Reg. No. : | | | | | | | | | | |

Question Paper Code: 35405

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fifth Semester

Electronics and Communication Engineering

01UEC505 – MICROPROCESSORS, MICROCONTROLLERS AND APPLICATIONS

(Regulation 2013)

Duration: 1:15hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The number of hardware interrupts that the processor 8085 consists of is

   (a) 1 (b) 3 (c) 5 (d) 7

2. Why is 8085 processor called as 8 bit processor?

   (a) Has 8 bit ALU (b) Has 8 bit Data bus
   (c) None of these (d) Both (a) and (b)

3. Which bus is bidirectional?

   (a) Address bus (b) Control bus
   (c) Data bus (d) None of these

4. The end of a macro can be represented by the directive

   (a) END (b) ENDS (c) ENDM (d) ENDD

5. Programmable peripheral input-output port is other name for

   (a) serial input-output port (b) parallel input-output port
   (c)) serial input port (d) parallel output port

6. In 8086 microprocessor the following has the highest priority among all type interrupts?

(a) NMI (b) DIV 0 (c) TYPE 255 (d) OVER FLOW

7. What is SJMP?

(a) Short Jump (b)Stack Jump
(c)Synchronize Jump (d) State Jump

8. When 8051 wakes up then 0x00 is loaded to which register?

(a) DPTR (b) Stack pointer
(c) PC (d) PSW

9. The configuration in which each LED receives operating current of 8 mA from power supply while the port lines sink the current on each port line is

(a) common port configuration (b) common anode configuration
(c) common cathode configuration (d) none of these

10. The internal schematic of a typical stepper motor has

(a) 1 winding (b) 2 winding
(c) 3 winding (d) 4 winding

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain in detail the addressing modes of 8085 with suitable examples. (8)

12. Enumerate about the architecture of 8086 microprocessor with a block diagram and also explain its functions in detail. (8)

13. Explain with necessary diagrams the operation of 8255 programmable peripheral interface. (8)

14. Describe in detail about 8051 microcontroller memory. (8)

15. With a neat diagram explain the interface of stepper motor with 8051 microcontroller. Also write an ALP to run the motor in both anticlockwise and clockwise direction. (8)