Objective:-

There are 8 blocks in the Junjhunu district and all the blocks have their unique geological, historical and cultural features. Khetri and Udaipurwati are rocky while chirawa and Nawalgarh are plain land having great agricultural and irrigation dependence on ground water. Alsisar block is totally desert with saline ground water and no irrigation. Surajgarh and Buhana are also depending on ground water but the ground water potentials in these blocks is very low. The Jhunjhunu block is a maize of all the above and have broad spectrum of ground water quality problems. The area is scanty in rail-falls and has many water quality problems. If the grounds water of this area is characterized and problems identified remedial measures may be exercised for safeguard of life. This is the cause due to which the area of Jhunjhunu block chosen for this research study.

In the present study the Udaipurwati block of the jhunjhunu district has been selected. Out of 92 villages of Udaipurwati block water samples will be collected from different locations/villages of the block and analyzed for different parameters e.g. E.C., pH, TDS, Chloride, Nitrate, Flouride, Sulphate, Hardness, Alkalinity etc. as per standard methods and analyzed values will be recorded. These data’s were compared with the common diseases appearing in the human being living in this area.

The area of Udaipurwati block of Jhunjhunu district is affected with fluoride and other contamination in water. High fluoride causes dental fluorosis and skeletal fluorosis is very common to the people of this area. This shows that the high level of fluoride in ground water is the root cause of this effect in people. High nitrate contamination in drinking water may cause methemoglobinemia. In this disease infants feel problem in breathing. skin colour of infants gets blue and ultimate leading to their death. Hence, nitrate is a silent killer and more fatal than fluoride. Other water borne diseases e.g. cholera, gastroentitis, hepatitis, typhoid are also common. Biological contamination of drinking water is responsible for these diseases. For this bacterial test of water samples may be conducted so that the actual cause of contamination may be identified. Most of the diseases spreading through water if identified within the time and they may be prevented and outbreaks of diseases can be checked. Thus, human life could be saved from infections of diseases caused by water borne microbes.
The main aim of the study is to cater more precisely documented information on the causative factors and to find the correlation of common diseases and water quality problems in this area so that preventive suggestions may be given to the human being residing in this area so that water borne diseases can be stopped in areas under investigation.

So present study will be carried out with the following objectives:

1. Analysis of physico-chemical properties of water samples i.e. turbidity, colour, pH, EC, F-, NO$_3^-$ and total hardness.

2. The water samples analyzed for F- and NO$_3^-$ will be characterized for their toxicity in potable water.

3. Microbiological studies of various pathogenic fungi, bacteria, virus in water from point of view of human health.

4. The data pertaining to water borne diseases was collected village-wise from various dispensaries in order to assess the nature of spread of these water borne pathogens.

5. The results so obtained were statistically calculated and was interpreted with correlation of regression equations in between various physico-chemical parameters.

6. Suggestions to treat water