MY SO PRACTICE TEST

DIVISION B - MIDDLE SCHOOL, GRADES 6-9

PRACTICE TEST

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. What is the definition of a robot?
   a. A machine which resembles a human being
   b. Any machine which can follow instructions
   c. A machine capable of carrying out a complex series of actions automatically
   d. A machine which can think for itself, especially if the thought processes are logical

2. Which of the following describes the use of technology or machinery, specifically involving gasses?
   a. Actuation
   b. Carboniation
   c. Hydraulics
   d. Pneumatics

3. The word robot comes from the Czech word "robota" which means..
   a. automated
   b. forced work or labor
   c. human like
   d. scientific life

4. Leonardo da Vinci sketched plans for a humanoid robot in the late_____.
   a. 1100s
   b. 1200s
   c. 1300s
   d. 1400s

5. A rigid covering for the body in some invertebrates but also robots!
   a. Armor
   b. Endoskeleton
   c. Exoskeleton
   d. Hardware

6. What is the study of the mechanical laws relating to the movement or structure of living organisms called?
   a. Bionics
   b. Biomechanics
   c. Ergonomics
   d. Ergometrics

7. The study of mechanical systems that function like living organisms or part of living organisms is called?
   a. Bionics
   b. Biomechanics
   c. Ergonomics
   d. Ergometrics

8. The Military are researching Exoskeletons which are controlled by what?
   a. Artificial intelligence
   b. An on board computer which is pre-programmed
   c. Batteries
   d. Signals from the brain

9. Which of the following describes the use of technology or machinery, specifically involving liquids?
   a. Aquatics
   b. Carbonation
   c. Hydraulics
   d. Pneumatics

10. The branch of technology that deals with dimensions of microscopic proportion, is known as?
    a. Micromachinery
    b. Microtechnology
    c. Nanotechnology
    d. Robotics

11. The study of the mechanical laws relating to the movement or structure of living organisms, is called
    a. Bionics
    b. Biomechanics
    c. Biometrics
    d. Biotechnology

12. In Robotics, what is meant by an Android?
    a. A human with a robot like appearance
    b. A robot with a human like appearance
    c. A software program used to control a robot
    d. A type of operating system

13. If a robot's output is typically carried out by "actuators", what input devices are found on a robot?
   a. Google Glasses
   b. Keypads
   c. Sensors
   d. VR Headsets

14. If there is a mistake or problem in the computer program, there is a _____
   a. bug
   b. debug
   c. frustrate
   d. persist

15. Conditionals are
   a. any valid unit of code that resolves to a value
   b. any valid udit of code that resolves the problem
   c. a single image within an animation
   d. statements that only run under certain conditions

16. What type of test is most similar to binary?
   a. an essay test
   b. fill in the blank
   c. multiple choice
   d. true or false

17. What is the action of doing something over and over again called?
   a. bug
   b. loop
   c. opening
   d. process

18. A piece of code that can be called over and over again
   a. For Loop
   b. Function
   c. Parameter
   d. Process

19. _____ is the process of finding errors and fixing them within a program.
   a. Compiling
   b. Debugging
   c. Executing
   d. Scanning

20. A loop that never ends is referred to as a(n)_____
   a. For loop
   b. Infinite loop
   c. Recursive loop
   d. While loop

21. Which of the following is not a required part of a for loop??
    a. Condition
    b. Increment
    c. Initialization
    d. Variable

22. Which command will stop an infinite loop?
    a. Alt - C
    b. Ctrl - C
    c. Esc
    d. Shift - C

23. Jay is considering adding a repetition statement within his Java programming final project. Jay is unsure of the number of times each loop needs to execute. Analyze the conditional statements below and select which statement best fits the need identified by Jay within his programming.
    a. For loop
    b. If-Else
    c. Switch statement
    d. While loop

24. Sal needs to execute a section of code ten times within a program. Compare the selection structures below and select which one meets the needs identified.
    a. For
    b. If
    c. If-Else
    d. While

25. During program development, software requirements specify
    a. How the program will accomplish the task
    b. How to divide the task into subtasks
    c. How to test the program when it is done
    d. What the task is that the program must perform

1. **C**
2. **D**
3. **B**
4. **D**
5. **C**
6. **B**
7. **A**
8. **D**
9. **C**
10. **C**
11. **B**
12. **B**
13. **C**
14. **A**

15. **D**
16. **D**
17. **B**
18. **B**
19. **B**
20. **B**
21. **D**
22. **B**
23. **D**
24. **A**
25. **D**