

CS2100 Computer Organisation
AY2021/22 Semester 1
Assignment 3 Answer Sheet

FULL NAME:	
STUDENT ID: E.g., <AxxxxxxxY>	
TUTORIAL GROUP:	

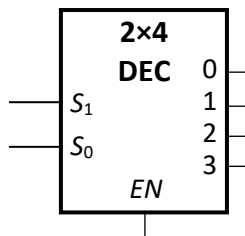
Question 0. Submission instructions (3 marks)

a. Name your file with your student number (eg: AxxxxxxxY>.pdf). (1 mark)	Y / N
b. There is only one PDF file in the submission folder. (1 mark)	Y / N
c. Your submission has your tutorial group number, student number and name. (1 mark)	Y / N

Question 1. MSI Devices (16 marks)

(a) $F(A,B,C,D) = \sum m(3, 5, 7)$

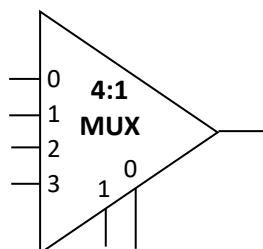
(b) Simplified POS expression for G .



$G =$

(c) $H(A,B,C,D) = \sum m(1, 3, 4, 5, 6, 7, 10, 13, 14, 15)$

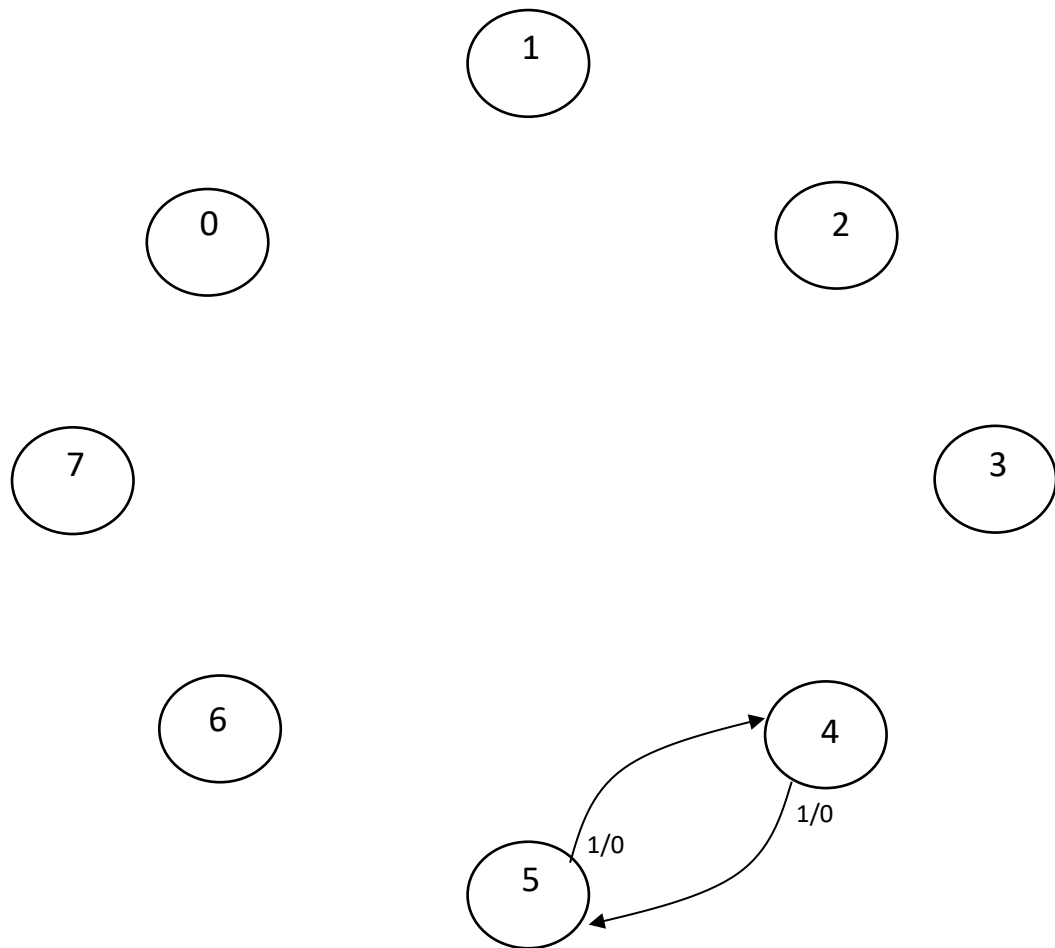
(d) Simplified SOP expressions for J and K .



$J =$

$K =$

Question 2. Sequential Circuit (14 marks)



Question 3. Pipelining (7 marks)

(a) [1 mark]

(b) [2 marks]

(c) [2 marks]

(d) [2 marks]