ABSTRACT:– Water is elixir of life. Ground water is no more considered to be non-polluted. The investigation was highlighted to assess the suitability of water for drinking. The present investigation attempts to study physico-chemical characteristics of ground water and evaluate for drinking. The water samples were collected from 40 bore wells in and around Islampur. The samples were analyzed for pH, EC, Alkalinity, Hardness, Chloride, Magnesium, and Calcium etc. The value as pH was ranged 6.50 to 7.70, EC 402 to 2100 mho/cm, Alkalinity 50 to 560 mg/L, Calcium 14.30 to 200 mg/L, Magnesium 6.15 to 95 mg/L, Chloride 26.59 to 443 mg/L. They were compared with standard value of APHA and WHO and classified according to Durfer and Beker's method. The ground water was found to rich in mineral and role of these are discussed.

Key words : Physicochemical characteristics, potable water, ground water.