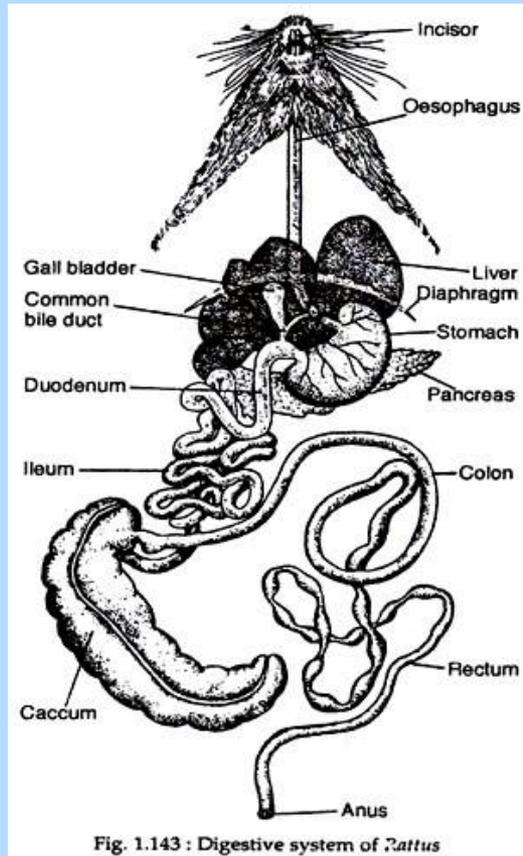


# Digestive System of Rat

Fig. 1.143: Digestive system of Rattus

# Digestive System of Rat (Diagram)



# Alimentary Canal

- The alimentary canal consists of the following:
- 1. Mouth
- 2. Mouth or buccal cavity
- 3. Pharynx
- 4. Oesophagus
- 5. Stomach
- 6. Small intestine
- 7. Large intestine
- 8. Anus

# Associated Digestive Glands

- The alimentary canal following are the associated digestive glands:
- 1. Salivary glands
- 2. Liver
- 3. Pancreas

# Mouth

- 1. The mouth is the transverse slit-like opening at the end of the pointed snout.
- 2. Mouth cavity: The mouth cavity is the space between mouth and pharynx enclosed by lips and cheeks.

# Pharynx

- 1. The pharynx is the posterior narrow part of the mouth cavity the soft palate.
- 2. Nasopharynx lying above the soft palate.
- 3. Oropharynx, the region between the soft palate and the oesophagus.

# Oesophagus

- 1. The oesophagus is long, narrow, dilatable.
- 2. It is a straight tube leading from the pharynx through the neck and thorax to abdomen and joins to the stomach.

# Stomach

- 1. The stomach is the most dilated bag-like portion of the alimentary canal lying transversely just below the diaphragm.
- 2. A thin-walled and strongly rounded left part is called cardiac stomach.

# Layers of the Stomach

- 1. Serosa layer
- 2. Muscularis
- 3. Submucous membrane
- 4. Mucous

# Detailed Layers of the Stomach

- 1. Serosa: The outermost layer consists of loose connective tissue covered by peritoneal lining.
- 2. Muscular layer: It is composed of three layers of muscles - the outer thin longitudinal muscles, middle thick layer of circular muscle.
- 3. Submucosa: Loose connective tissue with blood and lymph vessels.
- 4. Mucous membrane: It is the innermost part folded into numerous gastric pits.

# Functions of Liver

- 1. It secretes bile juice, which neutralizes acidity of food, emulsifies fats, and stimulates peristaltic contractions of the intestine.
- 2. It stores sugar in the form of glycogen.
- 3. It brings about process of deamination.
- 4. It plays a role in storage of hemoglobin of blood.
- 5. It shows detoxification.
- 6. It secretes anti-coagulant factor.
- 7. It also stores vitamins A, B, D & iron.
- 8. It destroys old worn-out erythrocytes.