BET 2022 Unofficial Answer Key Along with Memory Based Questions

1. In uniform circular motion, which quantity remains variable?

Ans. The **speed** remains constant, but the velocity varies.

2. During bending of cyclist Which quantity is not involved in it..option ..mg (wt)..centrifugal force...torque or friction

3. which enzyme facilitates the separation of dsdna strand?

4. RNA virus replicates wherein host machinery....nucleus or cytoplasm?

5. restriction IIP endonuclease enzyme produces which sequence?

6. Which is not extracted from seaweed?

Ans. Agar

7. Which Ig causes an Allergic type 1 reaction?

Ans. lg E

8. Selection marker for the transgenic plant?

Ans. Hygromycin phosphotransferase

9. Which one of them is a linker histone?

Ans. H1

10. Which are the components of core histone?

Ans H2A, H2B, H3, H4

11. Plasmid has 3 EcoR1 sites. They are only partially digested. No uncut or nicked DNA. What will be the max number of bands in electrophoresis?

Ans. 07

12. 100m long train going at 68 km/hr and a man running at 8km/hr towards the same direction. At what time will train to cross the man?

Ans. 6 Sec

13. Probability of Sunday on the 1st of January consecutively for at least 3 years?

14. Bacteria X and Y have equal contribution in culture. After plating, there are two colonies grown. what is the probability that it will be X and Y? Ans. 25%

15. 5mM sucrose was hydrolysed using equal amount of 10 mM HCL. What is the final concentration of Glucose and fructose?

Ans. 5mM Glucose and 5mM fructose

16. Which is not a carbon source of acetyl coa?

17. If 20ml of 50mM NaOAc and 30ml of 25mM glucose is mixed, what will be the resultant concentration of each of them in the resultant solution?

18. AIDS will have an effect or will affect?

Ans.CD4+T CELL

19. During animal cloning the cells used are in which phase?

Ans G1

20 Which has the highest melting temperature?

Ans. High GC content

21. Which of the following are Sulphur containing amino acids?

Ans. Methionine and Cysteine

22. Four organisms having content of thymine as A.36% B.28% C.24% and D.18% respectively. Which among them is not most likely thermophilus bacteria?

23. Which of the following is not the super secondary structure of RNA?

Ans. Kowlash

24. Which RNA is synthesized by which polymerase?

25. Match the following (Given with the Answers)

i. Turner Syndrome - **XO**

- ii. Down`s Syndrome- **Trisomy 21**
- iii. Kleinfelder Syndrome- XXY
- iv. Edward Syndrome- Trisomy 18

26. In Agrobaceria vir A and vir G act by two-component sinalling. Mutation in vir G causes inactivation of vir G. What would be the outcome?

Ans. The phenolic signal is received but there is no transduction.

27. What we do not use more frequently for DNA Fingerprinting?

Ans. High copy number repeats

28. Enzyme responsible for degradation of RNA from DNA- RNA hybrid?

Ans. Rnase H

29. Proline is favoured in which type of sec structure?

30. Active site of serine is activated by phosphorylation of it is replaced by aspartic acid then what happens?

- 31. Antibody involved in type I Hypersensitivity?
- 32. Enzyme amount double lead to the reaction rate doubling, this means?

Ans. Initially (S) Km

33. Histidine along with protein purification techniques?

Ans. Cation exchange chromatography

34. Does cryptochrome absorb light?

Ans. Blue light and U.V light

35. MEP Pathway -

Ans. Terpene

- 36. Synapsis incorrect statement
- 37. 2 '3' dideoxy nucleotide is used in?

Ans. Sequence by Synthesis

- 38. Antigen-presenting cell and MHC marker process called?
- 39. Component of the preinitiation complex (PIC) of eukaryotic transcription?

Ans. D and F

40. 100gm glycine (mw- 75dalton) is added in 1L. What is the molarity?

41. If we have 1 centi Morgan to what will be its frequency?

Ans. 1%

42. If we add non-polar (toluene) to water?

Ans. Decrease

43. Method to separate cells of different cell cycle stages?

Ans. FACS

44. If a protein gives band at 60 Kda in Non reducing SDS PAGE and same protein when run on NATIVE PAGE. It gives 120kDa band then what is the oligomeric structure of protein?

Ans. Two identical subunits are not linked to disulfide bonds.

45. In animal biotechnology which technique or procedure we use for the production and rapid multiplication of the genes or genome?

Ans. Injecting nuclear genome and embryo transfer

46. Where will be the glycan part be present and synthesized in ER which is used for protein?

Ans. The core of the er

47. Enzyme which removes tension while DNA unwinding?

Ans. topoisomerase

48. Embryonic stem cells which are undifferentiated but can differentiate into any type of cell are? **Ans. Pleuriopotent**

49. What form of plasmodium enters the human body on infecting MALARIA?

Ans. Sporozoite

50. If yeast is obtained after commercial and industrial production what else can be made from? **Ans. Beer**

51. If 48 men can work in 25 hours then 15 men can work in?

Ans. 80 Hours

52. Organism responsible for Commerical production if citric acid?

Ans. Aspergillus Niger

- 53. Organism mainly found or present in the probiotics?
- 54. Which of the following is not extracted from seaweed?

Ans. Ajinomoto

- 55. What is the new pH of the pH 8 solution of 1M HCI when diluted 10 times?
- 56. In the production of Monoclonal Abs we use mammalian cells instead of bacterial cells why?

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57. Which phase is not a major check point from the cell cycle?

58. NAC transcription factor, subcellular localization?

Ans. Nucleus

59. Length of DNA having 10 million bp?

Ans. 3.4 mm

60. Defect in BKT gene causes what?

Ans. X linked gamma globulinemia.