Assignment 4
Due on 2020-10-30, 23:59:59

1. In a telephone line, a pulse has a bandwidth of 500 Hz and an amplitude of 1.5 millivolts. Find the peak-to-peak value of the signal.

2. Which of the following are present in the SIM900A Module board?
   - [ ] 5V power supply
   - [ ] UART interface
   - [ ] USB connector
   - [ ] SPI interface
   - [ ] RF module

3. Which of the following is true for the SIM900A Module board?
   - [ ] It has a serial port with a baud rate of 115200
   - [ ] It has a SPI interface that can be used to generate single-bit output signals.
   - [ ] It has a USB connector for power.
   - [ ] It has an SPI interface for power.

4. Which of the following is present in the GSM SIM card?
   - [ ] NAND flash memory
   - [ ] EMMC flash memory
   - [ ] SPI interface
   - [ ] UART interface

5. What is the purpose of the function `write команду`?
   - [ ] Send a text message
   - [ ] Send a binary data
   - [ ] Send a command
   - [ ] Send a binary data

6. What does the following code segment for the SIM900A Module board do?

```java
void setup()
{
  Serial.begin(9600);
}

void loop()
{
  digitalWrite(13, HIGH);
  delay(1000);
  digitalWrite(13, LOW);
  delay(1000);

  // Send AT command to read SIM information
  Serial.write("AT+CSIM\r\n");
  Serial.write("OK\r\n");
  Serial.write("OK\r\n");
}
```

7. What does the statement `digitalWrite(13, HIGH)` do?
   - [ ] Turn on the LED
   - [ ] Reset the microcontroller
   - [ ] Send a command to the SIM900A Module board
   - [ ] Send a data to the SIM900A Module board

8. Which of the following statements is true for the SPI interface?
   - [ ] It is a bus with a 32-bit data width
   - [ ] It is a bus with a 16-bit data width
   - [ ] It is a bus with a 8-bit data width
   - [ ] It is a bus with a 4-bit data width