

Default for BIO201

The default category for questions shared in context 'BIO201'.

Fill in the Blank (FBQs) BIO: 201 GENETICS I

FBQ1

_____ are responsible for the characteristics or traits that are shown by the organisms

Genes

1.0000000

0.0000000

FBQ2

Who disproved the theory postulated by Hippocrates?

Aristotle

1.0000000

0.0000000

FBQ3

Who disproved the theory postulated by Hippocrates?

Aristotle

1.0000000

0.0000000

FBQ4

The theory of pangenesis was tested by _____

August Weismann

1.0000000

0.0000000

FBQ5

The chromosomal theory of inheritance is the idea that genes, the units of heredity are_____ and are found in the chromosomes

Physical

1.0000000

0.0000000

FBQ6

In which year was the theory of Germplasm formulated?

1885

1.0000000

0.0000000

FBQ7

Boveri was able to show that abnormal development of a dispermic embryo was the result of the _____ distribution rather than dispermy per se.

Erratic chromosome

1.0000000

0.0000000

FBQ8

The occurrence of trisomy 21 has been found to be associated with the age of the _____

Mother

1.0000000

0.0000000

FBQ9

Nullisomy is equal to _____

* $2n-2$ *

1.0000000

0.0000000

FBQ10

_____ worked on reduction division.

Boveri

1.0000000

0.0000000

FBQ11

Who postulated the pre-formation theory?

Jan Swammerdam

1.0000000

0.0000000

FBQ12

What is the probability that the first child of Aa x aa parents will have a recessive genotype?

Half

1.0000000

* $\hat{A}^{1/2}$ *

1.0000000

FBQ13

Male bees (drones) develop by _____ from unfertilized eggs.

Parthenogenesis

1.0000000

0.0000000

FBQ14

A male that possess female characteristics externally shows a condition known as _____

Testicular feminisation

1.0000000

Male pseudohermaphroditism

1.0000000

FBQ15

When a grandfather transmits his X chromosome to his grandson through his daughter, this situation is referred to as _____

Crisscross

1.0000000

0.0000000

0.0000000

FBQ16.

A dark staining body in the interphase nucleus of most female somatic cell is called _____

Barr body

1.0000000

0.0000000

FBQ17

The gene that is transmitted from father to the son only is described as _____

Holandric gene

1.0000000

0.0000000

FBQ18.

_____ are the genes that are present in both sexes but only expressed themselves in one sex

Sex-limited traits

1.0000000

0.0000000

0.0000000

FBQ19.

Gametogenesis involves ----- and -----

Oogenesis, spermatogenesis

1.0000000

Spermatogenesis, oogenesis

1.0000000

FBQ20.

Who thought that mysterious vital forces were responsible for what he thought was a de novo origin of adult parts.

Pierre-Louis

0.0000000

Wolff

1.0000000

Karl Ernst

0.0000000

Jean-Baptiste

0.0000000

FBQ 21

----- is the variations in the number of individual chromosomes which give unbalanced set of chromosome

Aneuploidy

1.0000000

0.0000000

FBQ22

----- was the year Hertvig and Straburger advanced the theory that the cell nucleus must contain the hereditary materials

1885

1.0000000

0.0000000

FBQ23

----- is the process that bring about equal distribution of the nuclear materials important for the physiological and developmental process of the cell

Mitotic process

1.0000000

Mitosis

1.0000000

FBQ24

_____ is a cross in which the parents differ with respect to only one trait which is controlled by only one gene.

Monohybrid cross

1.0000000

0.0000000

0.0000000

FBQ25

According to _____ there is a segregation of alleles, so only one member of a pair enters the gamete.

Mendel

1.0000000

0.0000000

0.0000000

FBQ26

In the formation of gametes, the two alleles of a given gene assort independently of the pairs of alleles of other genes on non-homologous chromosomes. Which law of Mendel is this statement?

