



VINAYAKA MISSION'S RESEARCH FOUNDATION
AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY, PAIYANOOR



MICROPROCESSOR LABORATORY

STANDARD OPERATING PROCEDURE

Name of the Lab./facility	Micro Processor Lab
Name of the equipment	Micro Processor Trainer kit 8085
Purpose	To provide ample opportunity for the students to understand the core technology concepts, principles, procedures and applications of 8085 microprocessor.
Scope	The main objective of this lab course is to gain hands on experience of programming the 8085 microprocessor and also on the interfacing of different peripherals to it.
Responsibility	Faculty – Lab in charge, HOD/EEE

STANDARD OPERATING PROCEDURE FOR MICROPROCESSOR KIT

- Check for any visual problems in the trainer kit like loose connections.
- Before proceeding with the lab experiment, the problem analysis and program outcomes like algorithms, flowcharts, op-code and mnemonics are required.
- Switch ON the power supply of the microprocessor trainer kit.
- Press RESET button.
- Enter address 8000 in the microprocessor kit.
- Press the increment button before entering every instruction.
- To fetch the result, press Execute, Increment and Reset sequentially.
- Give the address of the input, type input data in the corresponding address.
- Press Increment, Execute, Reset sequentially and give output address to view the result.
- Test the result by observing the content of various registers and memory addresses.
- Upon completion of the experiment Turn Off the power supply of the microprocessor trainer.

PRECAUTIONS TO BE FOLLOWED

- Do not touch or disconnect any IC's while the trainer kit is in operation.


- Keys of the key board of the trainer should be handled softly- no hard pressing.

RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment.
- Maintenance Record.


Prepared by


Approved by


Principal
(Authorized by)



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MICROCONTROLLER LABORATORY

STANDARD OPERATING PROCEDURE

Name of the Lab./facility	Micro Processor Lab
Name of the equipment	MicroController Trainer kit 8051
Purpose	To provide ample opportunity for the students to understand the core technology concepts, principles, procedures and applications of 8051 microprocessor.
Scope	The main objective of this lab course is to gain hands on experience of programming the 8051 microprocessor and also on the interfacing of different peripherals to it.
Responsibility	Faculty – Lab in charge, HOD/EEE

STANDARD OPERATING PROCEDURE FOR MICROPROCESSOR KIT

- Check for any visual problems in the trainer kit like loose connections.
- Before proceeding with the lab experiment, the problem analysis and program outcomes like algorithms, flowcharts, op-code and mnemonics are required.
- Switch ON the power supply of the microprocessor trainer kit.
- Press RESET button.
- Enter address 8500 in the microprocessor kit.
- Press the increment button before entering every instruction.
- To fetch the result, press Execute, Increment and Reset sequentially.
- Give the address of the input, type input data in the corresponding address.
- Press Increment, Execute, Reset sequentially and give output address to view the result.
- Test the result by observing the content of various registers and memory addresses.
- Upon completion of the experiment Turn Off the power supply of the microprocessor trainer.

PRECAUTIONS TO BE FOLLOWED

- Do not touch or disconnect any IC's while the trainer kit is in operation.

- Keys of the key board of the trainer should be handled softly- no hard pressing.

RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment.
- Maintenance Record.


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MICROPROCESSOR LABORATORY

STANDARD OPERATING PROCEDURE

Name of the Lab./facility	Micro Processor Lab
Name of the equipment	Micro Processor Trainer kit 8086
Purpose	To provide ample opportunity for the students to understand the core technology concepts, principles, procedures and applications of 8086 microprocessor.
Scope	The main objective of this lab course is to gain hands on experience of programming the 8086 microprocessor and also on the interfacing of different peripherals to it.
Responsibility	Faculty – Lab in charge, HOD/EEE

STANDARD OPERATING PROCEDURE FOR MICROPROCESSOR KIT

- Check for any visual problems in the trainer kit like loose connections.
- Before proceeding with the lab experiment, the problem analysis and program outcomes like algorithms, flowcharts, op-code and mnemonics are required.
- Switch ON the power supply of the microprocessor trainer kit.
- Press RESET button.
- Enter address 8000 in the microprocessor kit.
- Press the increment button before entering every instruction.
- To fetch the result, press Execute, Increment and Reset sequentially.
- Give the address of the input, type input data in the corresponding address.
- Press Increment, Execute, Reset sequentially and give output address to view the result.
- Test the result by observing the content of various registers and memory addresses.
- Upon completion of the experiment Turn Off the power supply of the microprocessor trainer.

PRECAUTIONS TO BE FOLLOWED

- Do not touch or disconnect any IC's while the trainer kit is in operation.

- Keys of the key board of the trainer should be handled softly- no hard pressing.

RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment.
- Maintenance Record.


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MICROPROCESSOR LABORATORY

STANDARD OPERATING PROCEDURE

Name of the Lab./facility	Micro Processor Lab
Name of the equipment	DAC interface with 8085 microprocessor
Purpose	To provide ample opportunity for the students to understand the core technology concepts, principles, procedures and applications of 8085 microprocessor.
Scope	The main objective of this lab course is to gain hands on experience of programming the 8085 microprocessor and also on the interfacing of different peripherals to it.
Responsibility	Faculty – Lab in charge, HOD/EEE

STANDARD OPERATING PROCEDURE FOR MICROPROCESSOR KIT

- Check for any visual problems in the trainer kit like loose connections.
- Before proceeding with the lab experiment, the problem analysis and program outcomes like algorithms, flowcharts, op-code and mnemonics are required.
- Switch ON the power supply of the microprocessor trainer kit.
- Load the data in register A.
- Load the count and starting address of the message.
- Get the data.
- Display data and wait for some time.
- Decrement count.
- If count is zero then stop otherwise go to step 1.
- Upon completion of the experiment Turn Off the power supply of the microprocessor trainer.

PRECAUTIONS TO BE FOLLOWED

- Do not touch or disconnect any IC's while the trainer kit is in operation.
- Keys of the key board of the trainer should be handled softly- no hard pressing.

RECORD TO BE MAINTAINED

- Laboratory Manual containing the experiments that can be performed with the equipment.
- Maintenance Record.



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