

## **GPIO QUESTIONS**

1. What is the purpose of GPIOA MODER-register ?
2. How many pins in the each GPIO 's?
3. What are modes used for the GPIO register?
4. Mention the different register that can be used along with GPIO ?
5. What are the 2 types of alternate functions used in GPIO?
7. What are the input and output registers used in GPIO?
6. What is the use of BSRR register in GPIO register?
8. How to enable all the GPIO ports in GPIO?
9. What is the use of ODR and IDR register in GPIO registers?
10. How many GPIO ports are typically available in STM32 microcontrollers?

## **USART QUESTIONS**

- 1.What is the use of data register in USART?
- 2.How many USART modules are typically available in STM32 microcontrollers?
- 3.What are the pins are used in USART1 for transmitter and receiver?
4. What are all the registers used in USART register?
5. Which register is used to read the data from the USART?
6. How do you set the baud rate for USART communication in STM32 microcontrollers?
7. What are the different modes of operation supported by the USART in STM32 microcontrollers?
8. What is the use of BRR register in USART register?
9. Which register is used for enable TX and RX pin USART ?
10. Which register is used for transmitting data and receiving data in USART?

## **INTERRUPT QUESTIONS**

1. Which control register is used in interrupt?
2. What are all external interrupt register present in interrupt?
3. Why SYS CFG register is used for interrupt?
4. How many register present in the IPR register?
5. Why function pointer is used for interrupt?
6. How to enable the external interrupt for PC13 pin?
7. How to unmask the EXIT13 (external interrupt 13)?
8. Which register is used to trigger the interrupt?
9. What is usage of pending register in interrupt?
10. Which register is used to set PC13 pin as input?

## **SYSTIC TIMER**

1. Why we are not using GPIO pins in the SYSTIC timers?
2. What are the register used to configure the systic timers?
3. Which register is used to intialize the value in systic timer?
4. Which register is used to load the value in the systic timer?
5. Why we use countflag in systic timer?
6. How many bits present in the Systic timer?
7. What is the use of systic current value register in Systic timer?
8. How to Enable systick and select internal clk src in systic timer?
9. How to clear the systick current value register in systic timer?
10. Which register is used to enable the systic timer?

## **TIMER**

1. How to calculate the update event in timer?
2. What are all the registers used in timers?
3. Which register is used enable the counter in timers?
4. Why TIM\_CNT register is used in timers?
5. Why we use auto reload register in timers?
6. Which register is used to update interrupt flag?
7. What is the use of timer prescaler register?
8. Which internal clock source used for timer?
9. Which bus we have to enable the timer?
10. What is the purpose of using TIMER instead of systic timer?

## **ADC**

1. Which register is used to enable ADC ?
2. How many channels present in the ADC?
3. What is the purpose of using status register in ADC?
4. Which register is used to Set conversion sequence length to 1?
5. What is the use of sequence register 3 in ADC?
6. Which bus is to Enable clock access to ADC?
7. What is the analog signal frequency range in ADC?
8. Which GPIO port is used for ADC?
9. What is the use of data register in the ADC?
10. Which register is used to enable the first channel in the ADC?