Estd : 1984	KONGU ENGINEERING COLLEGE (Autonomous) PERUNDURAI ERODE - 638 060 Internal Quality Assurance Cell (IQAC)	Improvement Form for Test Assessment Revision - 1 01-06-2018 IQAC

Name of the Faculty, Designation & Dept.	S.Malliga, professor, CSE	Programme & Department of the Students	B.E.CSE
Course Code & Name	18CST32 – Computer Organization	Academic Year, Semester & Section	2019-20, III Sem C Sec

Follow-up Actions for Weak / Failed Candidates in Continuous Assessment Test (CAT)

Sl.No.	Test Name	Percentage of Failure	*Remedial Measures for Weak / Failed candidates (Assignments, Special Session, Special Tests etc..)	Signature of Course Faculty
1.	CAT - I	27.59	Counseled the students, Assignment given on CAT 1 QP	
2.	CAT - II	26.15	Special classes from 23/9/19 to 26/9/19	
3.	CAT – III	23.85	Counselled the students	
4.	End Semester	24.61	-	

Course Faculty 17/12/19

Course Coordinator 17/12/19

Year Coordinator 17/12/19

Statements / Suggestions - by HOD about measures taken.

1. .....

2. .....

HOD 19/12

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* Course teachers should decide the remedial measures for individual candidate's based on the performance in the answer sheet /weak areas. These activities can be conducted and recorded during 8th hour/ Saturdays. Course teacher should maintain corresponding necessary documents in their course file with attendance of candidates.
* This form is mandatory for faculty appraisal credits.

CO

18CSR166

CAT1

Assignment

1) -2^{n-1} to $2^{n-1}-1$

2) 0010 1011 (43)

8-bit

32 16 8 4 2 1

1 0 1 0 1 1

8-bit

=43

15

22/8/19

3) n+1

4) (i) Index Addressing mode

(ii) Auto Increament / And Decrement A.m

(iii) Indirect A.m

(iv) Immediate A.m

5) $\text{overflow} = x_{n-1} y_{n-1} \overline{S_{n-1}} + \overline{x_{n-1}}\, \overline{y_{n-1}} S_{n-1}$

XOR GATE is used

0 0 0

0 1 1

1 0 1

1 1 0

6) A = 1111 1010 (-6)

B = 0000 1010 (+10)

1111 1010

0000 0101

0000 0110 (+6)

(-7) 1111 1010

0000 1010

1111111111 11

0 0 0 0 0 0 0 0 0 0 0 0 0 0

11 1 1 1 1 1 1 1 1 1 0 1 0

11 1 1 1 1 1 1 1 1 0 1 0

← 0

← 0

← 0

← 0

1) 1 1 1 1 1 1 1 1 1 1 0 0 0 1 0 0 (-60)