Mendel's *second law of inheritance*

1.0000000

0.0000000

FBQ27

When an unbiased coin is tossed the probability that it will come up heads is_____

Half

1.0000000

* $\frac{1}{2}$ *

1.0000000

0.0000000

0.0000000

FBQ28

When two alleles are identical, the genotype is said to be _____

Homozygous

1.0000000

0.0000000

FBQ29

Probability is applicable to genetics when considering Mendel's _____ law of inheritance

Second

1.0000000

2nd

1.0000000

0.0000000

FBQ30

The first significant breakthrough on the problem of quantitative inheritance by Nilsson Ehle was in the year -----

1909

1.0000000

0.0000000

FBQ31

In 1891 a German biologist called _____ observed that in certain insects, the nuclei of half of the sperm contain an extra structure.

Hermann Henking

1.0000000

0.0000000

FBQ32

The variability in developmental success is said to be a reflection of ----- differences between nuclei in different quadrants

Qualitative

1.0000000

0.0000000

FBQ33

A trisomy is a type of chromosome imbalance which produces a condition known as _____

Down's syndrome

1.0000000

0.0000000

FBQ34

The alternative forms of the same genes are called _____

Alleles

1.0000000

0.0000000

0.0000000

FBQ35

_____ is specific point on the chromosomes occupy by a gene

Locus

1.0000000

0.0000000

Multiple Choice Questions (MCQs) BIO: 201GENETICS I

MCQ1

Which of the following is not an aim of study of Genetics?

Explain the growth of genetics

0.0000000

State some of the theories of evolutions of Genetics

0.0000000

Explain the essential features of the chromosome theory

0.0000000

Explain evolutionary theories

1.0000000

MCQ2

In which year was the factor responsible for the transmission of characters named genes?

1890

0.0000000

1908

0.0000000

1809

0.0000000

1909

1.0000000

MCQ3

Who theorised that small representative elements of all parts of the parental body are concentrated in the semen?

Mendel

0.0000000

Aristotle

0.0000000

Hippocrates

1.0000000

Bateson

0.0000000

MCQ4

Early in the 19th century, ----- postulated that minute particles from each part of the body of the parents are united in sexual reproduction.

Christian Wolff

0.0000000

Jan Swammerdam

0.0000000

Pierre-Louis Maupertuis

1.0000000

Mendel

0.0000000

MCQ5

----- worked with sea urchins and discovered that two equal-sized nuclei, one from egg and other from sperm fused at fertilisation.

Wilhelm Roux

0.0000000

Boveri

0.0000000

Sutton

0.0000000

Herwiig

1.0000000

MCQ6.

In which year was hypothetical discussion implied that the chromosomes are the bearer of hereditary materials?

1663

0.0000000

1773

0.0000000

1883

1.0000000

1783

0.0000000

MCQ7

In which year was Mendelian laws discovered?

1600

0.0000000

1700

0.0000000

1800

0.0000000

1900

1.0000000

MCQ8

The theory that genes are on chromosomes was provided by

Weismann

0.0000000

Boveri

0.0000000

Mendel

0.0000000

Sutton

1.0000000

MCQ9

The condition in which more than one sperms fertilised an egg is called -----

Dispermy

0.0000000

Trispermy

0.0000000
Polysperm

1.0000000
Monospermy

0.0000000
MCQ10
In *Datura*, what is the haploid number of chromosome?

12

1.0000000
13

0.0000000
14

0.0000000
15

0.0000000
MCQ11
Those affected with Down's syndrome have ----- number of chromosomes

44

0.0000000
45

0.0000000
46

0.0000000
47

1.0000000
MCQ12
In general population, the occurrence of trisomy 21 is one in --- live births

500

0.0000000
600

1.0000000
800

0.0000000
1000

0.0000000
MCQ13

The cross that make it possible to determine the unknown genotype is called _____

Homozygous cross

0.0000000
Heterozygous cross

0.0000000
Test cross

1.0000000
Back cross

0.0000000
MCQ14

The principles of segregation deals with the _____

Transmission of chromosomes

0.0000000
Transmission genes

0.0000000
Transmission of only one locus

1.0000000
Transmission of only two loci

0.0000000
MCQ 15

A dice has six sided, what is the probability that it will not show 6 when thrown?

