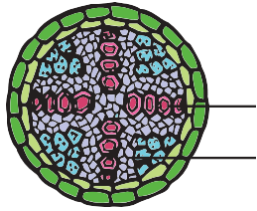




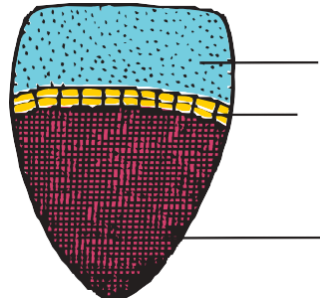
Padalsalai's Telegram Groups!

(தலைப்பிற்கு கீழே உள்ள லிங்கை கிளிக் செய்து குழுவில் இணையவும்!)

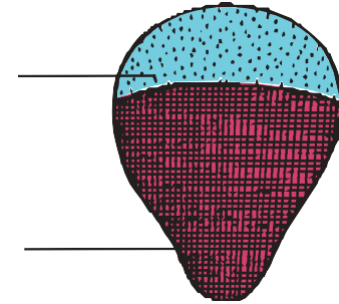
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- Lesson Plan - Group
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- 12th Standard - Group
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- 11th Standard - Group
https://t.me/Padalsalai_11th
- 10th Standard - Group
https://t.me/Padalsalai_10th
- 9th Standard - Group
https://t.me/Padalsalai_9th
- 6th to 8th Standard - Group
https://t.me/Padalsalai_6to8
- 1st to 5th Standard - Group
https://t.me/Padalsalai_1to5
- TET - Group
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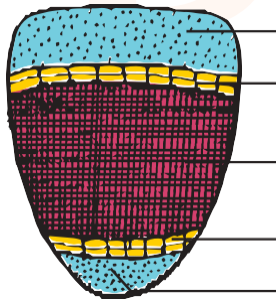
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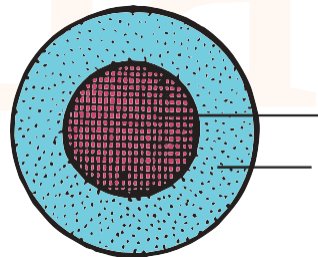
Conjoint, collateral and open



