

#### SNS COLLEGE OF TECHNOLOGY



#### AN AUTONOMOUS INSTITUTION

Approved by AICTE New Delhi & Affiliated to Anna University Chennai Accredited by NBA & Accredited by NAAC with "A+" Grade, Recognized by UGC COIMBATORE

#### DEPARTMENT OF CIVIL ENGINEERING

#### 19CET308 – AR VR IN CIVIL ENGINEERING

III YEAR / VI SEMESTER

**Unit 1: Introduction to VR** 

**Topic 1 : Introduction** 





#### What is VR?







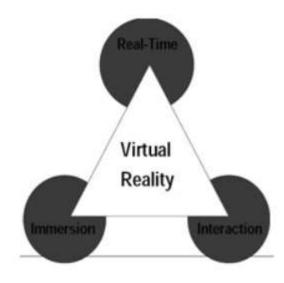




#### **Virtual Environment**



- ➤ A Computer generated world with which the user can interact.
- Interaction can vary from looking around to interactively modifying the world.





#### Virtual Reality



- ➤ A Computer generated, immersive (or wide field), multi-sensory information program which tracks a user in real time.
- ➤ Virtual Reality means feeling the imaginary (virtual) world, rather than the real one. The imaginary world is a simulation running in a computer.
- ➤ Virtual reality is the term used for computer generated 3D environments that allow the user to enter and interact with alternate realities.
- ➤ The definition of "virtual" is near and "reality" is what we experience as human beings.



## **Virtual Reality**







## **Features of Virtual Reality**



- Replaces real world
- Immersive multimedia/computer-simulated
- Replicates environment
- Simulates physical presence
- Allows interaction







Virtual travel, field trips

Places, spaces

Immersive training

- Military
- Driving
- Other Simulations

Storytelling

Gaming

Therapy

Marketing





Virtual Reality in the Military







Virtual Reality in the Healthcare







Virtual Reality and Education







Virtual Reality and Scientific Visualization







Virtual Reality in Entertainment





# Advantages and Disadvantages of Virtual Reality



#### Advantages

- Virtual reality creates a realistic world.
- It enables user to explore places.
- Through Virtual Reality user can experiment with an artificial environment.
- Virtual Reality make the education more easily and comfort.

#### Disadvantages

- The equipments used in virtual reality are very expensive.
- It consists of complex technology.
- In virtual reality environment we cant move by our own like in the real world.





## Thank You!!