The content of Ac in basic computers is Hex A937. & the initial Value of E is 1. Find the content of AC, E, PC, AR and IR in Hex afters the execution of CLA instruction. Repeat the problem also for CMA, CME, INC SNA and SZE instructions. PC = 021 H 1 E OGOACOOOL POO AR A937 021 Initial 150 STYCLAN 0000 022 800 7800 an 129h P'CMA 5668 200 022 7000 a Mour CME 0. A937 022 100 HOOH INC 1 A938 1022 7020 020 SOMS SNA M 1 A937 023 008 7008 SZE A937 7002 022 002 Tresusar. 016. x 8

ACH= (A937)16

= 1010 1001 0011 0111

After CMA instruction,

AC = 0101 0110 1100 1000 = (5608)16

99 An instruction at address 021 has I=0 an opcode of AND instruction, and an

address part = 083. (All no. are in Hex The memory word at address 083 conta

the operand B&FZ and AC = A937. Find the content of PC, AR, DR, AC

and IR after execution of AND, instone

Repeat the problem with 6 more time Starting with opcode for MRI.

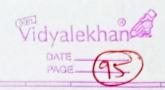
O sobord I = tid I

tuetori act						
The same		PC	AR	DR.	AC	IR
-	Initial	021	-	- 3	A937	1
A Second	AND	022	083	B8F2	A832	0083
-	ADD	022	083	B8F2	6229	1083
-	LDA	022	083	B8F2	B8F2	2083
	STA	022	083	troot	A937	3083
V	BUN	083	683	omo sa	A937	4083
1	BSA	084	0846	mo I	A937	5083
	ISZ	022	083	B&F3	A937	6083
1						, 36K) ·
		,				· A
				NAME OF THE OWNER, WHEN PERSON AND PARTY OF THE OWNER, WHEN PERSON	The second secon	

C.= 3AF+1

Q.10 The content of PC = 3AF (in Hex) The content of mormony address 3AF The content of memoral at address 325 = 09AC The content of memory at address gac = 1) What is the instruction that will be fetched & executed 9 Show the binary operation that will be performed in AC.

Address Operand 1 + SPA 3AF. 932E 328 homogo of 32E 09AC AC = 7EC3 Repeat the poolers with 6 more thr (i) 90= (1001) 200 Atien portonto. I bit = 1 Oprode: 00] ADD instruction 1 ADD 32E - 150 lostent After execution AC + 7EC3 + 8B9F Exol PSSO SANA EAC = SOA62 90 E=1 LDA 022 083 BYF2 B8F2 2083 (ii) Orive the content of register PC; AR, DR, Ac and IR in Hex and Values of F, I and Seq. Counter SC in binary at the end of instruction Pc = 3AF+1. = 3BO.



$$AR = 9AC$$
 $IR = 932E$
 $DR = 8B9F$ $E = 1$
 $AC = 0A62$ $I = 1$ $SC = 0000$