

5. BIOLOGY IN HUMAN WELFARE

1VSAQ + 1SAQ + 1LAQ [2M + 4M + 8M] = 14 MARKS

FRUIT POINTS

1. **Biological knowledge** is very useful to human welfare, medical field, agriculture.
2. Biology helps us to face various types of parasitic, bacterial, viral, fungal and other infections.
3. Biology educates people on the abuse of tobacco, drugs, alcohol etc.,
4. **Parasitism** is intimate association of two individuals of which one is benefited and the other is harmed. [IPE]
5. A parasite which lives on the body of the another parasite is called **hyper-parasite**. [IPE]
6. Degeneration of gonads (testis) of the host due to presence of a parasite is [IPE]
called **parasitic castration**. **Ex:** Sacculina causes degeneration of ovaries in the crabs.
7. **Incubation period:** The period between the entry of sporozoites into blood of a man and appearance of clinical symptoms of malaria is called incubation period. It is about 10-14 days.
8. Migration of sheathed microfilaria larva from deeper vessels to peripheral blood vessels during night sleeping time between 10.00 PM and 4 AM is referred to as **nocturnal periodicity**. [IPE]
9. **Tobacco** contains Nicotine which stimulates adrenal glands. [IPE]
10. **TDA** stands for **Teenage Drug Abuse**.
The proverb, 'Prevention is better than cure' holds true in case of TDA abuse. [IPE]
11. **Life cycle of E histolytica:** (i) Trophozoite stage (ii) Precystic stage (iii) Cystic stage. [IPE]
12. **Life cycle of Plasmodium in man:** [IPE]
(a) **Hepatic schizogony:** (i) Pre-erythrocytic cycle (ii) Exo-erythrocytic cycle (iii) Prepatent period
(b) **Erythrocytic schizogony:** (i) Gogli cycle (ii) Incubation period (iii) Formation of Gametocytes
13. **Life cycle of Plasmodium in mosquito-Ross cycle:** [IPE]
 1. Gametogony: (i) Formation of male gametes (ii) Formation of female gamete
 2. Fertilization
 3. Formation of Ookinetie & Oocysts
 4. Sporogony

14. Structure and Life cycle of Ascaris lumbricoides:**[IPE]**

- i) Common round worm lives in the intestine of man (mostly children)
- ii) Mode of infection is through contaminated food and water.
- iii) In both males and females, the body is elongated and cylindrical.
- iv) In both forms mouth is at the anterior end surrounded by Chitinous lips.
- v) After copulation in the small intestine the female releases about two lakh eggs daily.
- vi) Each egg is surrounded by a rippled protein coat and hence it is called mammillated egg.
- vii) **Pathogenicity:** Ascaris causes ascariasis.

15. MALT constitutes about **50%** percent of the lymphoid tissue in human body. **[NEET-2017]**

16. Cholera and tetanus is caused by bacteria. **[NEET-2017]**

17. Grafted kidney may be rejected in a patient due to **cell-mediated immune response.** **[NEET-2015]**

18. Immunoglobulins **IgA** does constitute the largest percentage is human milk. **[NEET-2015]**

19. HIV that causes AIDS, first starts destroying **helper T-lymphocytes.** **[NEET-2015]**

20. The active form of Entamoeba histolytica feeds upon **erythrocytes, mucosa and submucosa of colon.** **[NEET-2015]**

21. The cell-mediated immunity inside the human body is carried out by **T-lymphocytes.** **[NEET-2013]**

22. Infection of Ascaris usually occurs by **drinking water containing eggs of Ascaris.** **[NEET-2013]**

23. Drug called **Heroin** is synthesized by **acetylation of morphine.** **[NEET-2019]**

24. Widal test is carried out to test **Typhoid fever.** **[NEET-2010][2012 PMT]**

25. Ringworm in humans is caused by **fungi.** **[2010 PMT]**

26. The letter T in T-lymphocyte refers to **thymus.** **[2010 PMT]**

27. Common cold is not cured by antibiotics because it is caused by a **Virus.** **[2011]**

28. Ringworm in humans is caused by **Fungi.** **[NEET-2010]**

29. The infectious stage of Plasmodium that enters the human body is **Sporozites.** **[NEET-2020]**

30. Coca alkaloid or cocaine is obtained from **Erythroxylum coca.** **[NEET-2019]**

31. The infectious stage of plasmodium that enters the human body is **female gametocyte.** **[NEET-2020]**

32. In **TH cells** of blood corpuscles, HIV undergoes replication and produce progeny viruses. **[NEET-2023]**

33. Diacetyl morphine is also called as **smack.** **[NEET-2023]**

34. Neoplastic characteristics of cells refer to mass of proliferating cells, rapid growth of cells and invasion and damage to the surrounding tissue. **[NEET-2025]**