MES COLLEGE ERUMELY
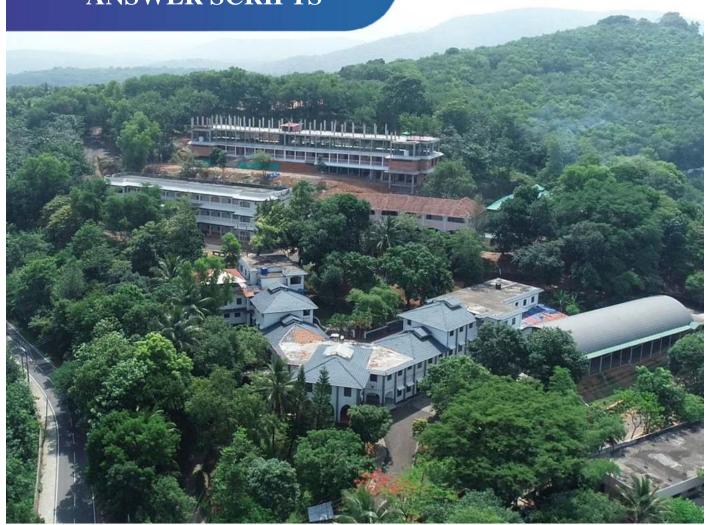
QUESTION PAPER & ANSWER SCRIPTS

MODULE WISE EXAMINATION

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III SEMESTER BCA MODULE WISE EXAMINATION

CA3CRT07 – MICROPROCESSOR AND PC HARDWARE (CORE)

MODULE – I

Time: 45 Minutes   Max Marks: 25

PART – A

(Answer any 5 questions, each question carries 2 marks)

1. What is Microprocessor?
2. What is Data Bus?
3. What is Control Bus?
4. What is memory word?
5. What you mean by machine language?
6. What is registers?
7. What is accumulator?

PART – B

(Answer any 3 questions, each question carries 3 marks)

8. Write a note on classification of microprocessor.
9. Write a short note on Flag registers
10. Write a note on Timing Diagram for opcode Fetch Cycle
11. Write a note on INSTRUCTION CYCLE

PART – C

(Answer any 1 questions, each question carries 6 marks)

12. Explain internal architecture of 8085
13. Explain pin diagram of microprocessor 8085

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III SEMESTER BCA MODULE WISE EXAMINATION

CA3CRT07 – MICROPROCESSOR AND PC HARDWARE (CORE)

MODULE – II

Time: 1 Hour

Max Marks: 25

PART – A

(Answer all questions, each question carries 1 marks)

1. What are the classification of instruction set?
2. Discuss various type of addressing modes in Intel 8085.
3. Write a short note on symbols and abbreviations in used in 8085?
4. Describe MVI M, data?
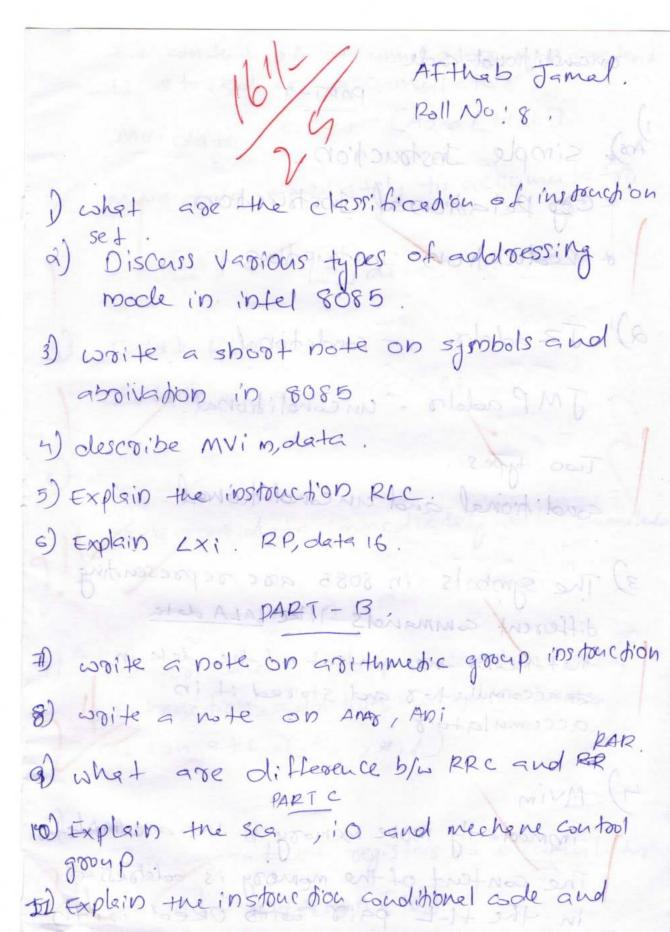5. Explain the instruction RLC?
6. Explain LXI rp, data 16

PART – B

(Answer all questions, each question carries 3 marks)

7. Write a note on arithmetic Group instruction of Intel 8085.
8. Write a short note on ANA r, ANA M, ANI data
9. What are the difference between RRC and RAR

PART – C

(Answer any 1 questions, each question carries 5 marks)

10. Explain stack, I/O and machine Control Group
11. Explain the instructions conditional CALL and unconditional CALL

Afthab Jamal.
Roll No: 8.

