Paper code - U239-141 (T1) 1T)
U 239-121 (71) comp

G.R. No.

OCTOBER 2019/ INSEM (T1)
S. Y. B.TECH. (COMPUTER ENGINEERING/INFORMATION TECHNOLOGY)
(SEMESTER – III)
COURSE NAME: ANALOG AND DIGITAL ELECTRONICS
COURSE CODE: CSUA21181/ITUA21181
(PATTERN 2018)
(Marking Scheme)

Time: [1 Hour]   [Max. Marks: 20]

Q 1 a) 1's complement definition [1 mark]
       Example [1 mark]
       2's complement definition [1 mark]
       Example [1 mark]
       Mapping of SOP expression into K-map [1 mark]
       Grouping of cells [1 mark]
       Obtaining minimized expression with logical circuit diagram [2 marks]

Q 1 b) Each table [2 marks] (expected 3 tables)
       Minimized expression [1 mark]
       Finding of PI and EPI [1 mark]

Q 2 a) Truth Table [2 marks]
       Obtaining SOP expression [2 marks]
       Mapping SOP expression   into K-Map [2 marks]
       Drawing Logical Circuit Diagram [2 marks]

Q.2 b) Block diagram of BCD adder with explanation [2 marks]
       Three cases with examples [6 marks]

Q. 3 a) Block diagram [1 mark]
        Truth Table [1.5 marks]
        Excitation Table [1.5 marks]

Q.3 b) Truth Table of S-R flip flop [2 marks]
       Conversion with block diagram of J-K Flip Flop [2 marks]