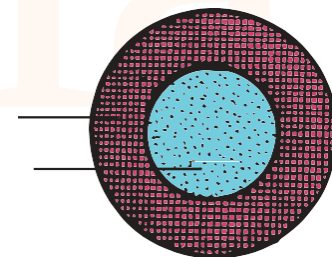
Conjoint, collateral and closed



Conjoint, Bicollateral



Concentric and Amphicribal



Concentric and Amphivasal

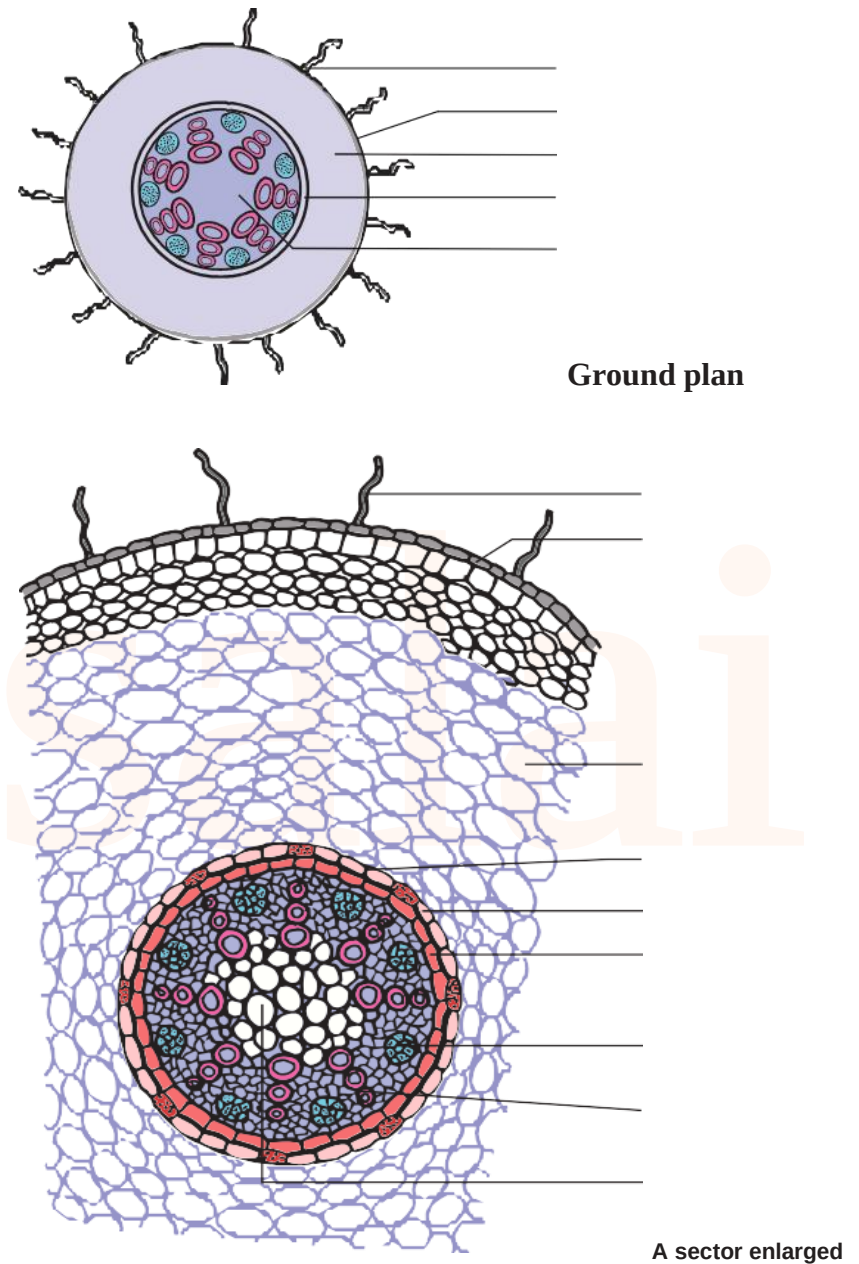
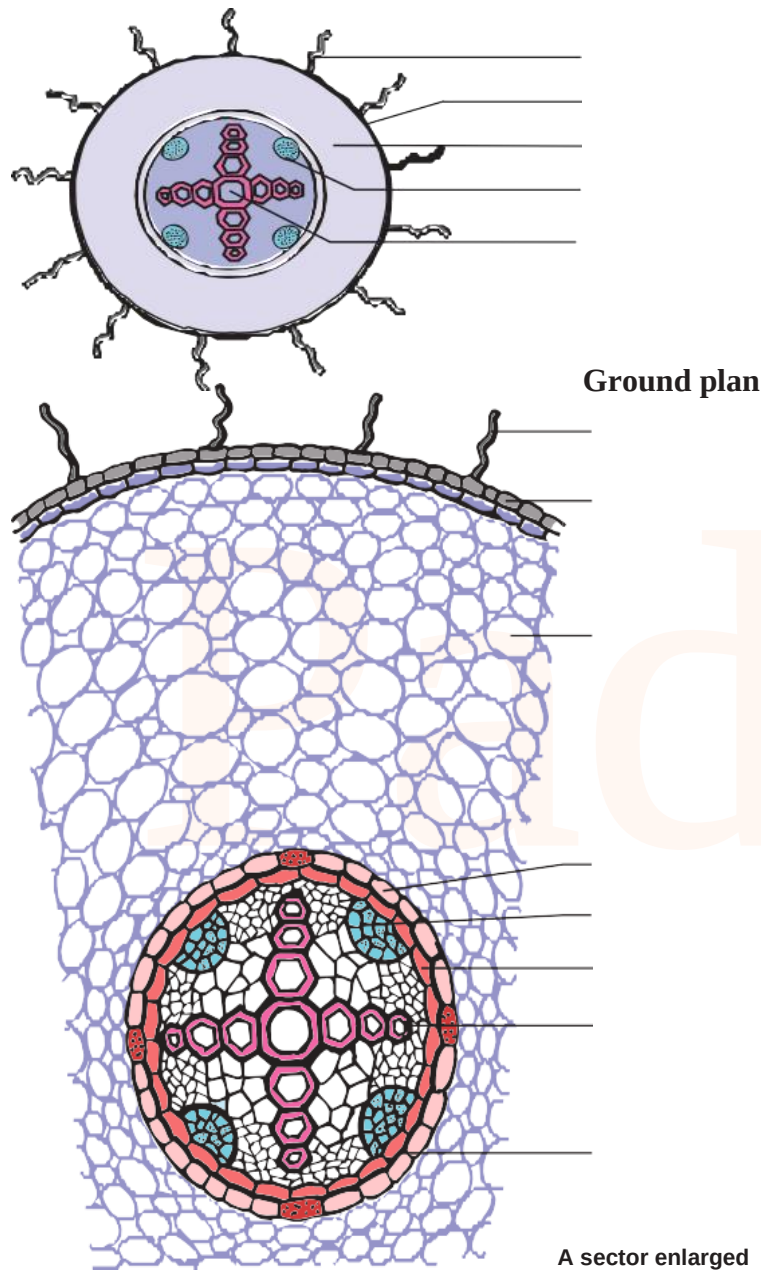
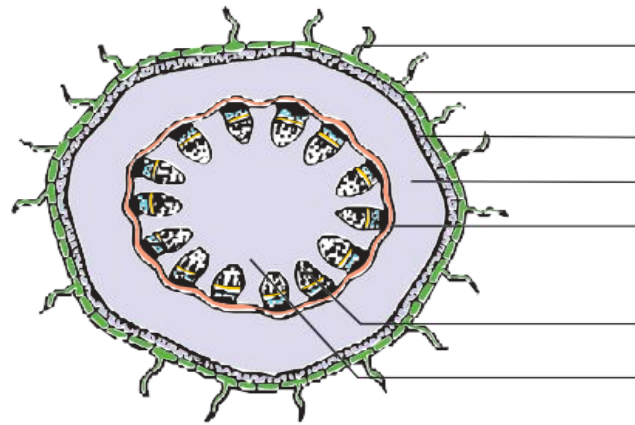
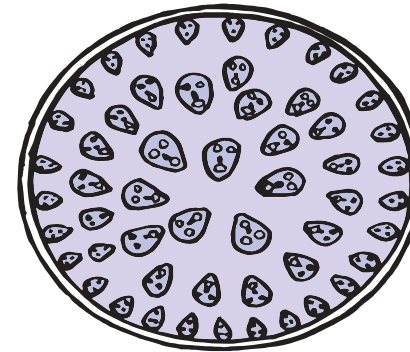