Cross Check

0 0 0 0 0 0 0 0 0 1 1 1 0 1 1

0 0 0 0 0 0 0 0 0 0 1 1 1 1 0

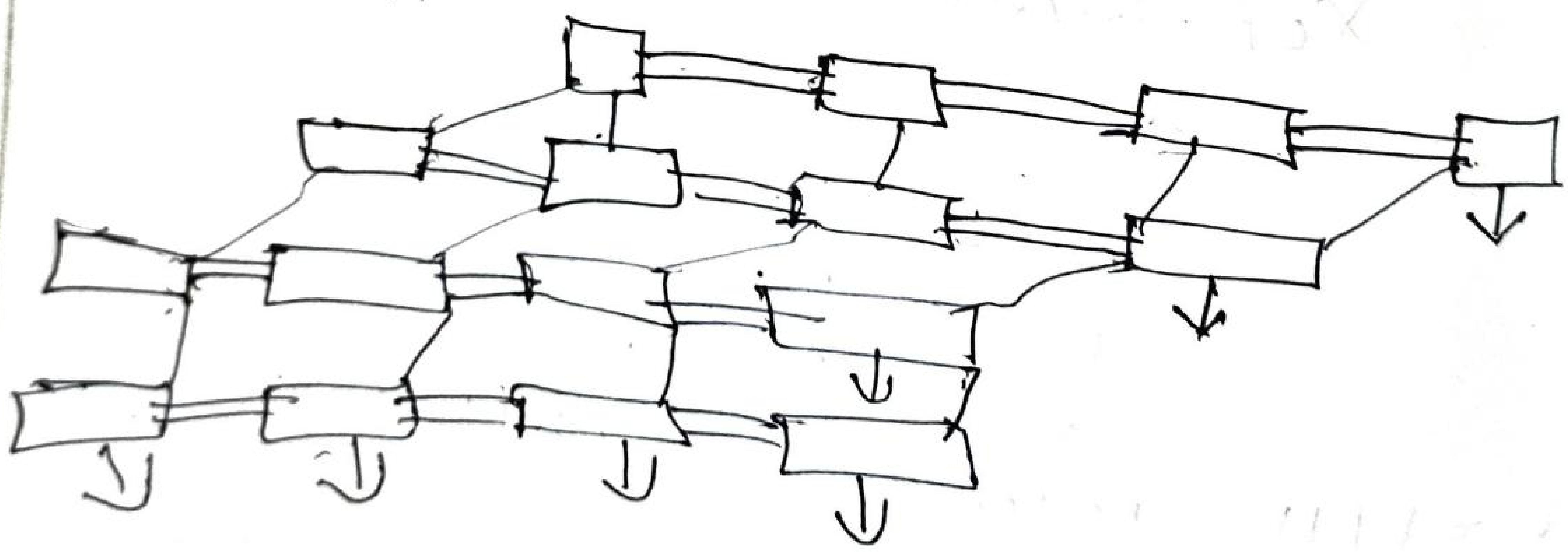
⇒ (+60)

4)

= 4 = 6×3-1

= 18 - 1

= 17



→ worst-case signal propagation delay PATH

8)

