

# **BIOLOGY FOR ENGINEERS**

## **UNIT 4**

### **HUMAN DISEASES**

1.What is diabetes?

Diabetes is a chronic disease that affects the way your body regulates blood sugar (glucose) levels.

2.What are the causes of diabetes?

The exact cause of diabetes is unknown, but factors that may contribute to its development include genetics, lifestyle factors (such as obesity and lack of physical activity), and certain medical conditions.

3.What are the symptoms of diabetes?

Symptoms of diabetes may include increased thirst and urination, fatigue, blurred vision, slow healing wounds, and frequent infections.

4.How is diabetes diagnosed?

Diabetes can be diagnosed through a blood test that measures your blood sugar levels.

5.What are the treatments for diabetes?

Treatment for diabetes may include lifestyle changes (such as eating a healthy diet and exercising regularly), medication (such as insulin), and monitoring blood sugar levels.

6.How can diabetes be prevented?

Diabetes can be prevented by maintaining a healthy weight, exercising regularly, eating a healthy diet, and avoiding tobacco and excessive alcohol use.

7.What is cancer?

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells in the body.

8.What are the causes of cancer?

The causes of cancer can vary, but risk factors may include genetics, exposure to certain substances or environments, and lifestyle factors such as tobacco and alcohol use.

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9. What are the symptoms of cancer?

Symptoms of cancer may vary depending on the type and stage of the disease, but may include fatigue, unexplained weight loss, pain, and changes in the appearance of the skin or other tissues.

10. How is cancer diagnosed?

Cancer can be diagnosed through various tests such as imaging studies, biopsies, and blood tests.

11. What are the treatments for cancer?

Treatment for cancer may include surgery, radiation therapy, chemotherapy, immunotherapy, and targeted therapy.

12. How can cancer be prevented?

Cancer can be prevented by maintaining a healthy lifestyle, avoiding tobacco and excessive alcohol use, and getting regular screenings for certain types of cancer.

13. What is hypertension?

Hypertension, also known as high blood pressure, is a condition in which the force of blood against the walls of your arteries is consistently too high.

14. What are the causes of hypertension?

The causes of hypertension can vary, but risk factors may include genetics, lifestyle factors such as obesity and lack of physical activity, and certain medical conditions.

15. What are the symptoms of hypertension?

Hypertension may not cause any symptoms, but over time it can lead to serious complications such as heart disease, stroke, and kidney disease.