



**Que 2 Short Questions (Attempt any SEVEN)**

**[14]**

- 1 Differentiate: JUMP and CALL.
- 2 Explain Control Transfer Instructions of 8086.
- 3 Explain Function Of Instruction Pointer Register.
- 4 Differentiate: Minimum and Maximum Mode Systems In Terms of 8086 Microprocessor.
- 5 What is the Function of LOCK Signal In 8086?
- 6 What is Interrupt?
- 7 How Many Bytes Are Required To Store The Starting Addresses of ISR Of 8086?
- 8 Enlist Arduino - Like Systems.
- 9 What Are Arduino Add - Ons (Shields)?

**Que 3 [A] Explain Addressing Modes Of 8086 With Necessary Examples.**

**[06]**

**[B] Write on Software Model of 8086 Microprocessor.**

**[06]**

**OR**

**[B] Draw and Explain Architecture of 8086 Microprocessor.**

**[06]**

**Que 4 [A] Give an Account of Minimum Mode Interface Signals of 8086.**

**[06]**

**[B] Explain Hardware Organization of the Memory Address Space of 8086.**

**[06]**

**OR**

**[B] Write a Note on Maximum - Mode Memory Control Signals.**

**[06]**

**Que 5 [A] Write a Detailed Note on Internal Interrupts.**

**[06]**

**[B] Discuss Byte Wide Input Ports Operation Using Isolated I/O In 8086 Microprocessor.**

**[06]**

**OR**

**[B] Discuss Interrupt Instructions.**

**[06]**

**Que 6 [A] What is Arduino? List Its Advantages. Discuss Different Types of Arduino Boards.**

**[06]**

**[B] Enlist Features of ATmega328. Explain Watchdog Timer.**

**[06]**

**OR**

**[B] What is Structure of Arduino Program? Write Code For RGB Mood Lamp Project.**

**[06]**

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