0 0 0 0 0 0 0 0 -1

8 addition operation into 1 addition operation

So total No. of operation Reduis = n-1

11y for 100 is => n-1

= 100-1

= 99

9) for 3-2 Reducon, K = 16

L = 1.7 log2 K - 1.7

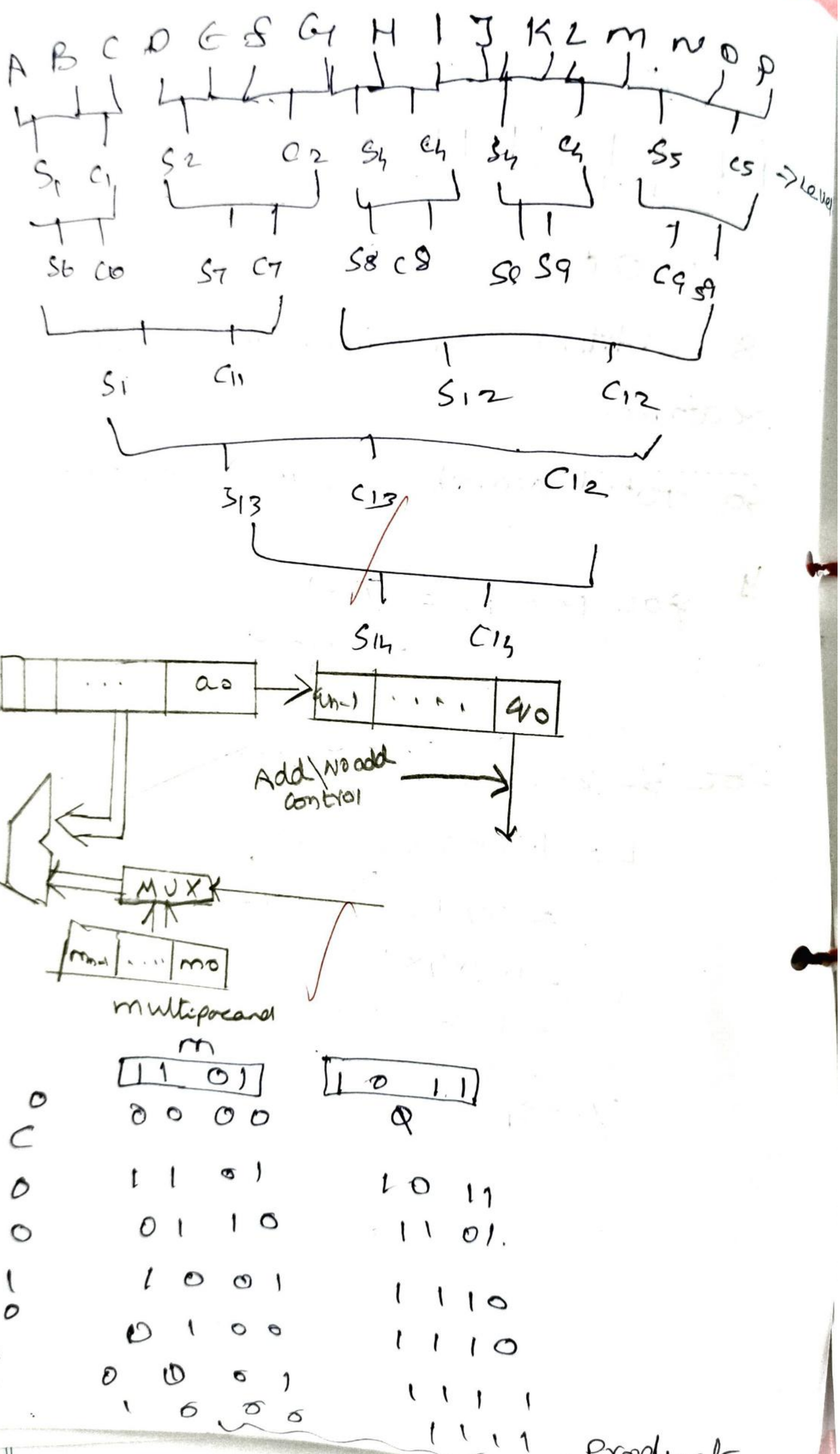
= 1.7 log2 16 - 1.7

= 1.7 x 4 x log2 2 - 1.7

= 6.8 - 1.7

= 5.1

L = 5



-13 => 1 0 0 1 1

0 0 1 0 0

0 1 0 0 0

+4 => 1 0 1 1 1

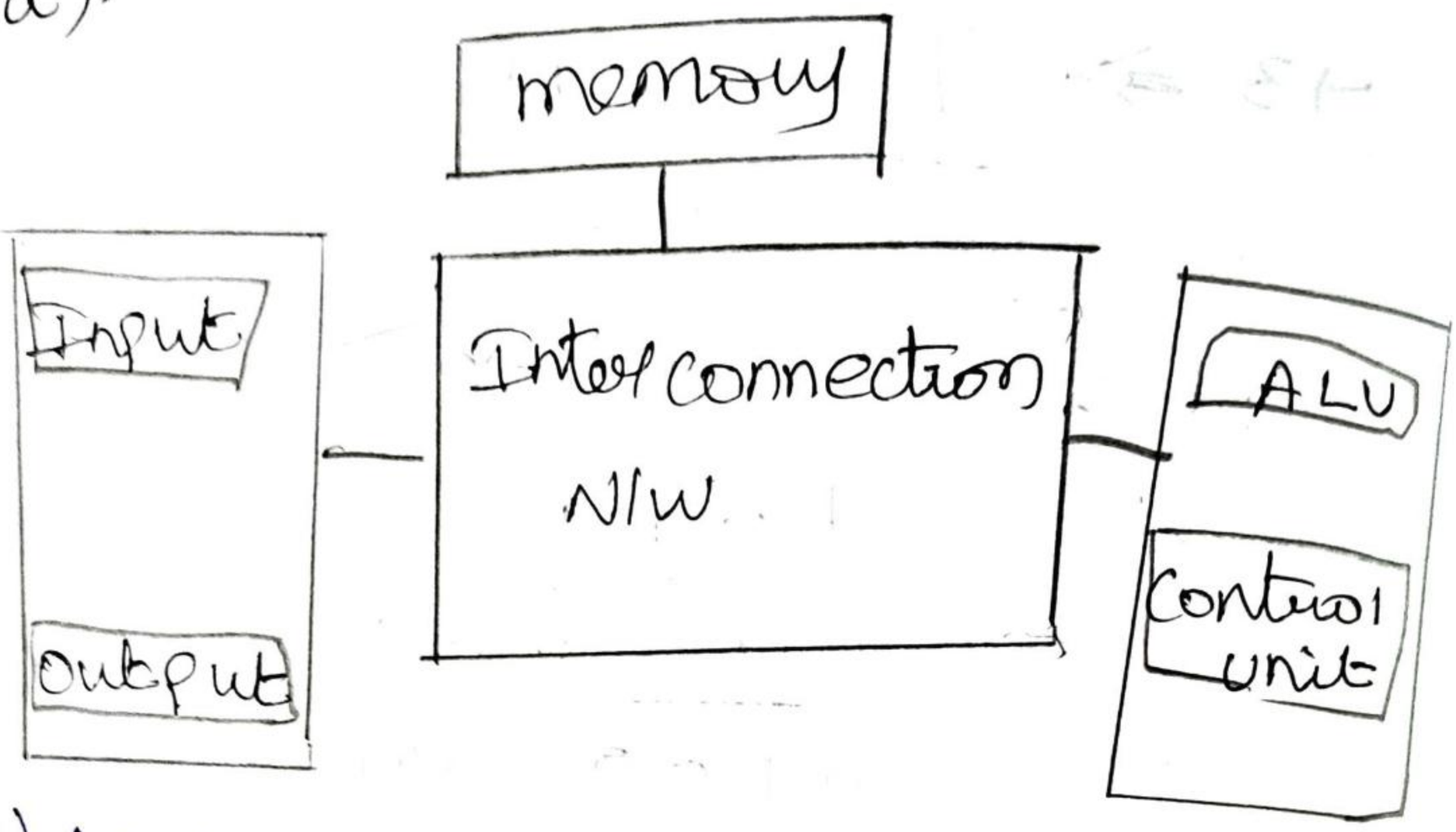
0 1 0 0 0 (-9)

0 1 0 0 1 (+9)

```
        RISC
Load    R2,N        Load the size of the list
clear   R3          Initialize Sum to 0
move    R4,#NUM1    Get address of the first
                    number
Load    R5,(R4)     Get the next number
Add     R3,R3,R5    Add this number to the Sum
Subtract R2,R2,#1   Decrement the counter
Branch if !R2=0 Loop  Branch back if not
                      finished
Store R3,Sum        store the final sum
```

11) a).

a)



