

22148

M.E. 2nd Semester (E.C.E.) Examination, May-2015

ELECTRONICS SYSTEM DESIGN

Paper-MEEC-502

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. (a) Design a BCD to Seven Segment Converter. 10
(b) Implement Full-subtractor using 8:1 MUX. 10
2. (a) Design a 4-bit look ahead adder. 10
(b) Given $F = \sum m(2,4,5,6)$ implement $F(L)$ and $F(H)$ with an A-O-I devices. 10
3. (a) Draw and fully label the general model of a sequential finite state machine. 10
(b) Why we need shift registers in digital design ? Explain the various operation modes of shift register. 10
4. (a) What do you mean by multi input system controller design ? Explain in detail MDS diagram. 10
(b) What is PLA ? Draw and explain its structure. Discuss the PLA based design in detail. 10
5. (a) Explain Hazards with examples. 10
(b) What are essential Hazards ? How these Hazards effect the operation of Asynchronous machine ? Discuss. 10

22148-P-2-Q-8(15)

[P.T.O.]

22148

(2)

22148

6. Explain the various MEV approaches to asynchronous circuits in detail. 10
7. (a) Explain wired logic in detail. 10
(b) Using steps and rules for design of asynchronous machines, design a Basic Binary Cell. 10
8. (a) Write a detailed note on electromagnetic interference and electromagnetic compatibility grounding and shielding in digital circuits. 10
(b) What are the timing and frequency considerations for designing system controller ? 10

<http://www.HaryanaPapers.com>

Whatsapp @ 9300930012

Your old paper & get 10/-

पुराने पेपर्स भेजे और 10 रुपये पायें,

Paytm or Google Pay से