

GAT-B 2022 Unofficial Answer Key Along with Memory Based Questions

1. What changes frequency, wavelength or velocity on changing medium?
2. Triangle, square, regular polygon has charge q at corners what will be EF
3. Which one is inactivated vaccine, Covishield, Covaxin?

Ans - Covaxin

4. LASER is monochromatic or polychromatic?

Ans - Monochromatic

5. Strain of corona ds rna ss RNA
6. What is the electronic configuration of phosphorus +3

Ans - $[\text{Ne}] 3s^2$

7. Why is neo gene introduced in knockout mice?

Ans - The neo gene produces an antibiotic that kills unwanted cells The neo gene produces a toxin that inhibits transcription off the target gene

8. Magnetic susceptibility is negative for?

Ans. diamagnetic material.

9. If any boy or girl drives a bicycle and if takes horizontal turn then what will be constant?

Ans - Kinetic Energy

10. Repressor of lac operon has zinc finger or leucine zipper?

Ans - leucine zipper

11. Which is the sealing enzyme?

Ans - DNA Ligase

12. Where does RNA Replication take place?

Ans - Cytoplasm

13. RNA interference or post-transcriptional gene silencing involves?

Ans - inserting small pieces of double-stranded RNA (siRNA), identical to small sections of the gene that needs to be suppressed.

14. If 2 gene allele A1 and A2 has ratio of 0.8 and 0.2 then what will the frequency of A1A2 genotype be?

Ans - 0.32

15. Forces that act on bending horizontally on a bicycle. torque, friction , weight, centrifugal force

16. Out of Alkane, Alkene, and Alkyne, which is more acidic?

Ans - Alkynes are more acidic than Alkanes and Alkenes.

17. Which algorithm is used for protein folding: PDB alphafold, GenBank, SwissProt?

Ans - AlphaFold

18. 80% reaction completed in time 25 min, find t half for zero-order reaction

19. DNA Polymerase of E.Coli

Ans - DNA Ploymerase III (Holoenzyme)

20. GenBank has repository data on phenotypic traits of knockouts of the human genome - correct or incorrect?

21. What is the molarity of acetic acid of 1 gm/ml?

22. What was improved in flavr savour tomato??

Ans Improved shelf-life, increased fungal resistance and a slightly increased viscosity

23. Is sickle cell anaemia autosomal dominant?

Ans - No. It is autosomal recessive.

24. Complement activation takes place in which type of Hypersensitivity?

Ans Type II hypersensitivity is also known as cytotoxic reactions and engages IgG and IgM antibodies, leading to the complement system activation and cell damage or lysis

25. Order of progressive higher level of chromatin origin.

Ans - Nucleosome

26. Function of Interferon

Ans - an antiviral factor that interferes with viral replication in mammalian cells