1) Input unit

2) memory unit ← primary memory, cache memory, secondary memory

3) ALU

4) Output unit

5) Control unit

6) (i) 7 and 9

+ 7 ⇒	0	0 1 1 1	
(+) + 9 ⇒	0	1 0 0 1	(+)
+16	1	0 0 0 0	overflow

(ii) −13 and +4

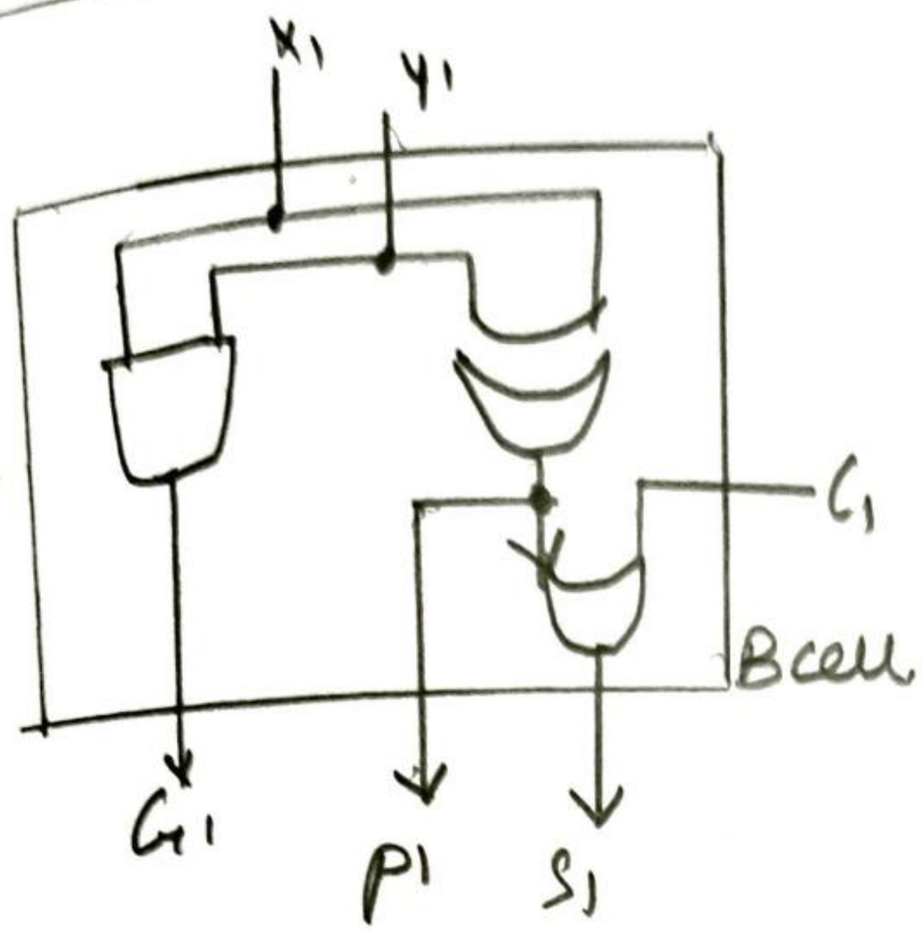
−13 ⇒ +13 ⇒ 0 1 1 0 1

1 0 0 1 9

−1 0 0 1 1 No overflow

LOOP	move R2,N	Load the size of list
Clear	R3	Initialize sum to 0
move	R4,#NUM1	Load address of the first number
Add	R3,(R4)+	Add the next number to sum
Subtract	R2,#1	Decrement the counter
Branch>0	LOOP	Loop back if not finished.
move	R3,SUM	Store the find sum

Loop	move	R2, N	Load the size of the list
Clear			
Clear	R3		Initialize sum to 0
Load	R4, #num1		Get address of the first number
Add	R3, R3, R5		Get the next number
Add	R7, R3, MB4,		Add this number to sum
Subtract	R2, R2, #1		Decrement the counter
Branch IS (R2) > 0	Loop		Branch BACK if not finished
Store	R3, Sum		Store the sum



Let us consider the design of a 4-bit adder, the carries can be implemented as

$$C_4 = G_{10} + P_0 G_0$$

$$C_2 = G_{11} + P_{10} + P_1 P_0 C_0$$

$$C_3 = G_{12} + P_2 G_{11} + P_2 P_1 G_{11} + P_2 P_1 P_0 C_0$$

$$C_4 = G_{13} + P_3 G_{12} + P_3 P_2 G_{11} + P_3 P_1 G_{10} + P_3 P_1 C_0$$

M

```
      1 0 1 1   0 1
  x   1 1 1 1   1 1
  ------------------
          1 0 1 1 0 1
        1 0 1 1 0 1
      1 1 1 1 0 1
    1 0 1 1 0 1
  ------------------
  1 1 0 0 0 0 0 1
  1 1 0 1 1 1 0
  0 0 1 1
  ------------------
  1 1 0 0 0 0
  1 1 1 1 0 0
0 0 1 1 1 0 0 0 0 1 1
        1 1 0 0 1 1 1 1 0 0
        0 0 1
  ------------------
  1 1 0 1 1 0 0 1 1
  0 1 0 0 0 0
  0 0
  ------------------
  0 1 0 0 1 0 1 0 0 0 1 1
  0 0 0 0 1 0 1 0 0 0 1 1
  ------------------
  1 0 1 1 0 0 0 1 0 1 1
  ------------------
```

A = 010111 (+23)

B = 110110 (-10)

```
        0   1   0   1   1   1
           -1  +2  -2
  ------------------
        1 1 1 1 1 0 1 0 0 1 0
        1 1 1 1 1 1 0
  ------------------
      1) 1 1 1 1 0 0 0 1 0 1 0 1 0     c = 250
```

KONGU ENGINEERING COLLEGE,PERUNDURAI,ERODE-638052

SCHOOL OF COMMUNICATION AND COMPUTER SCIENCES

DEPARTMENT OF CSE

CIRCULAR

23.09.2019

Due the large number of failures in the course 14CST32 – Computer organization in Continuous Assessment Test II, it is decided to conduct remedial classes for the failed students.