1/2

0.0000000
1/3

0.0000000
1/4

0.0000000
1/6

1.0000000

MCQ16

When two monohybrids are crossed, how many of the progeny will have dominant phenotype?

$\hat{A}^{1/2}$

0.0000000

$\hat{A}^{1/4}$

0.0000000

1/3

0.0000000

$\hat{A}^{3/4}$

1.0000000

MCQ17

Which of the following is not an objective of study quantitative polygenic inheritance?

To state how the genotype determines the phenotype

0.0000000

To account for the shades of difference between the variety of phenotypes in a given polygenic trait

0.0000000

To establish that the basic principle of inheritance is still in operative

0.0000000

To state how phenotype determines the genotype

1.0000000

MCQ18

The general term used to describe the number of whole sets of Chromosome is_____

Diploid

0.0000000

Haploid

0.0000000

Ploidy

1.0000000

Variation

0.0000000

MCQ19

Sex determination in Drosophila involves interaction between the autosome and the

Y chromosome

0.0000000
XY chromosome

0.0000000
X-chromosome

1.0000000
All of the above

0.0000000
MCQ20
How many chromosomes are found in honey bee?

10

0.0000000
12

0.0000000
16

1.0000000
20

0.0000000
MCQ21
Traits linked to sex chromosome in man is

Night blindness

0.0000000
Colour blindness

0.0000000
Hairy chest

0.0000000
All of the above

1.0000000
MCQ22
One of the two X chromosomes in the female is referred to as

X body

0.0000000

Barr body

1.0000000

Barn body

0.0000000

All of the above

0.0000000

MCQ23

called What name is used to describe modification of the same gene?

Genotype

0.0000000

Phenotype

0.0000000

Alleles

1.0000000

Factor

0.0000000

MCQ24

The sex which produces two types of gametes is called

homogametic sex

0.0000000

heterogametic sex

1.0000000

heteroallele sex

0.0000000

monogametic sex

0.0000000

MCQ25

Nilsson-Ehle worked on the colour of _____

Rice kernel

0.0000000
Drosophila

0.0000000
Wheat

0.0000000
Wheat kernel

1.0000000
MCQ26
In mice, the gene for testicular feminization is known to be located in the

Y chromosome

0.0000000
XX chromosome

0.0000000
YYC chromosome

0.0000000
X chromosome

1.0000000
MCQ27
The condition where a pair of chromosome fail to separate during cell division is described as

Disjunction

1.0000000
Co-disjunction

0.0000000
Non-disjunction

0.0000000
Gene disjunction

0.0000000
MCQ28
An offspring from two different parental types is called

cross brid

0.0000000
offspring

0.0000000
hybrid

1.0000000
progeny

0.0000000
MCQ29

The first significant breakthrough on problem of qualitative inheritance was by

Gregor Mendel

0.0000000
Nilsson-Ehle

1.0000000
August Weismann

0.0000000
Darwin

0.0000000
MCQ30

In an individual, the number and types of sex chromosomes present depend on

Sex of the individual

1.0000000
Chromosome of the individual

0.0000000
Autosomes

0.0000000
X chromosome

0.0000000
MCQ31

Deep/Soprano voice is linked to which chromosome

Y Chromosome

0.0000000
X Chromosome

0.0000000
Sex Chromosome

1.0000000
XY Chromosome

0.0000000
MCQ32
In mitosis, the two daughter chromosomes move to opposite poles during

metaphase

0.0000000
Prophase

0.0000000
Interphase

0.0000000
Anaphase

1.0000000
MCQ 33
Hairy chest is linked to which chromosome?

sex chromosome

0.0000000
X chromosome

0.0000000
Y chromosome

1.0000000
XY chromosome

0.0000000
MCQ34

The 5n individuals is described as

Polyploidy

0.0000000
Tetraploid

1.0000000
Pentaploid

0.0000000
Triploid

0.0000000
MCQ35

A karyotype is an individual's chromosome complement in terms of _____. I. chromosome number, II. Chromosome size, III. Location of the centromere in the different chromosomes

I only

0.0000000
I and II

0.0000000
II and III

0.0000000
I, II and III

1.0000000