


12TH CBSE PRINCIPLES OF INHERITANCE AND VARIATION MCQS TEST ANS

- 1) Heterozygous purple flower is crossed with recessive white flower. The progeny has the ratio :
(a) 75% purple and 25% white **(b) 50% purple and 50% white** (c) All purple (d) All white
- 2) Superiority of hybrid over parents is
(a) Digantism (b) Lethality **(c) Heterosis** (d) Dwarfism
- 3) Two crosses between the same pair of genotype or phenotypes in which the sources of the gametes are reversed in one cross, is known as
(a) Reverse cross (b) Dihybrid cross (c) Test cross **(d) Reciprocal cross**
- 4) Female heterogamy is found in
(a) Birds (b) Grasshopper (c) Both a and b (d) Drosophila
- 5) In a plant, red fruit (R) is dominant over yellow fruit (r) and tallness (T) is dominant over shortness (t). If a plant with RRTt genotype is crossed with a plant that is rrtt
(a) 50% will be tall with red fruit **(b) 75% will be tall with red fruit**
- 6) A self-fertilizing trihybrid plant forms
(a) 4 different gametes and 16 different zygotes (b) 8 different gametes and 16 different zygotes
(c) 8 different gametes and 32 different zygotes **(d) 8 different gametes and 64 different zygotes**
- 7) Male heterogamy is found in
(a) Drosophila (b) Humans (c) Grasshopper **(d) All of these**
- 8) A male human is heterozygous for autosomal genes A and B and is hemizygous for haemophilic gene h. What proportion of his sperms will be abh?
(a) $\frac{1}{32}$ (b) $\frac{1}{16}$ (c) $\frac{1}{4}$ **(d) $\frac{1}{8}$**
- 9) The recessive genes located on X-chromosome in humans are always
(a) sub-lethal (b) expressed in males **(c) expressed in females** (d) lethal
- 10) By which process there is a gain o segment of DNA which results in alteration in chromosome?
(a) Insertion (b) Duplication **(c) Both a and b** (d) Deletion
- 21) Lack of independent assortment of two genes A and B in fruit fly Drosophila is due to
(a) Recombination **(b) Linkage** (c) crossing over (d) Repulsion
- 22) In a mutational event, when adenine is replaced by guanine, it is a case of
(a) transcription **(b) transition** (c) transversion (d) frameshift mutation

WHATSAPP FREE TEST GROUP LINK GIVEN IN www.ravitestpapers.in

JOIN MY FREE OR PAID WHATSAPP TEST GROUP FOR ALL DPPS IN PDF

- 23) Given below is the representation of a kind of chromosomal mutation
- 
- What is the kind of mutation represented?
- (a) Deletion (b) Duplication (c) **Inversion** (d) Reciprocal translocation
- 24) Balance theory of sex determination was proposed by
- (a) Waldeyar (b) T.H. Morgan (c) Strassburger (d) **Calvin B. Bridges**
- 25) Gynaecomastia is the symptom of
- (a) **Klinefelter's syndrome** (b) Turner's syndrome (c) SARS (d) Down syndrome
- 26) A common test to find the genotype of a hybrid is by
- (a) Crossing of one F_2 progeny with female parent
 (b) Studying the sexual behaviour of F_1 progenies
 (c) **Crossing of one F_1 progeny with male parent**
 (d) Crossing of one F_2 progeny with male parent
- 27) In pea plants, yellow seeds are dominant to green. If heterozygous yellow seeded plant is crossed with a green seeded plant, what ratio of yellow and green seeded plants would you expect in F_1 generation?
- (a) 9 : 1 (b) 1 : 3 (c) 3 : 1 (d) **50 : 50**
- 28) A human male produces sperms with the genotypes AB, ab, aB and ab pertaining to the diallelic characters in equal proportions. What is the corresponding genotype of this person?
- (a) AaBB (b) AABb (c) AABb (d) **AaBb**
- 29) Mother is homozygous B, and father is A. What will be the possible blood group in their progeny?
- (a) **AB & B** (b) AB & A (c) A and B (d) O
- 30) Turner syndrome is
- (a) **XO** (b) XXY (c) XXX (d) XYY
- 31) In certain cell, genetic recombination can occur during
- (a) **Meiosis** (b) Amitosis (c) Mitosis (d) Both (a) and (b)
- 32) In a monohybrid cross involving incomplete dominance the phenotypic ratio equals the genotypic ratio in F_2 generation. The ratio is
- (a) 3 : 1 (b) **1 : 2 : 1** (c) 1 : 1 : 1 : 1 (d) 9 : 7

WHATSAPP FREE TEST GROUP LINK GIVEN IN www.ravitestpapers.in

JOIN MY FREE OR PAID WHATSAPP TEST GROUP FOR ALL DPPS IN PDF

- 33) When a tall plant with round seeds (TTRR) crossed with a dwarf plant with wrinkle seeds (ttrr), the F₁ generation consists of tall plants with round seeds. What would be the proportion of dwarf plant with wrinkle seeds in F₁ generation?
 (a) $\frac{1}{4}$ (b) $\frac{1}{16}$ (c) 0 (d) $\frac{1}{4}$
- 34) X-linked recessive gene is
 (a) Always expressed in male (b) Always expressed in female (c) Lethal (d) Sub lethal
- 35) Down's syndrome occurs as a result of
 (a) Trisomy (b) Tetrasomy (c) Autopolyploidy (d) Allopolyploidy
- 36) Indicate, the inheritance of which of the following is controlled by multiple alleles
 (a) Colour blindness (b) Sick cell anaemia (c) Blood group (d) Phenylketoneuria

**WHATSAPP TEST GROUP FEES
 FROM JULY 1 TO TILL FINAL EXAM
 WITH PDF ANSWERS**

CBSE 12 RS.2500

CBSE 11 RS.2000

CBSE 10 RS.2500

CBSE 9 RS.1500

OR MONTHLY FEES RS.500

WHATSAPP – 8056206308

CHECK MY WEBSITES FOR FREE PAPERS

www.ravitestpapers.com

www.ravitestpapers.in

WHATSAPP FREE TEST GROUP LINK GIVEN IN www.ravitestpapers.in

JOIN MY FREE OR PAID WHATSAPP TEST GROUP FOR ALL DPPS IN PDF