Figure 12.2 Transverse section of Dicot root

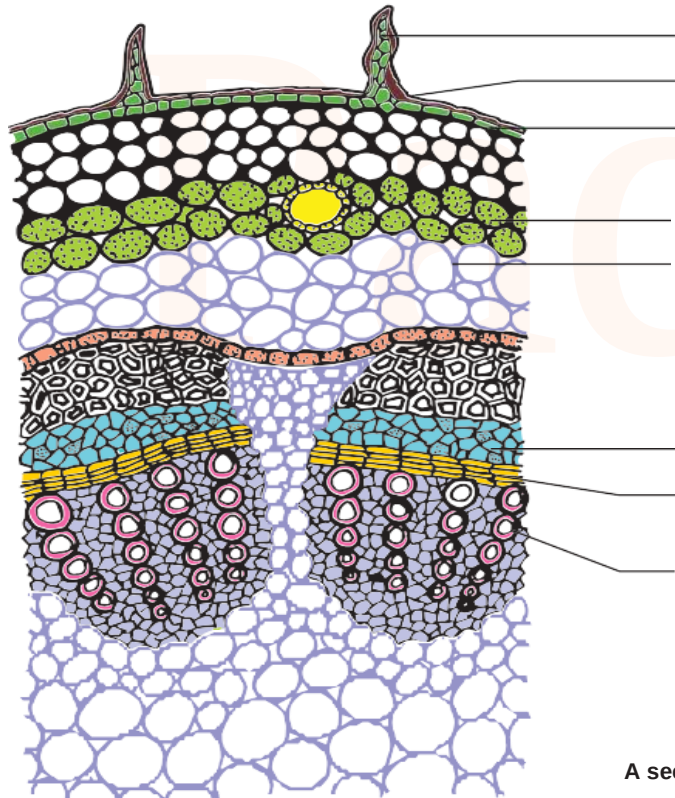
Figure 12.3 Transverse section of Monocot root