1) what are the classification of instruction set.

2) Discuss various types of addressing mode in intel 8085.

3) write a short note on symbols and abbrivation in 8085.

4) describe MVi m, data.

5) Explain the instruction RLC.

6) Explain LXi. RP, data 16.

PART - B

7) write a note on arithmetic group instruction

8) write a note on ANA, ANi

9) what are difference b/w RRC and RAR.

PART C

10) Explain the sca, io and mechane control group.

11) Explain the instruction conditional code and

unconditional code.

1)
Ans) * simple Instruction.

* Relational Instruction.

* Reduction Instruction.

2) JZ addr. - conditional

JMP addr - unconditional.

Two types.
conditional and unconditional.

3) The symbols in 8085 are representing
different commands like ALA data
that means the content of the data in
accumulator and stored it in
accumulator.

4) MVim
immediatly move memory to the accumulator
The content of the memory is addressed
in the H-L pair with ORed with

the content of accumulator and content
is stored in accumulator.

Mvi data. $[A] \leftarrow [A] \leftrightarrow [H-L]$

move data immediately to accumulator.

$[A] \leftarrow [A]$ data.

5) Rotet RLC.

Rotate accumulator Left. $[R]$

6) Lxi

move from data immediately to accumulator

$[A] \longrightarrow [R]$

PART-B

7) The arithmetic group instructions are
substraction, addition, multiplication,
devition etc. $(+, -, *, /)$

8) AMr.

move content of register to accumulator

$[A] \leftarrow [A] \wedge [r]$

Ani

move immediately to accumulator.

$$[A] \longleftarrow [A] \wedge [H-L]$$

9) **RRC** :

Read from the register to circuit.

$$[R] \longleftarrow [C]$$

RAR

Read from accumulator to register.

$$[R] \longleftarrow [A]$$

PART-C

10)

Nithin T.H

Ans

Feed A

D. data
* ~~data~~ transfer set
* Arathametic set
* logical set
* Branch control set
* I/o control Branch controll set
* ~~meshtion~~ meshtion controll and Jemp Set

(d) ~~product addresscary mode~~
~~In directory addresscay mode~~
~~determine addresscay mode~~
~~definir addresing mode~~

product addresing mode
In directory addrecain mode
definir addressing mode
registed addresing mode

7) Arathametic group Instruction

Arathametic group contain instr
action of as increment decrem
ent etc.. Arathametic group

instruction. are ADDR, ADDM,

ADCR, ADAL, ~~~~~~~~~~~~

ADCR, ADUL, ANA, ANA data, ACA d

7) RRC

Rodage register on the array to
read from the register. to the
Circate. [R] ← [C]   the accumulator

RAR

Read from the Accumulator. the
register.

$$[R] ← [A]$$

8) ANA R

ANA r with accumulato

$$[A] ← [A] \wedge [r]$$

ANA m

the control of the memory conter
on is addion by [H-L] pair and
~~ with accumulation and

store from the accumulator.

5)

RLC

rotate accumulator left

$$[An+1] \leftarrow [An]$$

ANI data

AND accumulator data with accumulator
or.

$$[A] \leftarrow A[data]$$

Fatima salim

Roll No: 35.

1. Arithmetic group

logical group

I/o and control group

branched group

Addressing group.

5) RLC

Return to the subroutine if the result has.

carry, if carry status $cs = 1$.

6) ANA $\underline{r}$.

The content of register B transferred to the accumulator, ~~to the de~~, if the result is non zero.

ANM

The content of ~~the register, is transferred to~~ ~~a special address of the~~ accumulator, if the ~~result have minus~~, sign parity $p = 0$.

ANM

The memory location of a specified address of the (H-L) pair, to the content of the accumulator. the result is.

$$[A] \leftarrow (H-L) [M]$$

9. RRC

Return to the subroutine, If the result is has carry, The carry status $c_s = 1$

7. Instruction is a command that is given to the computer to perform an operation on given data. It is Arithmetic group Instructions. It is a content of the register that include addition, substraction, multiplication, division etc.

6. RP, register pair data 16 bit data.

5. RLC - The content of the accumulator rotated left by the content of accumulator. the result is placed in the accumulator itself.

A	0	1	2	3	4	5	6	7