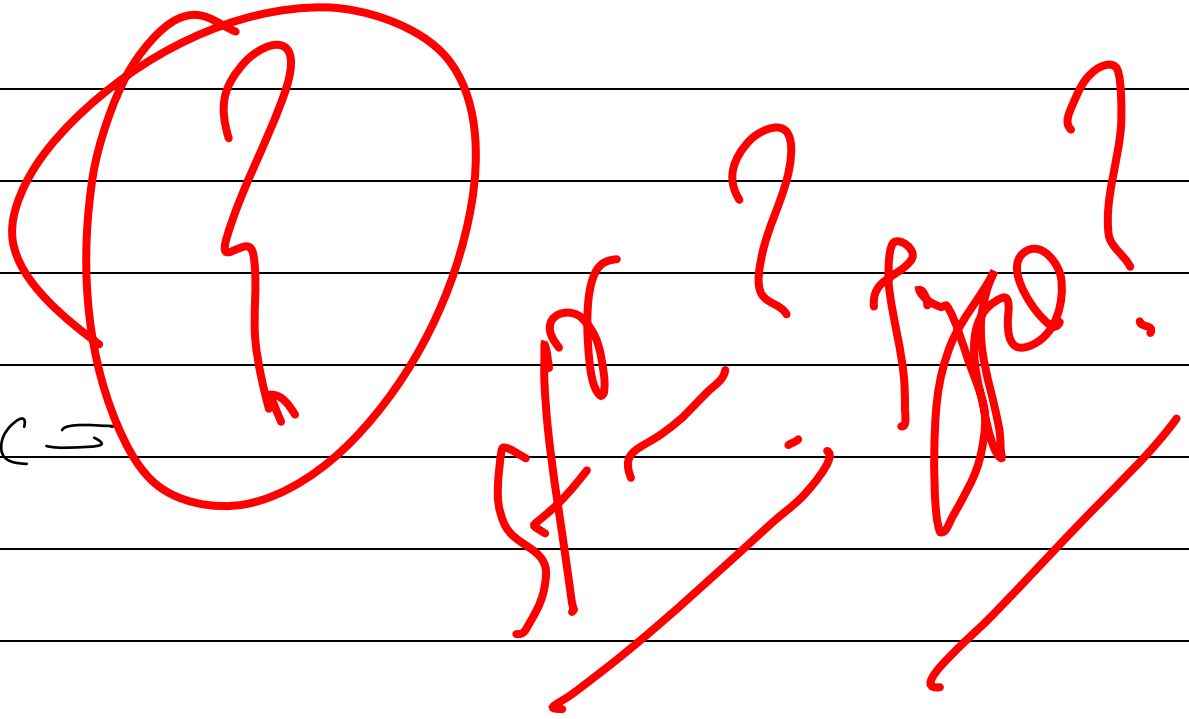
Chromosome have four types.

Acrocentric =

Metacentric =

Telocentric =

Submetacentric =



Acrocentric Chromosome = This chromosome have no arm only one (p) position

- In the i shape
-) These found in the vertibrate animals ex rabbit

(2) Metacentric - Those chromosome have two arms And the position of ~~centromere~~ centromere in the between two arms

- This have L shape

Telocentric = In this chromosome centromere have far to center.
have " shape chromosome.

(4) Submetacentric = This type chromosome have centromere to near by center of in centromere.
Thus have L shape by chromosome

Section - A

Ans-1 Mendal selected plant for his experiment Because the pea plant is the grow easyly to the another plant.

2. To have self pollination in the pea plant.

Ans-2 Initiation genetic code AUG

Mytheonine

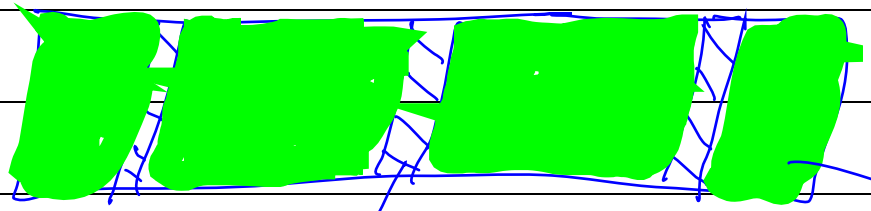
Ans-2 Gene bank => Gene bank is -

Conserve the gene is called gene bank

Ans-4 PCR — Polymerase chain Reaction

Ans-5 Split gene — In the process have protein Synthesis in Eukaryotics

Transcription — DNA $\xrightarrow{\text{Transcription}}$ mRNA
hnRNA.



Exon

Intron

In this process replacing of Intron by enzyme of Mt dryphos phate

- Adding of Exon in the nucleoplasm
- Then after capping and tailing mRNA come in the stable form

Then come in the cytoplasm and process start of protein sythesis

Section - B

Polyene Chromosome