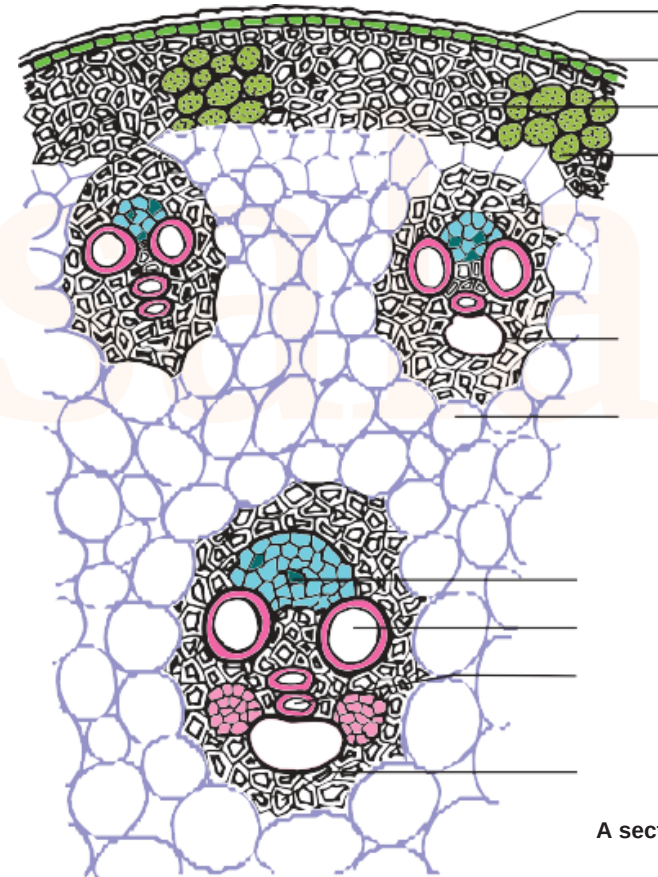
Ground plan



Ground plan



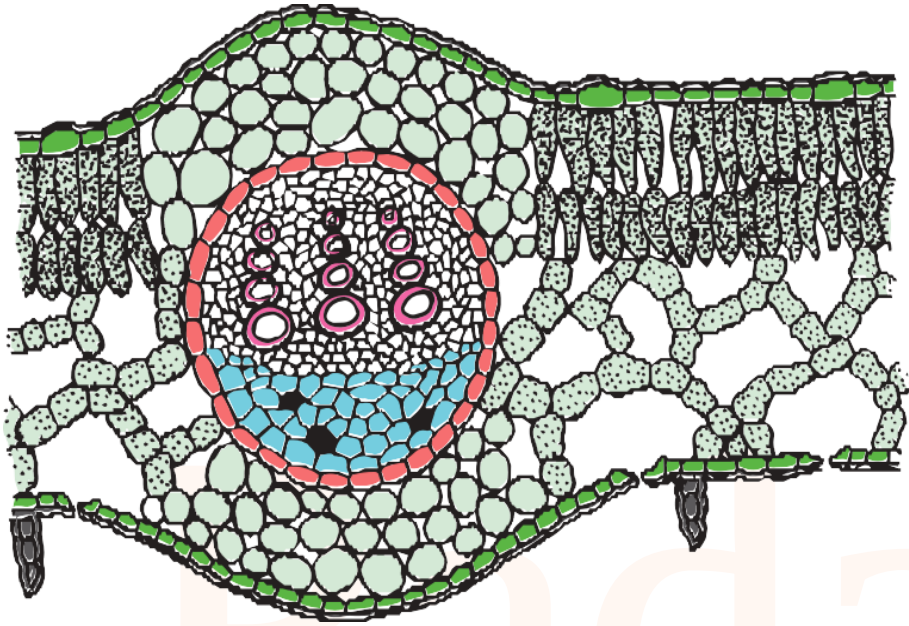
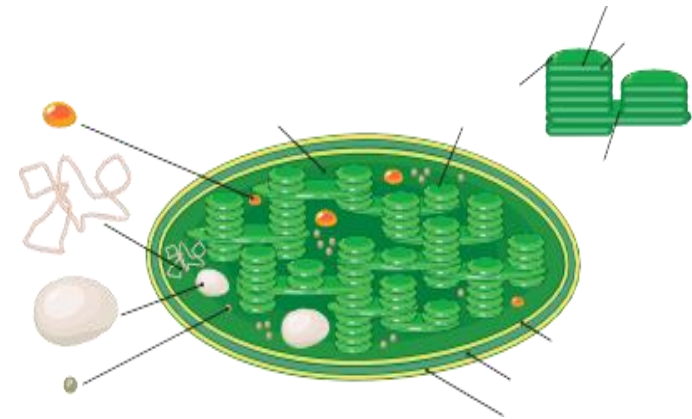
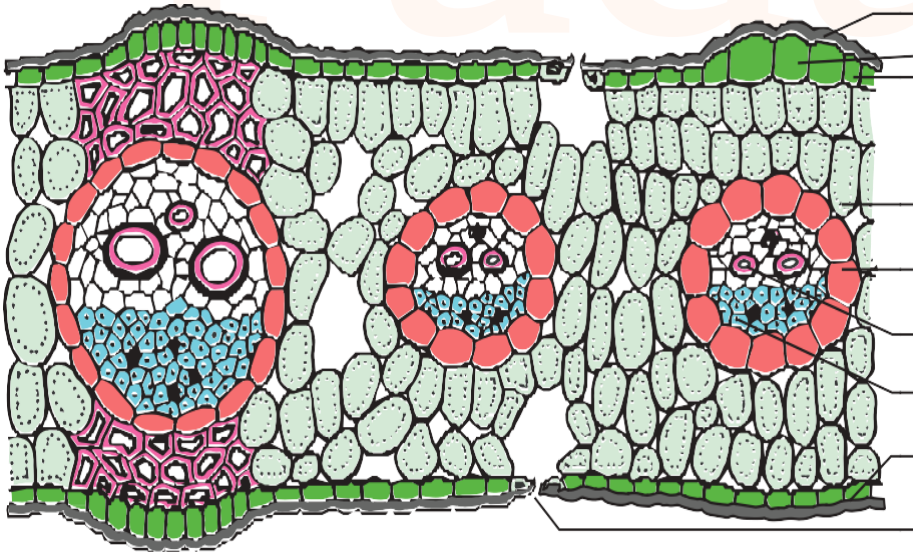
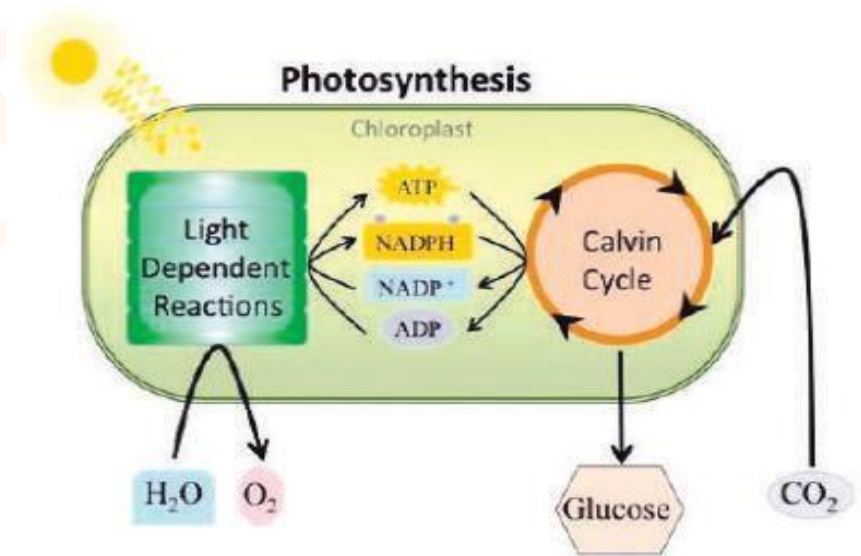
A sector enlarged



