

Robotics in Healthcare

Robotics · Practice Test · 20 Questions

1. What is a robotic device used to assist or replace a missing body part called?

- A) Prosthetic
- B) Stethoscope
- C) Microscope
- D) Pacemaker

2. Which type of robotic system is commonly used by surgeons to perform precise, minimally invasive operations?

- A) Domestic helper
- B) Surgical robot
- C) Education robot
- D) Space rover

3. What is the primary goal of an exoskeleton robot when worn by a human?

- A) To filter blood
- B) To improve physical strength or mobility
- C) To replace the brain
- D) To digest food

4. Which robotic technology is implanted to help regulate a patient's irregular heartbeat?

- A) Artificial lung
- B) Pacemaker
- C) Bionic eye
- D) Robotic skin

5. What do robotic arms in hospitals often help pharmacists do?

- A) Write prescriptions
- B) Dispensary medication
- C) Perform brain surgery
- D) Cook meals

6. What is a 'bionic eye' designed to do for a human?

- A) Change eye color
- B) Restore visual perception to the blind
- C) Magnify distant stars
- D) Record video

7. What type of robot is designed to provide comfort and companionship to elderly patients?

- A) Social or therapeutic robot
- B) Demolition robot
- C) Industrial welder
- D) Assembly line robot

8. What does a robotic neuro-rehabilitation device help patients regain?

- A) Vision
- B) Movement after an injury
- C) Hair growth
- D) Sense of smell

9. Which body part is most commonly replaced by a robotic-assisted surgical procedure?

- A) The knee or hip
- B) The entire stomach
- C) The fingernails
- D) The tongue

10. What do researchers use 'nanorobots' for in the context of human health?

- A) Building tiny houses
- B) Delivering medication to specific cells
- C) Repairing broken bones externally
- D) Cleaning hospital floors

11. What sensory information do some advanced prosthetic hands provide to the user?

- A) Taste
- B) Touch or pressure feedback
- C) Hearing
- D) Smell

12. In robotic surgery, what acts as the interface between the surgeon's hands and the surgical instruments?

- A) A computer console
- B) A wireless remote
- C) A keyboard
- D) A touchscreen

13. What is a key benefit of using robots for repetitive laboratory testing on human samples?

- A) They get tired quickly
- B) They increase accuracy and reduce human error
- C) They require lunch breaks
- D) They make the samples larger

14. Which robotic technology is used to assist individuals with paralysis to stand or walk?

- A) Robotic wheelchair
- B) Powered exoskeleton
- C) Drone
- D) Air purifier

15. What do 'telepresence' robots allow doctors to do?

- A) Perform remote consultations with patients
- B) Physically carry patients
- C) Repair internal organs
- D) Take blood samples

16. What is the main function of a robotic gait trainer in physical therapy?

- A) To help patients learn to walk again
- B) To measure body temperature
- C) To provide oxygen
- D) To administer injections

17. What type of sensor do many healthcare robots use to avoid bumping into patients?

- A) Proximity sensors
- B) Light sensors
- C) Sound sensors
- D) Pressure sensors

18. Which field combines robotics and biology to create machines that mimic human movement?

- A) Biomimetics
- B) Geology
- C) Astrophysics
- D) Astronomy

19. Robotic insulin pumps are primarily used by patients with which health condition?

- A) Diabetes
- B) Asthma
- C) Fractured bones
- D) Common cold

20. What is a 'cobot' in a medical environment?

- A) A robot that works collaboratively with a human
- B) A robot that works independently
- C) A robot made of wood
- D) A robot that performs surgery alone