

## MDCAT Biology Chapter 9 Life process in Animals & Plants Online Test

Sr	Questions	Answers Choice
1	The chances of which hemophilia is equal in males & females	A. A B. B <b>C. C</b> D. All
2	Man has _____ linkage group	<b>A. 23</b> B. 21 C. 25 D. 46
3	The two linked genes A and B with a 30% recombination frequency must be	A. 15 units apart <b>B. 30 units apart</b> C. 60 units apart D. 90 units apart
4	SRY is located at the tip of	A. Short arm of X-chromosome <b>B. Short arm of Y-chromosome</b> C. Long arm of Y-chromosome D. Long arm of X-chromosome
5	Pseudo-autosomal genes are present on	A. X-chromosome B. Y-chromosome <b>C. Both a &amp; b</b> D. Autosomes
6	Diabetes is the leading cause of	A. Kidney failure B. Adult blindness C. Heart disease <b>D. All of these</b>
7	Blood pressure is also an example of _____ trait	<b>A. Multifactorial</b> B. Qualitative C. Single genic D. Both a & b
8	A carrier mother for colour blindness does not have	A. A normal boy <b>B. A carrier boy</b> C. A colour blind boy D. A normal daughter
9	How many kinds of rhodopsins, a blue cone monochromate will have	A. 3 B. 2 <b>C. 1</b> D. No rhodopsins
10	Degenerated testes are present in abdomen in which of these cases	A. Down's syndrome B. Klinefelter's syndrome C. Turner's syndrome <b>D. Testicular feminization</b>
11	Insulin receptors are present in	A. Cytoplasm of muscle cells B. Cell membrane of liver cells C. Cell membrane of muscles and liver cells <b>D. Cell membrane of all body cells</b>
12	A blue cone monochromate	A. Can perceive two colours B. Can't perceive any colour <b>C. Can perceive only blue colour</b> D. Can perceive only red colour
13	Which can convert glucose to glucose 6 phosphate	A. Hexokinase B. Glucokinase C. Phospho fructokinase <b>D. Both a &amp; b</b>
14	What will be the risk of hemophilia in sons if father is hemophilic and mother is normal	<b>A. 0%</b> B. 20% C. 25% D. 50%
15	Queen Victoria was having which kind of hemophilia	<b>A. A</b> B. B C. C D. D

		D. None
16	Genes can be mapped on chromosomes on the basis of	A. Sex linkage B. Assortment C. Recombination frequency D. Gene sequencing
17	If six cells out of 10, do crossing over what will be percentage of cross over gametes	A. 60% B. 30% C. 40% D. 50%
18	If the distance of 20 map units is found among two linked loci what would be the percentage of cross gametes	A. 40% B. 60% C. 20% D. 10%
19	Color blindness, haemophilia and gout form linkage group on	A. Chromosome 9 B. Chromosome 19 C. x-chromosome D. y-chromosome
20	Anti-Rh antibodies appear in plasma	A. During first few months B. During last months C. Only when stimulated D. If Rh <sup>+</sup> individual mistakenly receives Rh <sup>-</sup> blood
21	There are _____ total possible genotypes of blood group ABO system	A. 3 B. 4 C. 6 D. 7
22	Bilirubin	A. Turns skin Yellow B. Damages brain cells C. Causes jaundice D. All of these
23	What are chances for having Rh-ve baby if one parent is Rh+ve and (homozygous) and other is Rh-ve	A. 25% B. 50% C. 100% D. 0%
24	Rh factor is encoded by	A. 2 genes which occupy 3 loci B. 3 genes which occupy 2 loci C. 2 genes which occupy 2 loci D. 3 genes which occupy 3 loci
25	What is the probability of having albino child if father and mother both are carrier(Aa)	A. 25% B. 30% C. 50% D. 75%
26	Two parents of blood group A had a child of blood group O, what will be percentage chances of having such child again	A. 25% B. 50% C. 75% D. None
27	Interaction of two loci	A. Pleiotropy B. Epistasis C. Dominance D. Differentiation
28	A phenotype which can't be expressed in heterozygous state but can only be expressed other in homo or hemi form, would be	A. Dominant B. Bombay C. Recessive D. Ordinary
29	In case of sickle cell anemia, in place of glutamic acid, _____ is found	A. Histidine B. Valine C. Proline D. Leucine
30	Mutations are inherited only if they occur in the	A. Gland cells B. Gametes C. Muscle cells D. Somatic cells
31	A change in one or more bases of DNA, which results in the formation of an abnormal protein is	A. Moulting B. Transformation C. Mutation D. Fission
32	Homogenetic acid is oxidized rapidly when exposed to air, turning the urine	A. White B. Purple C. Blue D. Black

33	Point mutation occurs in	A. Sickle cell anemia B. Phenylketonuria C. Alkaptonuria D. All
34	Which enzyme deficiency leads to phenylketonuria	A. Phenylalanine oxidase B. Phenylalanine hydroxylase C. Phenylalanine synthase D. Phenylalanine carboxylase
35	Mutation of one or two N-bases is	A. Inversion B. Point mutation C. Deletion D. Chromosomal aberrations
36	Mutation may be caused by	A. Chemicals B. Radiations C. Mutagens D. All of these
37	Sickle cell mutation affects	A. One beta chain B. Both beta chains C. Only alpha chain D. None of the alpha or beta chain
38	Genes for alpha and beta chains of hemoglobin are found on which chromosomes?	A. Chromosome 16 alpha; chromosome 11 beta B. Chromosome 11 alpha; chromosome 16 beta C. Chromosome 11 D. Chromosome 16
39	In sickle cell beta chain glutamic acid is replaced by valine which is sixth amino acid from	A. N-Terminal B. C-Terminal C. R-Terminal D. H-Terminal
40	What is the 5th amino acid in sickle cell beta chain	A. Histidine B. Proline C. Leucine D. Valine
41	When a single gene has multiple phenotypic effects, the phenomenon is called:	A. condominance B. epistasis C. pleiotropy D. sex-linkage
42	What happens when both alleles of a gene pair independently express in a heterozygote?	A. dominance B. incomplete dominance C. over dominance D. codominance
43	A heterozygote offspring quantitatively exceeds the phenotypic expression of both the homozygote parents due to:	A. dominance B. incomplete dominance C. over dominance D. codominance
44	How many gene pairs contribute to the wheat grain colour?	A. one B. two C. three D. four
45	Who for the first time found white eye mutant in drosophila ?	A. Morgan B. Bridges C. Correns D. De Vries
46	Which of the following trait is transmitted directly from an affected to only its sons?	A. autosomal B. X-linked C. Y-linked D. X and Y linked
47	Which phenomenon reduces the chances of genetic recombination and variations among offspring ?	A. linkage B. crossing over C. independent assortment D. dominance
48	Which of the following traits is not sex-linked recessive ?	A. haemophilia B. colour blindness C. hypophosphatemic rickets D. thymosin syndrome
49	Which of these traits zigzags from maternal grandfather through a carrier daughter to a grandson ?	A. autosomal B. X-linked C. Y-linked D. X and Y linked
50	When a haemophilic carrier woman marries a normal man, who among her offspring may be	A. all her children B. all her daughter

50

affected

C. half of her daughter

D. half of her sons