CONCLUSIONS
On the basis of the experiments performed, results obtained and literature survey, following conclusions have been found:

• Probiotics are the normal flora of intestinal tract and can be obtained from various Natural samples like Milk, Curd, and Yoghurt as well as from stool sample and vaginal swab sample.

• Probiotics have ability to produce antimicrobial agents which protect internal organs especially intestinal tract and vaginal tract from infection.

• The Antibacterial substance produces by Probiotics seems to be a Protein of high molecular weight.

• Antibiotics susceptibility shows resistance of isolates towards various antibiotics which is a significant character of probiotics.

• Resistance of the probiotic strains to antibiotics could be used for both preventing and therapeutic purpose in controlling intestinal infection.

• Isolates survival and growth at low pH (pH 2 – 7) suggest that they can survive in extreme condition of intestinal tract.

• Growth in presence of Bile (1 – 4%) (w/v) indicates bile tolerance of isolates and the possibility of these organisms to be administered orally.

• Experimental results showed that isolates are able to tolerate NaCl (1 – 4%) (w/v) concentration. NaCl adapted isolates can help to survive in simulated gastric fluid. This indicates that it may be useful in enhancement of the stability and functional properties of probiotic strains.

• Property of tolerance to bile, acidic pH and NaCl concentrations could be advantageous for a probiotic culture for successful colonization in gastrointestinal environment.

• Prebiotics- non digestible but supportive to probiotic growth shows enhanced growth pattern of probiotics when combined with them. Study of possible mechanism of probiotics activity and their association with prebiotics may lead to the development of novel probiotics with new therapeutic aspect sotics.
• *Lactobacillus fermentum, Enterococcus durans, Pediococcus pentosaceus, Enterococcus faecium, Enterococcus durans/faecium, Enterococcus faecalis* were the isolates obtained from different natural samples and identified by partial 16s rRNA sequence as probiotics.

• Probiotics isolated from different samples were different from each other which was proved by 16s rRNA sequence, this could be because of the different in the role that they have to play in those samples.

• Construction or development of a highly potent probiotics consortium suitable to function under stress and adverse condition can be of great value as therapeutics and can be comparable with commercially available products.