

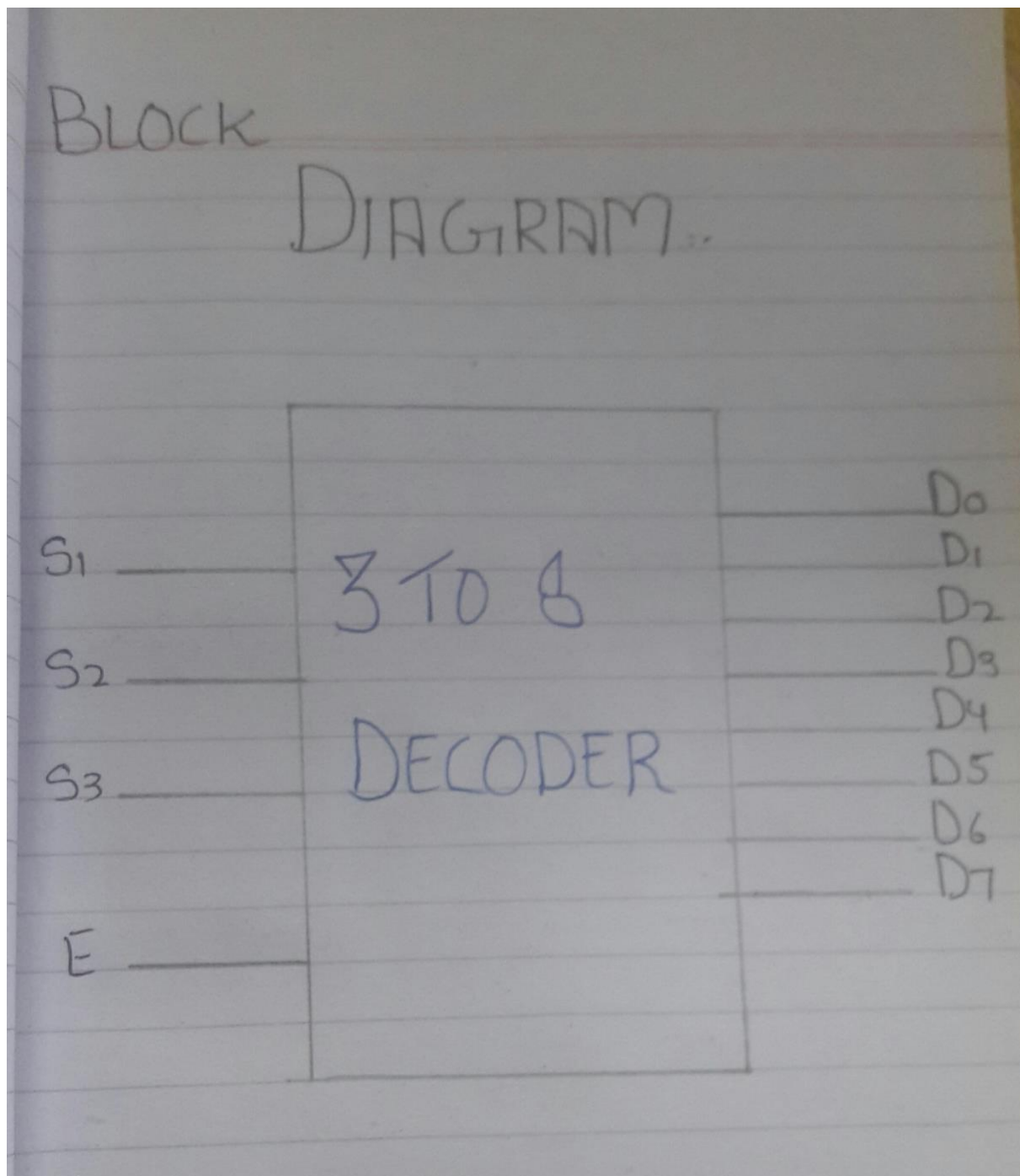
## **DECODER ASSIGNMENT**

**Q1)WHY WE USE DECODER?**

**ANSWER:**

**WE USE DECODER BECAUSE  
IT IS A CIRCUIT THAT CHANGES A  
CODE INTO A SET OF SIGNALS.IT  
ACCEPT ONE OR MORE INPUTS AND  
GENERATE A MULTI BIT OUTPUT.**

