

Class : XIIth Date :

Solutions

Subject : BIOLOGY DPP No. : 7

Topic :- Human Health & Disease

1 **(d)**

Smoking increases the chances of lung cancer, bronchitis, emphysema, coronary heart diseases, cancer of throat, gastric ulcer, cancer of urinary bladder, etc.

2 **(c)**

Rhinitis, commonly known as runny nose, is the medical term describing irration and inflammation of some internal areas of the nose. The primary symptom of rhinitis is nasal dripping. It is caused by chronic or acute inflammation of the mucous membrane of the nose due to viruses, bacteria or irritants. Rhinitis affects an individual's nose, throat or eyes and cause an increase in fluid production within these areas.

3 **(b)**

Polio or polio myelitis is an infective viral disease infants and childrens. It is caused by small RNA virus (polio virus or enterovirus).

4 **(c)**

The B-cells and T-cells are produced in bone marrow.

The T-cells (T-helper cells) stimulate B-cells to produce antibodies. Antibodies are the main component of immune system. Immunodeficiency is characterized by a very low number of circulating lymphocytes (B and T-cells) and the affected persons usually die at an early stage.

5 (a)

Filariasis is also known as elephantiasis as the legs become very heavy, stouts and elephant-like. This disease is caused by *Wuchereria bancrofti* or filarial worm, which invades in lymphatic or connective tissues. It spreads by the bite of *culex* mosquitoes.

6 **(a)**

Chemical carcinogens present in smoke have been identified as a major cause of lung cancer

7 **(d)**

The cancer of epithelial cells is called carcinoma. It is a tumour that arises in the tissue that line the body's organ like the nose, the colon, the penis, breast, etc. About 80% of all cancers are carcinomas. Leukaemia are cancers of blood or blood terming organ. Sarcoma originates in mesodermal tissue like bone, connective tissue muscle, cartilage, fibrous tissue or fat.

8 **(a)**

Transplant rejection is caused by the body's immune response to foreign material. Cell-mediated immunity is responsible for graft rejection

9 **(d)**

Physiological barriers Acid in the stomach, saliva in the mouth, tears from eyes all prevent microbial growth

10 **(b)**

Interferons.

Virus infected cells secrete proteins called interferons, which protect non-infected cells from further viral infection

11 **(a)**

A-Gametocytes, B-Salivary glands, C-Sporozoites

12 **(d)**

Smallpox is an acute, highly communicable disease caused by variola virus. It has now been largely controlled through vaccination. Smallpox vaccine was first prepared by **Edward Jenner** in 1798.

13 **(c)**

Antibodies could not solve all the problems of bacterial disease due to development of mutant strains resistant to antibodies.

14 **(c)**

In ELISA (Enzyme Linked Immuno Sorbent Assay), the antibody is bound to an inert polymer support than exposed to the sample. The second antibody used is one that has an enzyme attached to it that converts a colourless or nonfluorescent substrate into a coloured or fluorescent product.

15 **(c)**

Computerized axial tomography (CAT) is specialized technique for study of various parts inside the skull and location of any pathological condition.

17 **(b)**

A mosquito causes infection by taking a blood meal. First, sporozoites enter the bloodstream, and migrate to the liver of man

18 **(c)**

Entamoeba histolytica is gastrointestinal protozoan parasite that possess a serious health problem, with 50 million annual infections throughout the world

19 **(b)**

Interferon.

Interferons block viral reproduction in healthy cells

20 **(d)**

World Health Organisation has started a number of programmes to prevent the spreading of HIV infection that includes

- (i) making blood from blood banks safe from HIV
- (ii) ensuring the use of only disposal needless and syrings
- (iii) free distribution of condoms
- (iv) controlling drug abuse
- (v) advocating safe sex and promoting regular check-ups

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	D	С	В	С	A	Α	D	Α	D	В
Q.	11	12	13	14	15	16	17	18	19	20
А.	Α	D	С	С	С	С	В	С	В	D

