IoT Workshop Assessment

(SABUDH FOUNDATION)

Choose the correct options:

Q1 Identify analog sensors onboard kit

1. BME 280
2. LDR
3. Capacitive touch
4. Push buttons

Q2 Identify different actuators from following

1. OLED
2. RELAY
3. LDR
4. Motor Driver

Q3 In the case of BME, OLED and ESP32 configured in I2C communication they act as

1. BME & OLED act as slave and esp32 as master
2. BME & OLED act as master and esp32 as slave
3. oled & esp 32 act as master and BME as slave
4. all act as master devices

Q4 Which of the following is true in I2C communication protocol ?

1. There can be one master and multiple slave devices
2. There can be one master and one slave devices
3. There can be multiple masters and multiple slaves devices
4. There can be only 1 master and multiple slaves devices

Q5 Esp 32 is based on which architecture

1. AVR
2. ARM
3. X86
4. None of above

Q6 Communication protocol used in serial monitor

1. SPI
2. I2C
3. UART
4. None of above

Q7 what is the default resolution of ADC in ESP32

1. 10 bit
2. 12 bit
3. 8 bit
4. 16 bit

Q8 SSD1306 OLED Displays have what different types of communication interfaces

1. UART
2. 3 or 4 wire SPI
3. I2C
4. One wire

Q9 display.display(); is used

1. to clear display buffer
2. to display image or characters on oled
3. after configuring oled display
4. before display.clearDisplay();

Q10 In map(a, b, c, d, e), what a,b,c,d and e refer to

1. a = value to be mapped ,b = lower bound of current range , c = lower bound of expected range , d = upper bound of current range,e =upper bound of expected range
2. a = value to be mapped ,b = upper bound of current range , c = upper bound of expected range , d = lower bound of current range,e =lower bound of expected range
3. a = value to be mapped ,b = , c =upper bound of current range , d = lower bound of expected range ,e =upper bound of expected range
4. none of above

Q11 In AP mode which of the following is true

1. devices can connect to esp32
2. esp32 connects to an access point
3. esp32 can connect to station point
4. none of above

Q12 How many max number of simultaneous clients can connect with esp32

1. One
2. Two

IoT Workshop Assessment

(SABUDH FOUNDATION)

3. Three
4. Four

Q13 WiFi.softAP(const char* ssid, const char* password, int channel, int ssid_hidden, int max_connection)
What would be the value of parameter "channel" in case above

1. channel = 1~13
2. channel = 0~13
3. channel = 1~12
4. None of the above

Q14 while (WiFi.status() != WL_CONNECTED)
{
delay(100);
Serial.print(".");
}
Which of the following is correct

1. if wifi credentials are wrong, serial monitor will printout (.) indefinitely
2. In case it doesn't connect with wifi the first time it will try to reconnect after 1 second.
3. if WiFi.status() returns WL_CONNECT_FAILED it will exit loop
4. if WiFi.status() returns WL_CONNECTED it will exit loop

Q15 Which of the following is default http?

1. 443
2. 83
3. 80
4. 60

Q16 BME 280 is an example of

1. Weather station
2. analog sensor
3. digital sensor
4. None of the above

Q17 UART communication

1. is one wire protocol
2. Is two wire protocol
3. uses I2C
4. none of the above

Q18 Mesh networking is an example of

1. Wired network
2. ad hoc network
3. wider area network
4. local network topology

Q19 In order to respond to the HTTP request, we use the send method.
server.send(a, b, c);
where a , b, c refers to

1. a = handlerFunction , b = response code , c = query
2. a = response code , b = response type, c = response resource
3. a = response code, b = resource type, c = response resource
4. a = response code , b = response handler , c = resource

Q20 Can both Wifi And BLE be used in esp32 at same time? Explain reason

1. Yes
2. No

_____

_____

_____

_____

_____

_____

_____

_____