

INTERNATIONAL INDIAN SCHOOL-DAMMAM

WINTER ASSIGNMENT WORK SHEET FOR XII 09-10 BIOLOGY

1. Differentiate between Health and Disease.
2. What are the causative agent, major symptoms, treatment and preventive measures of the diseases: Typhoid, Pneumonia, Malaria, Amoebiasis, Filariasis and AIDS.
3. What is innate immunity? How it prevent us from infections?
4. Distinguish between active and passive immunity and primary & secondary immune response.
5. State the functions of T and B lymphocytes.
6. What are vaccines?
7. What is allergy reaction and what causes allergy?
8. What are primary and secondary lymphoid organs? Give examples.
9. Draw the diagram to show the multiplication of AIDS virus in a lymphocyte.
10. How is cancer cell different from a normal cell?
11. Mention the techniques used to detect and diagnose cancer.
12. Mention the common approaches for the treatment of cancer.
13. Mention the source, nature and the harmful effects of opioids, cocaine, and cannabinoids.
14. What are effects of alcohol intoxication?
15. Define the terms drug addiction, drug dependence and withdrawal symptoms.
16. Enlist the side effects of anabolic steroid intake in males and females.
17. Mention the measures useful for prevention and control of drug/alcohol abuse.
18. What is inbreeding? What are its advantages?
19. What is inbreeding depression? How it can be removed?
20. Describe the steps involved in MOET.
21. What is apiculture? What are the requirements for successful bee-keeping?
22. Describe the main steps involved in breeding a new genetic variety of a crop plant.
23. What is mutational breeding? Mention its merits and demerits.
24. What is Biofortification? What are its objectives?
25. How do we obtain virus-free plants?
26. Describe the procedure involved in micropropagation or plant tissue culture.
27. What is somatic hybridization? Mention the two steps involved.
28. Give the economic importance of: LAB, Penicillium notatum, Saccharomyces cerevisiae, Methanobacterium, Baculoviruses, Rhizobium
29. Describe the method of obtaining nematode resistant tobacco plant.
30. Mention the steps involved in obtaining human insulin from transgenic E.coli.
31. Discuss the three approaches used to treat SCID patient caused due to ADA deficiency.
32. What are transgenic animals? What for they are developed?
33. What is GEAC? State its functions.
34. What is Biopiracy? Explain it with an example.

35. Differentiate (a) eurythermal and stenothermal organisms and (b) euryhaline and stenohaline organisms (c) regulators and conformers
36. What is altitude sickness? How do our body adapt to it?
37. Explain with the help of standard graphs the exponential and logistic population growth.
38. Discuss the importance of predator-prey relationship.
39. Give an account of the methods employed by the plants to protect themselves from their predators.
40. What are parasites? Mention any two parasitic adaptations in a parasite.
41. What is brood parasitism?
42. Explain the relationship between fig and the wasp.

Define the terms: sexual deceit, phytophagy, aestivation, hibernation, poikilotherms, homeotherms. Co-evolution, camouflaging, commensalism, immigration, emigration, diapause.