Reg. No. :

Question Paper Code: 41652

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

Fifth Semester

Instrumentation and Control Engineering

14UIC502 - MICROPROCESSORS AND CONTROLLER

(Regulation 2014)

Duration: One hour   Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The purpose of the microprocessor is to control

    (a) memory   (b) switches   (c) processing   (d) tasks

2. The work of EU is

    (a) encoding   (b) decoding   (c) processing   (d) calculations

3. _____is used for serial communication interface.

    (a) 8251   (b) 8055   (c) 8237   (d) 8255

4. _____a subsystem that transfer data between computer components inside a computer or between computer:

    (a) Chip   (b) Register   (c) Processor   (d) Bus

5. The 8051 microcontroller is of ___pin package as a _____ processor.

    (a) 30, 1byte   (b) 20, 1 byte   (c) 40, 8 bit   (d) 40, 8 byte

6. In 8051 which interrupt has highest priority?

     (a) IE1   (b) TF0   (c) IE0   (d) TF1

7. All the functions of the ports of 8255 are achieved by programming the bits of an internal register called

     (a) data bus control   (b) read logic control
     (c) control word register   (d) none of the above

8. Port C of 8255 can function independently as

     (a) input port   (b) output port
     (c) a either input or output ports   (d) both input and output port

9. A complete transfer operation over the BUS, involving the address and a burst of data is called

     (a) Transaction   (b) Transfer   (c) Move   (d) Procedure

10. The PCI BUS has _____ interrupt request lines.

     (a) 6   (b) 1   (c) 4   (d) 3

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11.   Draw and discuss the internal block diagram of 8085 Microprocessor.   (8)

12.   Explain in details the addressing modes for 8085.   (8)

13.   Explain with a neat block diagram the architecture of 8051 microcontroller.   (8)

14.   Brief the salient features of a parallel programmable interface, 8255.   (8)

15.   Give a brief notes on Exemplary applications of each type of embedded system.   (8)

41652