APPENDIX - 6

ASSEMBLY LANGUAGE PROGRAM FOR SIGNAL 1 (PHASE II)

PROG 100: IN 81; Scan pushbutton 'A'
CMA;
MOV B, A;
LDA 2000;
ORA B; 'OR' With route '1A' flag.
MOV B, A;
IN 80; Scan switch '1'
CMA;
ANA B;
MOV B, A;
LDA 2000;
CMA;
RRC;
MOV C, A;
ANA B;
MOV B, A;
MOV A, C;
RRC;
RRC;
ANA B;
MOV B, A;
LDA 2007;
CMA;
RRC;
ANA B;
ANI 01;
PUSH PSW;
CZ 1NARE; reset if result is '0'
POP PSW;
CNZ 1ARE; set if result is '1'

SUBROUTINES

1NARE; LDA 2000;
ANI FE; reset bit '0'
OUT 82; of 2000 (RAM)
STA 2000;
RET;

1ARE; LDA 2000;
ORA 01; set bit '0' of
OUT 82; 2000 (RAM)
STA 2000;
RET;