Venue : IT-F04

Timings : 4.30 pm to 6.30 pm

No. of Days : 3 days

Dates : 24.09.2019 to 26.09.2019

The failures are instructed to attend the classes without fail.

Royal 23/9/19

HoD/CSE

CAT II

Remedial class on 24/9/19

KONGU ENGINEERING COLLEGE, PERUNDURAI- 638 060

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NOMINAL ROLL 2019-20

18 BATCH - CSE C

Class Advisor - TKV & VR

S.No	Roll No	Name of the Student	Remark
1	18CSR121	NAVIN A E	
2	18CSR122	NINISA B A	
3	18CSR123	NIVASHINI.K	
4	18CSR124	NOWNEESH T	
5	18CSR125	OBULI SAI NAREN	
6	18CSR126	OM SURYA PRAKASH A	
7	18CSR127	PALANI KUMAR M	
8	18CSR128	POONGUNDRAN M	
9	18CSR129	PRAANESH P S	
10	18CSR130	PRABU B	
11	18CSR131	PRADEEP C	
12	18CSR132	PRADEEP.A	
13	18CSR133	PRADHOSH.S S	
14	18CSR134	PRAKALYA M	
15	18CSR135	PRAKASH A A	
16	18CSR136	PRAMOD.A.N	
17	18CSR137	PRANESH KUMAR M	
18	18CSR138	PRASANTH S	
19	18CSR139	PRASATH M	
20	18CSR140	PRATHEKSHA K	
21	18CSR141	PRAVEEN C	
22	18CSR142	PRAVEEN M	
23	18CSR143	PRAVEENA.N	
24	18CSR144	PRAVEENKUMAR.M	
25	18CSR145	PRAVIN KUMAR S	
26	18CSR146	PRAVIN RAJ.A	
27	18CSR147	PREETHEES S	
28	18CSR148	PREMKUMAR.K	
29	18CSR149	RAGHUL.S	
30	18CSR150	RAGHUPRIYANTH.R	
31	18CSR151	RAGUNANTHAN S	
32	18CSR152	RAJARAMAN B	
33	18CSR153	RAJHARINI R	
34	18CSR154	RAKESH ROSHAN M	
35	18CSR155	RAKSHITHA.R	
36	18CSR156	RANGARAAJ V	
37	18CSR157	RANKISH.K	
38	18CSR158	RAVIRAAM V S	
39	18CSR159	RAZEEN I	
40	18CSR160	RIMA.P	
41	18CSR161	RITHIK M	
42	18CSR162	ROHINTH T	
43	18CSR163	RUBASHREE.V	
44	18CSR164	SAI HARITHA S	
45	18CSR165	SAKTHI MURUGAVEL B	
46	18CSR166	SAKTHI PRASANNA S	
47	18CSR167	SAKTHI SRI.S.V	
48	18CSR168	SAKTHI.S	
49	18CSR169	SAMIKSHA M	
50	18CSR170	SANJANA SHURUTHY.K	
51	18CSR171	SANJAY S	
52	18CSR172	SANJAY KUMAR D	
53	18CSR173	SANJAY.S	
54	18CSR174	SANJAYAN S	
55	18CSR175	SANJEETH S	
56	18CSR176	SANJUTHA S S	
57	18CSR177	SANMUHAPRIYA S	
58	18CSR178	SARATH KUMAR S	
59	18CSR179	SARVESHWARAN M	

257

249

254

252

253

246 , 17

256 - 13

266 - 12

26/9/19