



## Fanuc Robotics Questions with Answers

**Q1. What is Artificial Intelligence Robotics?**

**ANS:**

Artificial Intelligence Robotics covers all the material needed to understand the principles behind the AI approach to robotics and to program an artificially intelligent robot for applications involving sensing, navigation, planning, and uncertainty.

**Q2. Which of the following laws is Azimovs first and most important law of robotics?**

- a) robot actions must never result in damage to the robot
- b) robots must never take actions harmful to humans
- c) robots must follow the directions given by humans
- d) robots must make business a greater profit
- e) robots should be used to eliminate jobs of human workers

**ANS: b) robots must never take actions harmful to humans**

**Q3. Who is considered to be the father of artificial intelligence?**

- a) Fisher Ada
- b) John McCarthy
- c) Allen Newell
- d) Alan Turning
- e) None of the above

**ANS: b**

**Q4. Programming a robot by physically moving it through the trajectory you want it to follow is called:**

- a) contact sensing control



- b) continuous-path control
- c) robot vision control
- d) pick-and-place control
- e) None of the above

**ANS: B**

**Q5. Nils Nilsson headed a team at SRI that created a mobile robot named:**

- a) Robotics
- b) Dedalus
- c) Shakey
- d) Vax
- e) None of the above

**ANS: C**

**Q6. What is the name for information sent from robot sensors to robot controllers?**

- a) temperature
- b) pressure
- c) feedback
- d) signal
- e) output

**ANS: c) feedback**

**Q7. What is the name for the space inside which a robot unit operates?**

- a) environment
- b) spatial base
- c) danger zone
- d) exclusion zone



e) work envelop

**ANS: e) work envelop**

**Q8. Which of the following terms refers to the rotational motion of a robot arm?**

- a) swivel
- b) axle
- c) retrograde
- d) roll
- e) yaw

**ANS: d) roll**

**Q9. Which of the following terms IS NOT one of the five basic parts of a robot?**

- a) peripheral tools
- b) end effectors
- c) controller
- d) drive
- e) sensor

**ANS: a) peripheral tools**

**Q10. Decision support programs are designed to help managers make:**

- a) budget projections
- b) visual presentations
- c) business decisions
- d) vacation schedules
- e) None of the above

**ANS: c) business decisions**



**Q11. The number of moveable joints in the base, the arm, and the end effectors of the robot determines ..... ?**

- a) degrees of freedom
- b) payload capacity
- c) operational limits
- d) flexibility
- e) cost

**ANS: a) degrees of freedom**

**Q12. PROLOG is an AI programming language which solves problems with a form of symbolic logic known as predicate calculus. It was developed in 1972 at the University of Marseilles by a team of specialists. Can you name the person who headed this team?**

- a) Alain Colmerauer
- b) Nicklaus Wirth
- c) Seymour Papert
- d) John McCarthy
- e) None of the above

**ANS: a) Alain Colmerauer**

**Q13. Which of the following places would be LEAST likely to include operational robots?**

- a) warehouse
- b) factory
- c) hospitals
- d) private homes
- e) chemical research laboratories

**ANS: d) private homes**



**Q14. For a robot unit to be considered a functional industrial robot, typically, how many degrees of freedom would the robot have?**

- a) three
- b) four
- c) six
- d) eight
- e) ten

**ANS: c) six**

**Q15. Which of the basic parts of a robot unit would include the computer circuitry that could be programmed to determine what the robot would do?**

- a) sensor
- b) controller
- c) arm
- d) end effector
- e) drive

**ANS: b) controller**

**Q16. Which of the following terms refers to the use of compressed gasses to drive (power) the robot device?**

- a) pneumatic
- b) hydraulic
- c) piezo electric
- d) photo sensitive
- e) electric

**ANS: a) pneumatic**



**Q17. The original LISP machines produced by both LMI and Symbolics were based on research performed at:**

- a) CMU
- b) MIT
- c) Stanford University
- d) RAMD
- e) None of the above

**ANS: b) MIT**

**Q18. Which of the following statements concerning implementation of robotic systems is correct?**

- a) implementation of robots CAN save existing jobs
- b) implementation of robots CAN create new jobs
- c) robotics could prevent a business from closing
- d) all of the mentioned
- e) Only B and C are possible

**ANS: d) all of the mentioned**

**Q19. Which of the following IS NOT one of the advantages associated with a robotics implementation program?**

- a) Low costs for hardware and software
- b) Robots work continuously around the clock.
- c) Quality of manufactured goods can be improved.
- d) Reduced company cost for worker fringe benefits
- e) Higher volume output of manufactured products

**ANS: a) Low costs for hardware and software**



**Q20. With regard to the physics of power systems used operate robots, which statement or statements is most correct?**

- a) hydraulics involves the compression of liquids
- b) hydraulics involves the compression of air
- c) pneumatics involve the compression of air
- d) chemical batteries produce AC power
- e) All of the mentioned are basic principles of physics

**ANS: c) pneumatics involve the compression of air**

**Q21. If a robot can alter its own trajectory in response to external conditions, it is considered to be:**

- a) intelligent
- b) mobile
- c) open loop
- d) non-servo
- e) None of the mentioned

**ANS: a) intelligent**

**Q22. The number of ways in which a robot arm can move is known as:**

- a) Degrees of rotation.
- b) Degrees of freedom.
- c) Degrees of arc.
- d) Coordinate geometry.

**ANS: b**

**Q23. A robot that has its own computer, and can work independently of other robots or computers, is called an:**



- a) Android.
- b) Insect robot.
- c) Automated guided vehicle.
- d) Autonomous robot.

**ANS: d**

**Q24. An automotive robot might best keep itself traveling down a specific lane of traffic by using:**

- a) Binaural hearing.
- b) Epipolar navigation.
- c) Edge detection.
- d) A second-generation end effector.

**ANS: c**

**Q25. A manipulator is also known as a:**

- a) Track drive.
- b) Robot arm.
- c) Vision system.
- d) Robot controller.

**ANS: b**