BLUE BRAIN
CONTENTS

INTRODUCTION

- WHAT IS BLUE BRAIN
- WHAT IS VIRTUAL BRAIN
- FUNCTION OF NATURAL BRAIN
- BRAIN SIMULATION
- CURRENT RESEARCH WORK
- ADVANTAGES
- DISADVANTAGE
- HARDWARE AND SOFTWARE REQUIREMENT
- CONCLUSION
INTRODUCTION

Human brain, the most valuable creation of God. The man is called intelligent because of the brain. But we loss the knowledge of a brain when the body is destroyed after the death

“BLUE BRAIN” - The name of the world’s first virtual brain. That means a machine that can function as human brain.
What is BLUE BRAIN

• “YES”, The IBM is now developing a virtual brain known as the BLUE BRAIN.
• It would be the world's first virtual brain. Within 30 years, we will be able to scan ourselves into the computers.
WHAT IS VIRTUAL BRAIN?

- A machine that can function as brain.
- It can take decision.
- It can think.
- It can response.
- It can keep things in memory.
WHY WE NEED VIRTUAL BRAIN

- To upload contents of the natural brain into it.
- To keep the intelligence, knowledge and skill of any person for ever.
- To remember things without any effort.
FUNCTIONING OF BRAIN

Sensory Input :-

Receiving input such as sound, image, etc through sensory cell.

Interpretation.

Interpretation of the received input by the brain by defining states of neurons in the brain.

Motor Output.

Receiving of electric responses from the brain to perform any action.
BRAIN SIMULATION

NATURAL BRAIN VS SIMULATED BRAIN

- **INPUT**
  - Through the natural neurons

- **INPUT**
  - Through the silicon chip or artificial neurons

- **INTERPRETATION**
  - By different states of the neurons in the brain

- **INTERPRETATION**
  - By a set of bits in the set of register
RESEARCH WORK

IBM developing the “Blue brain”

IBM, in partnership with scientists at Switzerland’s Ecole Polytechnique Federale De Lausanne’s (EPFL) Brain and Mind Institute will begin simulating the brain’s biological systems.
ADVANTAGES
1. Remembering things without any effort.
2. Decision without the presence of a person.
3. Using intelligence of a person after the death.
4. Understanding the activities of animals.
5. Allowing the deaf to hear via direct nerve stimulation

DISADVANTAGES
1. We become dependent upon the computer.

2. Others may use technical knowledge against us.
3. Another fear is found today with respect to human cloning
HARDWARE AND SOFTWARE

• 1. A Super computer
• 2. Memory with a very large storing capacity
• 3. Processor with a very high processing power.
• 4. A very wide network.
• 5. A program to convert the electric impulses from the brain to input signal, which is to be received by the computer and vice versa.
• 6. Very powerful Nanobots to act as the interface between the natural brain and the computer.
CONCLUSION

- We will be able to transfer ourselves into computers at some point.
- It will bring both benefits and harm to human society.