

Long Answer Type Questions

[5 marks]

Q. 1. Discuss the causes, symptoms, preventive measures and treatment of AIDS.

Ans. AIDS is caused by a retrovirus, HIV (Human Immunodeficiency Virus). It is transmitted from an infected to a healthy person through sexual contact, blood transfusion, use of infected needle or blade. Also, it may get transmitted from infected mother to her foetus.

Symptoms:

- (i) Inflammation in lymph glands.
- (ii) Loss of weight and sweating during night.
- (iii) Bleeding and fever.
- (iv) Severe damage to the brain which may even lead to loss of memory. In some cases, the person may cease to speak and even think.
- (v) Above all, the possibility of other diseases also increases because of the damage caused to the immune system.

Prevention:

- (i) By avoiding sexual contact with unknown persons.
- (ii) By using sterilised needles, blades, etc.
- (iii) By ensuring that the blood to be transfused is free from HIV.

Q. 2. What do you mean by disease? Describe the various causes of diseases.

Ans. Disease is defined as a condition of the body or a part of it in which its normal functioning gets disturbed. The main causes of diseases are:

- (i) Biological agents which are disease-causing microorganisms or pathogens like viruses, bacteria, fungi, protozoans, etc.
- (ii) Physical agents like heat, cold, radiation, humidity, pressure, electricity, sound, etc.
- (iii) Mechanical agents such as chronic friction as well as other mechanical forces that cause injuries, trauma and fractures, etc.
- (iv) **Chemical agents which are of two types:**
 - (a) Endogenous chemical agents which are formed in the body, like urea, uric acid, etc.

(b) Exogenous chemical agents which enter the body of the individual from outside, like metals, spores and pollens, etc.

(v) Inherited diseases: Some diseases are because of the hereditary reasons, disturbance in chromosomes or genes.

(vi) Social agents which may cause mental disorders.

(vii) Deficiency diseases are caused by insufficiency, absence or excess of a nutrient necessary for health.

Q. 3. Discuss types of anaemia with their symptoms.

Ans. Iron deficiency in the body results in anaemia. Nutritional anaemia is a disease syndrome caused by malnutrition. It is of two types:

(i) Microcytic anaemia

(ii) Pernicious anaemia

Microcytic anaemia: It occurs due to deficiency of iron in human diet.

Symptoms:

An anaemic person:

(i) becomes pale, weak and tired.

(ii) loses appetite.

(iii) loses body weight.

Pernicious anaemia: It is caused due to deficiency of vitamin B₁₂.

Symptoms: Patient becomes paler, shortness of breath after slight exertion, loss of weight, weakness, etc. It may be fatal.

Q. 4. Why is AIDS considered to be a syndrome' and not a disease?

Ans. AIDS causing virus-HIV that comes into the body via the sexual organs or blood transfusion will spread all over the body through lymph nodes. The virus damages the immune system of the body and due to this the body can no longer fight off many minor infections. Instead, every small disease like cold can become severe pneumonia or minor gut infection can become severe diarrhoea with blood loss. The effect of disease becomes very severe and complex, at times killing the person suffering from AIDS. Hence, there is no specific disease symptom for AIDS but it results in a complex disease. Therefore, it is known as a syndrome.

Q. 5. What are the essential components of primary health care?

Ans. Primary health care includes the following essential components:

(i) Providing education concerning prevailing health problems and methods of preventing and controlling them.

(ii) Provision of food supply and proper nutrition.

(iii) Adequate supply of safe and clean drinking water and basic sanitation.

(iv) Provision of maternal and child health care.

(v) Immunisation against major infectious diseases.

(vi) Prevention and control of local epidemic diseases.

(vii) Appropriate treatment of common diseases and injuries.

(viii) Provision of essential drugs,

(ix) Promoting health education in schools and colleges.

Q. 6. Describe influenza with its symptoms and prevention.

Ans. Influenza or flu is an acute respiratory tract infection caused by influenza virus. It is of three types - A, B and C. Influenza virus A and B have caused epidemics throughout the world. Influenza virus C occurs sporadically in the form of small outbreak. Major reservoirs of influenza virus are animals and wild birds. Influenza is spread mainly from person to person by droplet infection created by sneezing, coughing or talking and enters the respiratory tract. Its incubation period is 18 to 72 hours.

Symptoms: Fever, chills, aches and pain, coughing and weakness.

Prevention: Sufferers should cover their faces with handkerchief while coughing and sneezing. Healthy persons should remain away from such patients.

Q. 7. Distinguish between acute diseases and chronic diseases.

Ans.

Acute Diseases	Chronic Diseases
<ol style="list-style-type: none">1. Last for short periods of time, e. g., common cold.2. Cause major effects on general health in a very short time.3. Feeling of tiredness does not occur all the time.4. Weight-loss does not occur and one does not become short of breath.5. Acute diseases do not have long-term effects.	<ol style="list-style-type: none">1. Last for a long time, even life-time, e.g., elephantiasis.2. It takes a long time to cause major effects on general health.3. In case of chronic disease, one feels tired all the time.4. Weight-loss occurs and one becomes short of breath.5. Chronic disease have long-term effects.

Q. 8. Differentiate between kwashiorkor and marasmus.

Ans.

Kwashiorkor	Marasmus
<ol style="list-style-type: none">1. Occurs due to deficiency of protein in the diet.2. Child shows oedema in lower legs, lower arms and usually in face.3. Appetite is poor. Skin shows no change.4. Irritable, moaning and apathetic.5. It occurs in children from one to five years of age.	<ol style="list-style-type: none">1. Occurs due to deficiency of protein, carbohydrate and fat in the diet.2. No swelling.3. Appetite is usually good. Skin is flaky with diffused pigmentation.4. Quiet and apathetic.5. It occurs in infants up to one year of age.

Q. 9. Explain giving reasons:

(a) Balanced diet is necessary for maintaining healthy body.

(b) Health of an organism depends upon the surrounding environmental conditions.

(c) Our surrounding area should be free of stagnant water.

(d) Social harmony and good economic conditions are necessary for good health.

Ans. (a) Food is necessary for the growth and development of the body. Balanced diet provides raw materials and required energy in appropriate amount through nutrients like proteins, carbohydrates, fats, minerals, etc. which in turn are essential for the proper growth and functioning of a healthy body.

(b) Health is a state of being well enough to function physically, mentally and socially and these conditions in turn depend upon the surrounding environmental conditions. e.g., if there are unhygienic conditions in surrounding area, it is likely that we might get infected or diseased.

(c) This is so because many water-borne diseases and insect vectors flourish in stagnant water which cause diseases in human beings.

(d) Human beings live in societies and different localities like villages or cities, which determine the social and physical environment and hence both are to be kept in harmony. Public cleanliness is important for individual health. For better living conditions money is required. We need good food for healthy body and for this we have to earn. For the treatment of diseases also, one has to be in good economic condition.