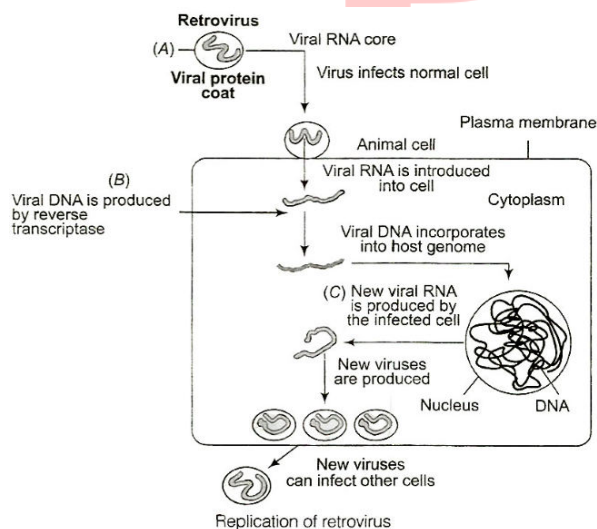


Topic :- Human Health & Disease

- (c)**
NMR scanning is based on magnetic resonance.
- (a)**
Human Immunodeficiency Virus (HIV) has three transmission.
(i) Through sexual intercourse (65%).
(ii) Transmission through blood transfusion, blood products and contaminated equipments (10%).
(iii) Transmission from mother to baby (25%).
- (c)**
Amniocentesis is one way to obtain foetal cells for testing of chromosomal abnormalities and genetic disorders. It is the process to determine any hereditary diseases in the embryo.
- (c)**
A-Reverse transcriptase, B-Viral DNA is produced, C-New viral RNA is produced by the infected cell



- (d)**
Oral contraceptives or contraceptive pills are taken to control fertility. Each pill contains a mixture of oestrogen and progesterone or only the pure synthetic progesterone which prevent ovulation.
- (c)**
Benign tumour is a tumour that lacks all three of three of the malignant properties of cancer. A benign tumour does not grow in an unlimited, aggressive manner, does not invade

surrounding tissues and does not metastasize.

7 (d)

Protein deficiency causes both Kwashiorkor and marasmus. **Kwashiorkor** is characterized by wasted muscles, thin limbs, retarded growth of body and brain, oedema, pot belly and diarrhea.

Marasmus is characterized by impaired growth and replacement of tissue proteins, thin limbs and prominent ribs, dry, wrinkled and thin skin and diarrhea.

8 (c)

An HIV infection damages the immune system, *i.e.*, your body's defense system that fight against diseases and infections

9 (a)

Cannabinoid are a group of chemicals, which interact with cannabinoid receptors present principally in the brain

10 (c)

Mast cells play a critical role in allergy and inflammation. Allergy is due to the release of chemicals like histamine and serotonin from the mast cells

11 (d)

Statements II, IV and V are correct regarding beri-beri disease.

12 (c)

Most common allergen for asthma is house dust, pollen grains, smoke, etc. Asthma is characterized by narrowing and inflammation of bronchi, bronchospasm and difficulty in breathing.

13 (b)

Common cold and AIDS are viral diseases, occur due to Myxo virus and Human Immunodeficiency virus (HIV) respectively.

The causative agents of ringworm disease are fungi *Trichophyton* and *Microsporum*. Typhoid and tuberculosis are bacterial diseases caused by *Salmonella typhi* and *Mycobacterium tuberculosis* respectively.

14 (c)

Tetanus is also known as 'lock jaw' disease. It is caused by the bacteria *Clostridium tetani*.

15 (c)

AIDS (Acquired Immuno Deficiency Syndrome) is caused by HIV (Human Immunodeficiency Virus). This virus selectively infects and kills the helper T-lymphocytes. Hence, the disease is characterized by reduction in the number of helper T-lymphocytes and breakdown of the immune system of the body.

16 (c)

Deficiency of vitamin-D causes weak bones, bone deformities, rickets in children and osteomalacia in adults. Marasmus is caused due to protein energy malnutrition.

17 (c)

Tumour that spreads and eventually caused ill health and death are described as malignant results from a breakdown of the regulatory mechanisms that govern normal cell behaviour. Sarcoma is a cancer of primitive mesoderm tissue and involves malignant tumours the cells of

which divide erratically.

18 **(a)**

Spleen is a large reservoir of erythrocytes. The spleen is a large bean-shaped organ. It mainly contains lymphocytes and phagocytes

19 **(a)**

Tobacco contains a large number of chemical substances including nicotine, an alkaloid

Tobacco contains large number of chemical substances including nicotine, an alkaloid. Nicotine stimulates adrenal gland to release adrenaline and nor-adrenaline into blood circulation, both of which raise blood pressure and increases the heart rate

20 **(d)**

The best HLA match for transplants in order of preference is as follows:

Identical twins>sibling(brother and sister)>parent>unrelated donor

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