**Q2)DRAW A BLOCK DIAGRAM OF 3 TO 8 DECODER?**

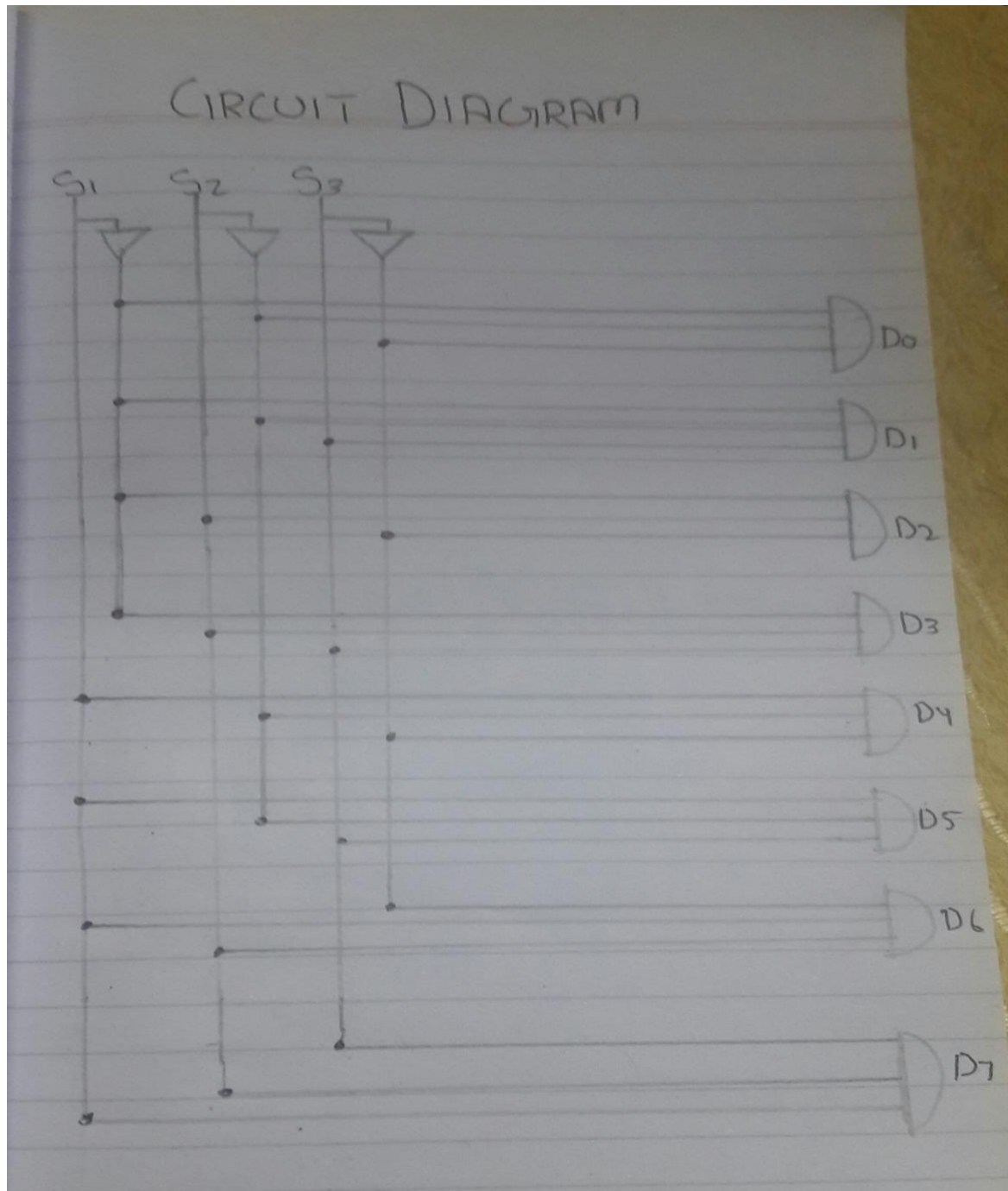


**Q3)DRAW A TRUTH TABLE?**

# TRUTH TABLE

E	INPUT			OUTPUT							
	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>	D <sub>6</sub>	D <sub>7</sub>
0	X	X	X	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0	0	0	0
1	0	0	1	0	1	0	0	0	0	0	0
1	0	1	0	0	0	1	0	0	0	0	0
1	0	1	1	0	0	0	1	0	0	0	0
1	1	0	0	0	0	0	0	1	0	0	0
1	1	0	1	0	0	0	0	0	1	0	0
1	1	1	0	0	0	0	0	0	0	1	0
1	1	1	1	0	0	0	0	0	0	0	1

**Q4)DRAW A CIRCUIT DIAGRAM?**



∞ The end ∞