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Question Paper Code: 35062

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

Fifth Semester

Instrumentation and Control Engineering

01UIC502 – MICROPROCESSORS AND CONTROLLER

(Regulation 2013)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

- The purpose of the microprocessor is to control
(a) memory (b) switches (c) processing (d) tasks
- A 4 bit binary code is called
(a) Nibble (b) Word (c) Byte (d) Bit
- _____ is used for serial communication interface.
(a) 8251 (b) 8055 (c) 8237 (d) 8255
- _____ a subsystem that transfer data between computer components inside a computer or between computer:
(a) Chip (b) Register (c) Processor (d) Bus
- 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
- 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

7. In 8051 which interrupt has highest priority?
(a)IE1 (b)TF0 (c)IE0 (d)TF1
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. An embedded system must have
(a) Hard disk (b) Processor and memory
(c) Operating system (d) Processor and input-output unit(s)
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. With a neat diagram discuss in detail about pin diagram of 8085. (8)
12. List different addressing modes of 8085 and discuss them. (8)
13. Discuss in detail about architecture of 8051. (8)
14. With a neat diagram explain in detail about 8085 based traffic light controller. (8)
15. Explain the different types of memory and memory management methods. (8)