

Enrollment No: \_\_\_\_\_ Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2017

Subject Name : Digital Electronics

Subject Code : 4CS02DEC1

Branch: M.Sc. C.A. & I.T. (Integrated)

Semester : 2

Date : 06/05/2017

Time : 02:00 To 05:00

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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- Q-1 Attempt the following questions: (14)**
- a) In Boolean Algebra  $A+A'$  = \_\_\_\_\_ 1  
(A) 1  
(B) 0  
(C) -1  
(D) None of Above
- b) In Boolean Algebra  $A.A'$  = \_\_\_\_\_ 1  
(E) 1  
(F) 0  
(G) -1  
(H) None of Above
- c) In Half Adder \_\_\_\_\_ and \_\_\_\_\_ are output. 1  
(A) Sum, Carry  
(B) Borrow, Difference  
(C) Sum, Difference  
(D) None of Above
- d) In Full Subtractor \_\_\_\_\_ and \_\_\_\_\_ are output. 1  
(A) Sum, Carry  
(B) Borrow, Difference  
(C) Sum, Difference  
(D) None of Above
- e) In Half Adder \_\_\_\_\_ number of input and \_\_\_\_\_ number of output. 1  
(A) 2,2  
(B) 2,4  
(C) 2,3  
(D) None of Above



- f) In Boolean Algebra  $A+1=$ \_\_\_\_\_ 1  
 (A) 1  
 (B) 0  
 (C) -1  
 (D) None of Above
- g) \_\_\_\_\_ is Input Device. 1  
 (A) Keyboard  
 (B) Calculator  
 (C) Printer  
 (D) None of Above
- h) \_\_\_\_\_ is Output Device. 1  
 (A) Keyboard  
 (B) Calculator  
 (C) Printer  
 (D) None of Above
- i) In De’Morgan’s law  $(AB)'$ =\_\_\_\_\_ 1  
 (A)  $A'+B'$   
 (B)  $A.B$   
 (C)  $A.B'$   
 (D) None of These
- j) In AND gate if both input are 1 at that time output is 1  
 (A) 1  
 (B) 0  
 (C) -1  
 (D) None of Above
- k) In OR gate if both input are 0 at that time output is 1  
 (A) 1  
 (B) 0  
 (C) -1  
 (D) None of Above
- l) \_\_\_\_\_ is known as inverse gate 1  
 (A) NOT  
 (B) AND  
 (C) OR  
 (D) None of Above
- m) AND gate is a logical \_\_\_\_\_ 1  
 (A) SUBTRACTION  
 (B) DIVISION  
 (C) MULTIPLICATION  
 (D) NONE OF THESE
- n) OR gate is a logical \_\_\_\_\_ 1  
 (A) SUBTRACTION  
 (B) DIVISION  
 (C) MULTIPLICATION  
 (D) NONE OF THESE



