

NEET BIOLOGY

Topic: Principle of inheritance and variation

- Q.1** Barr bodies are found in man and are associated with
(a) Male sex chromosomes (b) Female autosomes
(c) Male autosomes (d) Female sex chromosome
- Q.2** The blood group containing anti A and anti B is
(a) Blood group A (b) Blood group B
(c) Blood group AB (d) Blood group O
- Q.3** Which of the following sex – linked disease
(a) Baldness (b) Colorblindness
(c) Night blindness (d) Far sightness
- Q.4** Albinism is
(a) Autosomal disorder (b) Sex chromosomal disorder
(c) Both (d) None
- Q.5** Sickle – cell anaemia is due to
(a) Hormones (b) Viruses
(c) Genes (d) Bacteria
- Q.6** Turner’s syndrome in human is caused by
(a) Autosomal aneuploidy (b) Sex – chromosome aneuploidy
(c) Polyploidy (d) Point mutation
- Q.7** Colour blindness is caused by a single
(a) Dominant gene in woman (b) Dominant gene in man
(c) Recessive gene in man (d) Recessive gene in woman
- Q.8** If a haemophilic man marries a woman carrier (heterozygous) for haemophilia, what would be the possibility that their daughter would be haemophilic
(a) 100% (b) 75%
(c) 50% (d) 0%
- Q.9** In dihybrid cross pure homozygous plants will be
(a) 9 (b) 2
(c) 1 (d) 3
- Q.10** In a dihybrid cross, yellow is dominant over green and round seed coat is dominant over the wrinkled. These were crossed and a typical Mendilian dihybrid ratio 9:3 3: 1 was obtained. There are 1600 members of progeny. How many of them are likely to be wrinkled
(a) 100 (b) 400
(c) 300 (d) 600

- Q.11** What type of gametes are formed from a plant of genotype Tt Rr
(a) Tt and Rr (b) TR and tr
(c) TR, Tr, tR, tr (d) Tr, tr only
- Q.12** XO human sex anomaly is resultant of
(a) Klinefelter Syndrome (b) Down's Syndrome
(c) Turner's Syndrome (d) None of the above
- Q.13** "Cinderella" of genetics is
(a) Aspergillus (d) Drosophila
(c) Guinea pig (d) None
- Q.14** A Down's syndrome will be
(a) 45 + XX (b) 44 + XY
(c) 44 + XXY (d) 22 + XY
- Q.15** An individual with contrasting alleles is called
(a) Heterozygous (b) Homozygous
(c) Dioecious (d) Monoecious
- Q.16** Multiple allelism controls inheritance of
(a) Blood group (b) Phenylketonuria
(c) Colour blindness (d) Sickle – cell anaemia
- Q.17** Foetal sex can be determined by examining cells from amniotic fluid looking for
(a) Barr bodies (b) Chiasmata
(c) Sex chromosomes (d) Kinetochores
- Q.18** Law of incomplete dominance in *Mirabilis jalapa* (4 O'clock) was shown by
(a) Carrers (b) Mendel
(c) Hugo de vries (d) None of the above
- Q.19** What would be the number of chromosomes in the ovum (fertilized by a normal sperm) that resulted in the appearance of Klinefelter's syndrome in the offspring?
(a) 23 (b) 22
(c) 21 (d) 24
- Q.20** Erythroblastosis Foetalis is found in children having
(a) Both father and mother RH positive
(b) Rh positive father and Rh negative mother
(c) Both father and mother Rh negative
(d) Rh negative father and Rh positive mother
- Q.21** A husband and wife have normal vision but fathers of both of them were colour blind. Probability of their first daughter to be colour blind is
(a) 25% (b) 50%
(c) 75% (d) 0%
- Q.22** A cross between hybrid and either of any parent is called
(a) Monohybrid cross (b) back cross
(c) Test cross (d) Dihybrid cross

- Q.23** The somatic chromosome complement in all human being is
(a) 22 pairs of autosomes and one pair heterosomes
(b) 23 pairs of autosomes and one pair heterosomes
(c) 22 pairs of autosomes and one pair of heterosome
(d) none
- Q.24** The genotype of a boy having sexual characters of a girl is
(a) XX (b) XXY
(c) XO (d) XYY
- Q.25** A test cross is between
(a) Two hybrids (b) F₁ hybrid with dominant parent
(c) F₁ hybrid with recessive parent (d) All the above
- Q.26** Genetic code was given by
(a) Watson and Crick (b) Nirenberg
(c) Beadle and Tatum (d) Kings, Watson and Crick
- Q.27** Which of the following Mendel's laws has not proved to be true in all cases?
(a) Law of segregation
(b) Law of independent assortment
(c) Law of dominance
(d) None of these
- Q.28.** Mongolism syndrome is caused by
(a) Extra chromosome
(b) Extra autosome
(c) Extra chromosome in 21st autosomal pair
(d) Gene mutation
- Q.29** In monohybrid cross a typical genotypic ratio is
(a) 3 : 1 (b) 9 : 7
(c) 9 : 3 : 3 : 1 (d) 1 : 2 : 1
- Q30** The types of gametes produced by an individual with genotype aaBbCc are
(a) 8 (b) 6
(c) 4 (d) 2

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10
Ans.	d	d	b	a	c	b	c	c	b	b
Que.	11	12	13	14	15	16	17	18	19	20
Ans.	c	c	b	a	a	a	a	d	a	b
Que.	21	22	23	24	25	26	27	28	29	30
Ans.	d	b	c	b	c	b	c	c	d	c