SUMMARY

Twenty five albino rats of both sexes were utilized in this study. The animals were divided into five groups of different ages. The ages chosen were, one day, one month, three months six months and one year.

The amimals were anaesthetised with chloroform, sacrificed, the pancreas was dissected out and immediately fixed into Bouin's fluid. Paraffin sections of a thickness of 10 micrometers were obtained. They were stained with Masson's trichrome for collagenous fibers, orcein for elastic fibers and Gomori's reticulin for reticular fibers. The results revealed the following:

The pancreas of albino rat was invested by a well defined capsule. It was covered on its ventral surface by serosa.

The collagenous fibers in the capsule, interlobualr septa and around pancreatic ducts increased gradually with advancing age. In contrast the reticular fibers decreased gradaully with age.

Elastic fibers increased gradaully till adult age, then declined at the surface and became thinner around the ducts and blood vessels at senile age.

The islets of Langerhans were surrounded by a well defined complete capsule of reticular fibers. Collagenous fibers appeared only at the periphery of the islets or in between their cells at older ages.

No elastic fibers could be detected at all around the islets of Langerhans or in between its cells.