Instructions

- You have 50 minutes to complete this test.
- You may write your answers directly in the test.
- You may use any notes or resources you have created or collected.
- You may use a calculator and scratch paper if necessary.
- Good Luck!

Test Questions

1. Robot is derived from which Czech word?
   a. Rabota
   b. Rebota
   c. Ribota
   d. Robota

2. Drives are also known as
   a. Actuators
   b. Controller
   c. Manipulator
   d. Sensors

3. Which of the following is not the functionality of robots?
   a. Efficient Performance
   b. Multifunctionality
   c. Responsibility
   d. Reprogrammability

4. Clockwise of anti clockwise rotation about the vertical axis to the perpendicular arm is provided through
   a. Arm sweep
   b. Elbow extension
   c. Shoulder swivel
   d. Wrist bend
5. What is the full form of AGV?
   a. All Time Guided Vehicles
   b. Alternate Guided Vehicles
   c. Automatic Grouped Vehicles
   d. Automatic Guided Vehicles

6. Radial movement (in & out) to the manipulator arm is provided by
   a. Elbow extension
   b. Wrist bend
   c. Wrist swivel
   d. Wrist yaw

7. AVG Robot is placed in which of the following category?
   a. A Mobile Robot
   b. A Natural Robot
   c. A Saturated Robot
   d. An Unsaturated Robot

8. Which of the following is a serial Robot?
   a. Commercial Robot
   b. Industrial Robot
   c. In House Robot
   d. None of these

9. The Robot designed with Cartesian coordinate systems has
    a. Three linear movements
    b. Three rotational movements
    c. Two linear and one rotational movement
    d. Two rotational and one linear movement

10. Which part of the Robot provides motion to the manipulator and end-effectors?
    a. Actuator
    b. Controller
    c. Sensor
    d. None of the above

11. The Robot designed with Polar coordinate system has?
    a. Three linear movements
    b. Three rotational movements
    c. Two linear and one rotational movement
    d. Two rotational and one linear movement

12. Which of the following is not an Actuator?
    a. Digital Actuator
    b. Hydraulic and Eclectic Actuator
    c. Pneumatic Actuator
    d. None of these
13. Physical structure of a robot which moves around is called?
   a. End-effector
   b. Joints
   c. Links
   d. Manipulator

14. The kinematic part of the robot or manipulator is called
   a. End-Effectors
   b. Joints
   c. Links
   d. Sensors

15. Scara robot is very suitable in which kind of operations
   a. Assembly Operations
   b. Rotary Operations
   c. Single Operations
   d. Translatory Operations

16. Who first introduced the word “robot”?
   a. Isaac Asimov
   b. Isaac Newton
   c. Karel Capek
   d. R2-D2

17. Where was the term “robotics” first used?
   a. In a GM industrial plant
   b. In science fiction stories
   c. On the set of Star Trek
   d. The Massachusetts Institute of Technology

18. What was the purpose of Asimov’s Laws of Robotics?
   a. To insure that robots always serve mankind
   b. To insure that robots become our masters
   c. To insure that robots become sentient
   d. To insure that the military never gains control of robots

19. What do industrial robots look like?
   a. A multi-jointed arm with a fixed base
   b. A small vacuum cleaner
   c. A soft, furry pet
   d. Humanoid with legs and arms

20. Which of the following statements is true?
   a. All robots act like humans
   b. All robots are controlled remotely
   c. All robots are electromechanical machines using electronic programming
   d. All robots are intelligent
21. Which of the following systems uses motors and gears?
   a. The control system
   b. The propulsion system
   c. The sensor and feedback system
   d. The structural system

22. Which of the following systems provide support and stability?
   a. The control system
   b. The propulsion system
   c. The sensor and feedback system
   d. The structural system

23. Which one is not a requirement to be considered a robot?
   a. have human like features
   b. mechanical device that can move around
   c. requires a computer program to operate
   d. uses a micro-controller

24. Which of the following systems includes manipulators and actuators?
   a. The control system
   b. The propulsion system
   c. The sensor and feedback system
   d. The structural system

25. Which one is not a common robot application?
   a. dangerous jobs
   b. decision making jobs
   c. dirty jobs
   d. repetitive jobs
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1 | D |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3 | C |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5 | D |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 7 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8 | B |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 9 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|10 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|11 | D |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|12 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|13 | D |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|14 | B |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|15 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|16 | C |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|17 | B |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|18 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|19 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|20 | C |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|21 | B |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|22 | D |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|23 | A |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|24 | C |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|25 | B |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |