



اسم الطالب: رقم القيد: المجموعة:

*أجب عن جميع الأسئلة:

1. What does GPIO stand for?

- A. General Purpose Inner Outer Propeller
- B. General Purpose Input Output Pins
- C. General Purpose Interested Old People
- D. General Purpose Input Output Processor

2. _____ are pre built circuit boards that fit on top of Android.

- A. Sensor
- B. Data types
- C. Breadboard
- D. Shields

3. What license is Arduino distributed under?

- A. Proprietary with GNU GPL Ambient user interface
- B. Proprietary
- C. Shareware
- D. LGPL or GPL license

4. What does IDE stand for?

- A. In Deep Environment
- B. Integrated Development Environment
- C. Internal Deep Escape
- D. IDE

5. Which board is first to use microcontroller with in build USB?

- A. LilyPad
- B. UNO
- C. RedBoard
- D. Leonardo

اسم الطالب: رقم القيد المجموعة:

6. A program written with the IDE for Arduino is called _____

- A. IDE source
- B. Sketch
- C. Cryptography
- D. Source code

7. _____ board allows sewn into clothing.

- A. UNO
- B. RedBoard
- C. LilyPad
- D. Mega

8. A function is a series of programming statements that can be called by name. Which command is called once when the program starts:

- A. loop()
- B. setup()
- C. (output)
- D. (input)

9. It starts with a /* and continues until a */ What does this do?

- A. Loads a sketch
- B. Makes comments
- C. Compiles quicker
- D. Makes stars appear

10. How many types of arduinos do we have?

- a) 5
- b) 6
- c) 8
- d) 6

11. What is wrong with the following

/*Turns on an LED on for one second, then off for one second, repeatedly. This example code is in the public domain.*/

```
int led = 13;
void setup() {
  pinMode(led, INPUT);
}
void loop() {
  digitalWrite(led, HIGH);
  delay(1000);
  digitalWrite(led, LOW);
  delay(1000);
}
```

- A. All the code
- B. Void
- C. High and Low
- D. Low and High

12. What is the microcontroller used in Arduino UNO?

- a) ATmega328p
- b) ATmega2560
- c) ATmega32114
- d) AT91SAM3x8E

13. What does p refer to in ATmega328p?

- a) Production
- b) Pico-Power
- c) Power-Pico
- d) Programmable on chip

14. Arduino shields are also called as _____

- a) Extra peripherals
- b) Add on modules
- c) Connectivity modules
- d) Another Arduinos

15. What is the default bootloader of the Arduino UNO?

- a) Optiboot bootloader
- b) AIR-boot



اسم الطالب: رقم القيد المجموعة:

- c) Bare box
- d) GAG

16. Does the level shifter converts the voltage levels between RS-232 and transistor-transistor logic.

- a) True
- b) False

17. Which is the software or a programming language used for controlling of Arduino?

- a) Assembly Language
- b) C Languages
- c) JAVA
- d) Any Language

18. Do Arduino provides IDE Environment?

- a) True
- b) False

19. A program written with the IDE for Arduino is called _____

- a) IDE source
- b) Sketch
- c) Cryptography
- d) Source code

20. Arduino IDE consists of 2 functions. What are they?

- a) Build() and loop()
- b) Setup() and build()
- c) Setup() and loop()
- d) Loop() and build() and setup()

21. How many digital pins are there on the UNO board?

- a) 14
- b) 12
- c) 16
- d) 20

22. How many analog pins are used in Arduino Mega board?

- a) 16
- b) 14
- c) 12
- d) 8

23. Which board is first to use microcontroller within build USB?

- a) LilyPad
- b) UNO
- c) RedBoard
- d) Leonardo



اسم الطالب: رقم القيد المجموعة:

24. _____ are pre built circuit boards that fit on top of Android.

- a) Sensor
- b) Data types
- c) Breadboard
- d) Shields

25. A function is a series of programming statements that can be called by name. Which command is called once when the program starts:

- a) loop()
- b) setup()
- c) (output)

26. What is the range of numbers you can store in a variable of type byte?

- A. 0 to 255
- B. -128 to 127
- C. 0 to 9
- D. 0 to 65535

27. What does this line of code do? `temp = !temp;`

- A. Sets the variable temp to its logical compliment.
- B. Converts the variable temp to a boolean value.
- C. The line is not a legal Arduino statement.
- D. None of the above

28. What is the value of foo when these lines of code are executed? `foo = 12; foo = foo % 10;`

- A. 1
- B. 2
- C. 1.2
- D. None of the above

29. What does the word static do in this line of code? `static int temperature = 0;`



اسم الطالب: رقم القيد المجموعة:

- A. The variable's value is retained the next time it is accessed.
- B. The value of temperature will not be allowed to change.
- C. The variable will be reset to 0 each time loop() runs.
- D. The variable will have a greater range than a normal int
- E. The line is not a legal Arduino program statement.
- F. None of the above
30. Which language features are NOT present in the normal Arduino environment? (Check all that apply)
- A. Inheritance
- B. Standard Template Library
- C. Exceptions
- D. Operator overloading
- E. Floating Point math operations
- F. Object Oriented Programming
- G. Pointers
- H. Files
31. How many elements are in the array? `char textMessage[] = "Have Fun with Arduino";`
- A. 20
- B. 21
- C. 22
- D. The statement is not a legal Arduino program statement.
- E. None of the above
32. To subtract 1 from a variable counter, you can use the following statement(s) (check all that apply)

القسم: التحكم الالى
أسئلة الامتحان النهائي لمادة: متحكّمات دقيقة
لطلبة الفصل: السابع
رمز المادة: CT000 التاريخ: 2020/03/08
اسم الأستاذ: وليد شنب الزمن: ساعتان
للفصل الدراسي: خريف 2020

طرابلس

كلية التقنية الالكترونية
College of Electronic Technology - Tripoli



اسم الطالب: رقم القيد: المجموعة:

- A. Counter - 1;
- B. Counter--;
- C. --counter;
- D. Counter -= 1;
- E. Decrement(counter);
- F. Counter = counter -

33. What is the index of the letter F in this array? `char textMessage[] = "Have Fun with Arduino";`

- A. 5
- B. 6
- C. 4
- D. 'F'
- E. &textMessage+5

GOOD LUCK

Eng. Walid T. Shanab