Oysters are filter feeders and excellent bio-accumulating micro-organisms and may act as passive carriers of pathogens to humans when kept in polluted waters. Pasteurization is a relatively mild heat treatment, eliminates micro-organisms in food prolonging the shelf life. The objective of this study was to determine the best combination of time-temperature pasteurization of marinated oyster. The optimum conditions for pasteurization was determined by a central composite design $2^2$, where he studied the influence of the variables time and temperature of pasteurization. The effect of independent variables was determined by analysis of variance (ANOVA) ($p < 0.05$), ranking of the letter of Pareto variables, response surface and contour. According to the results obtained by pure error temperature and time had significant effects on weight loss by cooking, with the exception of the interaction of variables. The residual SS linear and quadratic temperatures were the only variables that significantly influence on the weight loss due to cooking and texture. But the two variables by pure error influence on the texture with the exception that the interaction of the both the residual SS as for the pure error was not significant. Regarding microbiological response of fecal coliform performed at all points you experience it has been found that temperatures and times chosen in this study were not significant, since in all the bands was analyzed reducing the amount of fecal to $< 310^1 \text{NMP}$.