

MIT WORLD PEACE UNIVERSITY

Digital Electronics and Computer Architecture  
Second Year B. Tech, Semester 1

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## 4 BIT ADDER AND SUBTRACTOR USING IC 7483

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### PRACTICAL REPORT

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## **1 Problem Statement**

*To design and implement 4 bit Adder and Subtractor using IC 7483 parallel adder.*

## **2 Components Used**

1. 2 1.5 V AA Batteries or 3 Volt Power Source
2. DIP Switch

## **3 Involved Truth Tables**

## **4 Pin Diagrams of Used ICs**

## **5 Theory**

### **5.1 What is adder and Subtractor**

### **5.2 Parallel Adder**

### **5.3 Serial Adder**

### **5.4 Advantages of Parallel Adder to Serial Adder**

### **5.5 Disadvantages of Parallel Adder to Serial Adder**

### **5.6 Working of Parallel Adder**

## **6 Prodecure**

## **7 Circuit Diagrams**

## **8 Applications**

## **9 Conclusion**