



B.TECH DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Fourth Semester

TEXTILE TECHNOLOGY

ECE290: Electronics And Microprocessors For Textile Industry

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. NAND and NOR gates are called
 - a) Dynamic gates
 - b) Basic gates
 - c) Universal gates
 - d) Complementary gates
2. Decade counter is also called
 - a) Mod 5 counter
 - b) Mod 8 counter
 - c) Mod 1 counter
 - d) Mod 10 counter
3. In a microprocessor, the register which is used to hold the address of the next instruction to be executed is called
 - a) Stack register
 - b) ALU
 - c) Accumulator
 - d) Program counter
4. ----- signal in a microprocessor 8085 is used to de-multiplex the address bus and data bus
 - a) SID
 - b) SOD
 - c) ALE
 - d) HOLD
5. MVI A,32 is an example for
 - a) Immediate addressing mode instruction
 - b) In direct addressing mode instruction
 - c) Indexed addressing mode instruction
 - d) Implied addressing mode instruction
6. In what mode all the three ports of 8255 can be used as either input port or output port
 - a) Mode 0
 - b) Mode 1
 - c) Mode 2
 - d) Mode 3
7. 8051 is a _____ Microcontroller
 - a) 4 bit
 - b) 16 bit
 - c) 24 bit
 - d) 8 bit
8. In the microcontroller 8051 the total number of bytes allocated for the RAM memory is

(ii) Discuss about the data transfer and logical instructions of 8085 microprocessor. (4)

(OR)

b) (i) Describe the architecture of 8255 with neat diagram and discuss about the modes of operation of 8255.

24. a) (i) Draw and explain the functional block diagram of 8051 microcontroller.

(OR)

b) (i) Explain the interrupt options and timer functions associated with 8051 microcontroller.

25. a) (i) What is a programmable logic controller? Explain the block diagram of PLC-CPU.

(OR)

b) (i) Explain the different programming methods of PLC. (7)

(ii) Describe any one application of PLC in textile industry. (7)
