1. LITERATURE REVIEW

Very important in water of human life. Ground water using in mostly open well and tube well in rural area. Ground water is very good and fresh drinking water. But the important drinking water quality parameters/characteristics like temperature, pH, turbidity, TDS, hardness, Alkalinity, phosphate, sodium chloride, sulphate, magnesium, nitrate and E.coli are reviewed and arranged in the subsequent paragraphs.

Drinking water in very effective of biological and chemical reaction in temperature. The turbidity and colour are indirectly related to temperature as the efficiency of coagulation is strongly temperature depends (APHA et.al.1992). pH is very effective in human body and not a complete in drinking water. 6.5 to 8.5 range of good water. Acidity and gas so many problem in pH(WHO 237) claimed that at high pH values drinking water acquires a bitter taste. Acidity us a measure of the ions in ground water the would react to neutralize hydroxide ions. It is thus a measure of the ability of water to neutralize of “assimilate” base. Alkalinity is a measure of the concentration of such ions in water that would react to neutralize hydrogen(H+) ions.

SanthiD. et.al. (2011) 9 carried out a review of water quality in kodumudiaru dam in tirunelveli district various physico-chemical parameters such as PH, electrical conductivity, total hardness, total alkalinity and presence of metals such as Ca, Mg etc.

Saxena et.al. (2008) 10 carried out a study on Chambal river in Madhya Pradesh. The objective was to study physico-chemical parameters from the water samples drawn. they studied Do, Turbidity, PH, electrical conductivity etc. other parameters like total hardness, chloride, nitrates, sulphates, BOD,COD, Na and K were also studied.

Shinde et.al. (2011) 11 studied the physico-chemical parameters and correlation coefficient of harsoolsavangi dam, Aurangabad. In order to draw water samples and district location were selected along the course of the river. The period covered was one year from January to December 2009.

Singh M. et.al. (2011) 12 carried out a review of physico-chemical parameters of river gomati at karekat. U.P. the study concentrated on parameters such as Ca, Mg, Fe and Chlorides. It was concluded that the high concentration levels of Fe and Chlorides observedwere harm full to metallic pipes and structures as well as agriculture.
Using total salt concentration and soluble percentage as a criterion different limits have been proposed (Euton 1935, Schofield 1936, and Wilcox 1948).

Sreeja et al. (2012) assessed the physico-chemical parameters of the kodayar river, Tamilnadu. At seven sampling stations from June 2010-June 2011. Various parameters both physical and physico-chemical parameters such as temperature, EC, TDS were evaluated the data obtained from the sample analysis was compared with the limits prescribed by various agencies such as WHO & ISI.

Ugwn et al. (2012) analysed the impact of growing population in the city of Abuja in Nigeria by studying the seasonal physico chemical characteristic of the usma river. The study revealed that all parameters measured were within the permissible level except total suspended solid which exceeded for all seasons.

WHO (1984b) documented that turbidity in excess of the guideline value if 5 NTU is generally objectionable to consumers consequently. Excessive turbidity can protect microorganisms from the effects of disinfection. Stimulate the growth of bacteria in the water and itself exert a significant chlorine demand. It is vitally important in producing safe drinking water.

Khare et al. (2011) conducted the physico chemical analysis ganga river water at Kanpur. The analysis involved the water samples taken from six different stations during pre-monsoon season (April 2011-May2011). It was observed that except for turbidity all other parameters studied were within most stringent limits set by WHO.

Jeena et al. (2012) studied the impact of municipal sewage of the Cauvery river in tiruchirupalli, T.N. various parameters like PH, BOD, EC and COD etc.

Chetia et al. (2011) carried out a study to review the pollution levels in Brahmaputra river system at golaghat, Assam. The analysis of arsenic in the underground water was carried out for this purpose. Samples were collected from different depths of the tube wells in the area. An aggregate of 22 samples were collected in this manner. Along with total arsenic an examination of concentration levels of Fe, Mn, Ca, Na, K and Mg was carried out.

Waghet al. (2009) analysis of physical chemical parameters in salinity exists in ground water but in variable amount it is mostly influenced by the a purifier material solubility on
minerals duration of content and factors such as permeability of soil. Drainage facility quality of rain fall and above all the climate of the area.

TDS in water are inorganic salts and small amounts of organic matter, total dissolved solid in water may be originated from natural sources sewage effluent discharges urban runoff to and industrial discharges TDS is linked to taste WHO recommended 1000 mg/l TDS as guideline values.

Ground water quality of various different has been studied in tube well, Bore well and open well, by a number of researchers. A few of them has been listed. Water quality of some drinking water of kathalaterritory Gujarat in study of ph, TDS, Chloride phosphate, nitrate etc. in j. chemistry pharm res. G.Shah et.at.2012) bacteriological analysis of river umkhrah, shillong, Meghalaya, India studies in present of reveals that the physic-chemical and bacteriological parameters investigated were found to be above the permissible limits of WHO.

Ammannet.al. (2003) report about the ground water pollution by runoff shamruck et-al (2001) studies the effat of chemical fertilizer on ground water quality in ther Nile valley aquifer Egypt and found the major ion concentration of nitrate (20 to 340 mg/l) sulphet (96 to 630 mg/l) phosphate (7 to 34 mg/l) and potassium (7 to 28 mg/l). Nitrate pollution of ground water in 14 cities of northern china due ti nitrogen fertilizer has been reported by zhanget.al (1996). The potential impacts of mine wastes in ground and surface water has been studies by Herzog (1986). Ground water contamination due to storm water infiltration has been reported by mikkelsenet.al (1997).

Studied the quality of drinking water in the Birbnu district of west Bengal and found high concentration of manganese, iron and zinc. Gupta et.al (1994) has shown the quality assessment of well water in the rural area around Rewa.Kumarswamyet.al (1997). Analyzed the ground water coastal basin in visakhapatnam and found that the chemical quality of the water has been effected by domestic waste water and sea water. Gupataet.al (1999) have found high hardness value and MPN of coli form in the drinking water of satna,Madhya pradesh. Dahiyaet.al (1999 has studied the physico-chemical characteristics of groundwater in rural areas of Thosham sub-division Bhivani district Hariyana. Shreenivaset.al(2000) studied the ground water quality of Hyderabad by taking 32 tube well water samples and reported the electrical conductivity. Total dissolved solids, total alkalinity,
hardness, calcium, magnesium, sodium and chlorides were above the permissible limit according to WHO and Indian standards.

Patel and co-worker (2015) also reported levels of pH, DO, BOD, COD, chloride, sulphate, calcium-magnesium hardness, nitrate and TDS of drinking water of Sanand district.

Surface and ground water in present of fluorides and (<1 mg/l) are common but 1.0 to 1.5 is no probability in drinking water WHO and India council of medical research (ICMR). Drinking water is the largest contribute to the daily fluoride in take (WHO 1984). Over range of fluoride general health effect of dental and skeletal fluorosis, non-skeletal in human body cells.

The presence of calcium in ground and surface water supplies result from passage through a deposits of limestone dolomite and gypsum (APHA et.al.1992) calcium range of 75-200 in drinking water is no effect in human bodies.