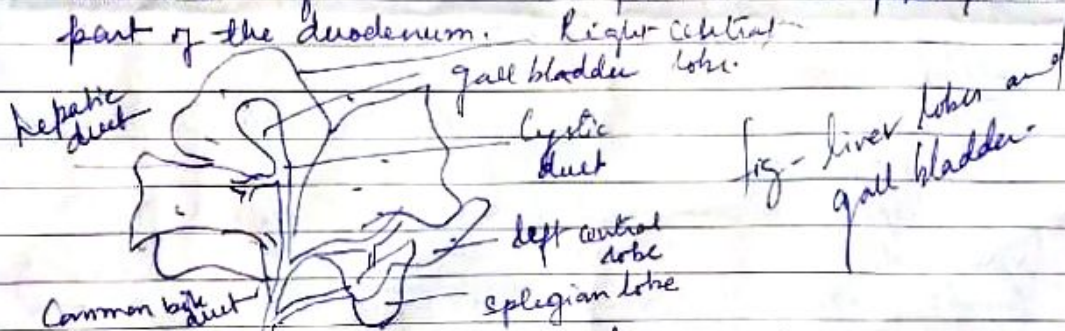


Liver and its functions.

Liver - Liver is the largest gland of the body consisting of five lobes of which three are on left and two on the right sides. The left lobes are a left lateral, left central and a Spiegelian lobe ~~which~~ while the right lobes are right caudal and caudate lobe. The liver presents a convex anterior surface fitting against the posterior wall of the diaphragm and a concave posterior surface fitting over the stomach and first part of the small intestine. The gall bladder is a large sacular structure situated more or less between the right and left lobes. A large cystic duct arises from the gall bladder which receives several small hepatic ducts from the different lobes of the liver carrying bile. Thus a large common bile duct is formed which opens in the ~~prox~~ proximal part of the duodenum. Right central



Histologically each lobe of liver consists of a number of hepatic lobules separated from one another by a thin layer of connective tissue but the separation of hepatic lobules in rabbit is incomplete. The bile duct and lymphatic capillaries separate the lobules from each other called the Glisson's capsule. Each lobule consists of a mass of polyhedral hepatic cells arranged in radial rows called the hepatic cords. Some specialized Kuffer cells are also found in the liver cells which generally help in the destruction of many germs. A network of blood capillaries are found by the interlobular and intra-lobular blood vessels called sinusoids. The intra-lobular veins are the fine branches of hepatic portal veins.

many interlobular bile ductules unite to form hepatic ducts which open in common bile duct.

FUNCTIONS OF LIVER → The important functions of liver can be summarized as below →

- 1) Secretion of bile which is an alkaline dark green coloured fluid having several organic and inorganic salts and some waste materials, functions of bile are -
 - a) It makes the chyme alkaline better suited for the action of pancreatic juice.
 - b) It is responsible for emulsification of fat.
 - c) Removal of waste products like bile pigments, inorganic salts, toxins etc from the body.
- 2) Stimulated peristalsis.
- 3) Bile salts are important for the absorption of Vit. K.
- 4) Bile acts as an antiseptic and does not allow multiplication of bacteria.
- 5) The excess sugars are stored in the liver cells as glycogen.
- 6) It helps in maintaining a constant sugar level in the blood.
- 7) Stores Iron and copper, manufactures Vit. K and stored vitamin D.
8. Formation of lymph
9. Decomposition of proteins and amino acids to ammonia by ornithine cycle
- 10) Production of fibrinogen and prothrombin for clotting of blood.
11. Production of heparin to check coagulation of blood
- 12) Removal of waste material like carbonic acid, lactol etc.
- 13) The Kuffer cells of the liver destroy, destroy the germs of many diseases.
14. Production of R.B.C. in the foetus of mammals
15. Production of heat
16. Destruction of R.B.C.