CHECK YOUR LEARNING

Suggested Answers

1. Cancer cells grow unchecked. They do not respond to signals to stop undergoing mitosis.
2. **(a)** Some cancers run in families and are inherited or partly inherited. This means that DNA passed from one generation to the next may contain information that makes the person more susceptible to cancer.
   (b) Cancer cannot be transmitted from one person to another because cancer is caused by a mistake in DNA.
3. **(a)** A carcinogen is a factor that increases the risk of cancer, such as smoking, UV sunlight, or certain foods.
   (b) Some examples of carcinogens that may be present in everyday life are smoke, UV rays in sunlight, cleaning chemicals, viruses such as HPV, food additives, and pollution.
4. Cancer is sometimes easy to overlook because there are few symptoms in the early stages.
5. Five diagnostic techniques used to detect cancer are CT scans, ultrasound, endoscopy, MRI, and mammogram.
6. Three conventional methods of treating cancer are surgery, chemotherapy, and radiation. Surgery cuts out the tumour. Chemotherapy uses drugs to kill cancer cells and reduce the size of the tumour. Radiation also kills cells and reduces the size of a tumour.
7. Appearance of cancer cells in the blood show that the cancer exists somewhere in the body. Cancer cells in the blood may also indicate that these cells have broken off from the original tumour and have travelled to other sites in the body. Tumours may be forming at secondary sites.
8. Lifestyle choices that help reduce the risk of cancer are avoiding tanning, maintaining a healthy weight, eating a better overall diet that includes "super foods," increasing exercise, and quitting smoking.
9. Some cancer screening tests are Pap smear, mole screening, and breast and testicle exam.
10. There is a risk of cancer recurring because neither the patient nor doctor know if all cancerous cells have been removed from the body. If any still exist, they can grow and start new tumours.