

# Internet of things

## Test 4

Name:

MM: 50 | Time: 45min

- 1. This device allows you to prototype your project without having to permanently solder the circuit together**  
(a) Crumboard (b) Printed circuit board (c) Sliceboard (d) Breadboard
- 2. Arduino program called as**  
(a) Cryptography (b) Compiled code (c) Sketch (d) None of these
- 3. Which command is the 9th pin on Arduino set as output?**  
(a) int sensorPin=9 (b) int sensorValue=9 (c) pinMode(9, OUTPUT); (d) digitalWrite(9, HIGH);
- 4. Fading technique used\_\_\_\_\_pin in Arduino.**  
(a) A2 (b) D2 (c) 5V (d) PWM
- 5. What does GPIO stands for**  
(a) General Purpose Input Output (b) Global purpose Input output (c) General Purpose Inset outset (d) None of these
- 6. Arduino uno have \_\_\_\_ size of program memory :**  
(a) 10 KB (b) 4KB (c) 16 KB (d) None of these
- 7. Clock Speed of Arduino UNO is**  
(a) 16 MHz (b) 12 MHz (c) 18MHz (d) 14MHz
- 8. What will happen if we supply a voltage of 25V to the IR sensor?**  
(a) Damage is caused (b) Sensor will work fine (c) Sensor will work fast (d) Sensor will work more accurate
- 9. Arduino IDE written in?**  
(a) Python (b) HTML (c) C/C++ (d) Assembly
- 10. Which Function is used for PWM pin in Arduino?**  
(a) digitalWrite() (b) Serial.print() (c) analogWrite() (d) pinMode()
- 11. Microcontroller used in Arduino UNO**  
(a) ATmega228P (b) ATmega320U (c) ATmega328P (d) ATmega220U
- 12. Digital value is converted to an analog signal by using**  
(a) ADC (b) DAC (c) pinMode() (d) None of these
- 13. Type of circuit board which can be used for extension of capabilities of Arduino board**  
(a) Bread Board (b) Shield (c) Actuator (d) Microprocessor
- 14. Which command used to print message on second line in LCD?**  
(a) lcd.setCursor(0,0); (b) lcd.setCursor(0,0); (c) lcd.grtcursor(0,1); (d) lcd.setCursor (1,0);
- 15. What is the function name for turn on led in Arduino?**  
(a) digitalWrite() (b) digitalRead() (c) Digitalwrite() (d) Digitalread()
- 16. How many times does the setup() function run on every startup of the Arduino System?**  
(a) Infinite (b) 1 (c) 2 (d) 3
- 17. Arduino board also called as**  
(a) Microprocessor (b) Timer (c) Oscillator (d) Microcontroller
- 18. To ground the circuit which pin is used**  
(a) PIN (b) Tx (c) GND (d) RESET
- 19. How many analog pins in Arduino UNO**  
(a) 14 (b) 5 (c) 10 (d) 6
- 20. PWM Full form?**  
(a) Pulse Wide modulation (b) Pulse width modulation (c) Plain width modulation (d) None of these
- 21. HC 05 is:**  
(a) Bluetooth module (b) LCD module (c) Gas sensor (d) Temperature sensor
- 22. Some of the compile errors are**  
(a) Missing semicolons or parentheses (b) Missing variable initialization (c) Misspellings & wrong capitalizations (d) All of the above
- 23. The Setup() Defines**  
(a) Pin functionality using the pinMode function (b) Initial state of pins (c) Initialize classes and variables (d) All of the above
- 24. Almost all statement written in arduino language must end with a**  
(a) comma (b) colon (c) asterisk (d) Semi colon
- 25. To easily interface add-on modules with Arduino we can use**  
(a) General PCB (b) Connectivity circuit boards (c) Arduino shields (d) Other high-end Arduino boards
- 26. The command which is used to display the characters in the serial monitor is**  
(a) Serial (b) Serial.type (c) Serial.println (d) Serial.printing
- 27. How many arguments does the analogRead() function have?**  
(a) 1 (b) 2 (c) 3 (d) 4
- 28. Analog read method in Arduino UNO returns value\_\_\_\_\_ range.**

- (a) 50-60 (b) 0-1023 (c) 0-255 (d) None of these
- 29. Arduino is an**  
 (a) Open source programmable circuit board (b) proprietary programmable circuit board (c) Open source non-programmable circuit board (d) None of these
- 30. Bootloader used in Arduino Uno**  
 (a) VHE bootloader (b) ICP bootloader (c) Optiboot bootloader (d) All of these
- 31. Types of jumper wire:**  
 (a) 1 (b) 2 (c) 3 (d) 4
- 32. Full form of LED**  
 (a) Liquid emitting diode (b) Liquid emitting disk (c) Light emitting dipole (d) Light emitting diode
- 33. Which communication protocol is commonly used for communication between Arduino and other devices?**  
 (a) HDMI (b) USB (c) I2C (d) VGA
- 34. Which pin on an Arduino board is used for serial communication with a computer?**  
 (a) Rx Tx (b) D5 D6 (c) A4 A5 (d) All of these
- 35. What is the function of the delay() function in Arduino programming?**  
 (a) To pause the execution of the program for a specified time (b) To measure the elapsed time since program start (c) To synchronize multiple Arduinos in a network (d) To control the brightness of LEDs
- 36. Which statement best describes the purpose of a breadboard in Arduino prototyping?**  
 (a) To provide power to the Arduino board (b) To mount and connect electronic components temporarily (c) To program the Arduino board wirelessly (d) To debug and monitor serial communications
- 37. What is the primary function of a potentiometer in an Arduino project?**  
 (a) To measure temperature (b) To generate random numbers (c) To adjust analog input voltage (d) To transmit data wirelessly
- 38. Which Arduino board is based on the ATtiny microcontroller and is suitable for small, low-power projects?**  
 (a) Arduino Uno (b) Arduino Nano (c) Arduino Lilypad (d) Arduino Leonardo
- 39. What is the function of the millis() function in Arduino programming?**  
 (a) To measure the current consumption of the Arduino (b) To generate random time delays (c) To obtain the number of milliseconds since the Arduino board began running the current program (d) To synchronize multiple Arduino boards
- 40. What is the primary function of the Serial.begin() function in Arduino?**  
 (a) To initialize the Arduino board (b) To begin serial communication at a specified baud rate (c) To start the loop() function (d) To configure analog input pins
- 41. Which Arduino function is used to send data over the Serial port?**  
 (a) Serial.begin() (b) Serial.print() (c) Serial.read() (d) Serial.available()
- 42. Which Arduino board is specifically designed for wearable electronics and is sewable onto fabric?**  
 (a) Arduino Uno (b) Arduino Nano (c) Arduino Lilypad (d) Arduino Mega
- 43. Which statement best describes the function of a resistor in an Arduino circuit?**  
 (a) It stores electrical charge temporarily (b) It regulates the voltage input to the Arduino (c) It amplifies or switches electronic signals (d) It limits the flow of current in the circuit
- 44. Which Arduino function is used to set the mode (input or output) of a specific pin?**  
 (a) pinMode() (b) digitalWrite() (c) analogRead() (d) analogWrite()
- 45. What is the primary function of the LiquidCrystal.h library in Arduino programming?**  
 (a) To interface with LCD display (b) To manage communication with SPI devices (c) To control stepper motors (d) To generate PWM signals
- 46. Which statement best describes the function of a phototransistor in an Arduino circuit?**  
 (a) It stores electrical charge temporarily (b) It regulates the voltage input to the Arduino (c) It detects light and converts it into an electrical signal (d) It amplifies or switches electronic signals
- 47. What does p refer to in ATmega328p?**  
 (a) Programmable on chip (b) Power-Pico (c) Production (d) Pico-Power
- 48. What is the correct execution process of an Arduino code?**  
 (a) Editor->Preprocessor->Compiler (b) Preprocessor->Editor->Compiler (c) Compiler->Preprocessor->Editor (d) Editor->Compiler->Preprocessor
- 49. The 5V pin of Arduino supplies \_\_\_\_ volts of power.**  
 (a) 2.5 (b) 10 (c) 5 (d) 0
- 50. Every Arduino board has a \_\_\_\_ Mhz crystal oscillator.**  
 (a) 12 (b) 14 (c) 16 (d) 20