A sector enlarged

Figure 12.4 Transverse section of Dicot stem

Figure 12.5 Transverse section of Monocot stem

Figure 12.6 Transverse section of Dicot leaf**Figure 12.7** Transverse section of Monocot Leaf**Figure 12.8** Ultrastructure of Chloroplast**Figure 12.9** Overview of Hill and Calvin cycle

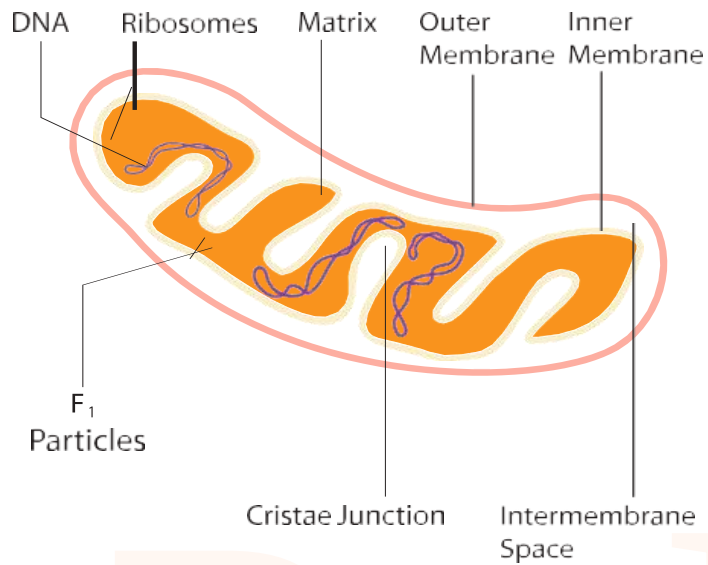


Figure 12.10 Structure of Mitochondria

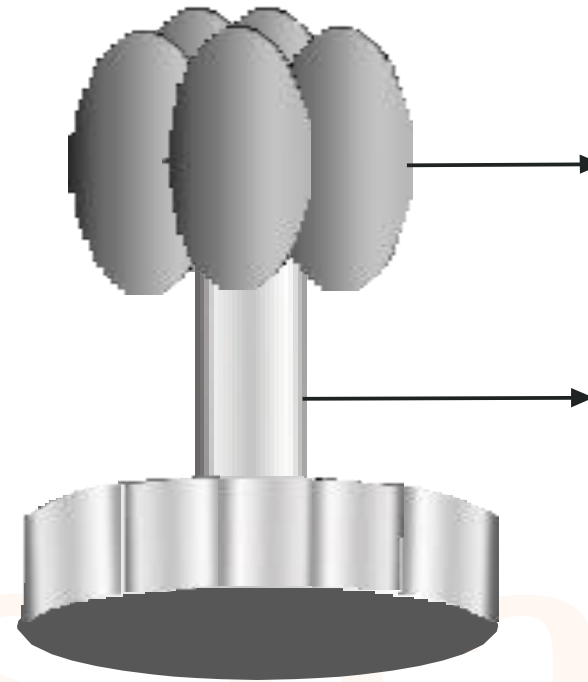
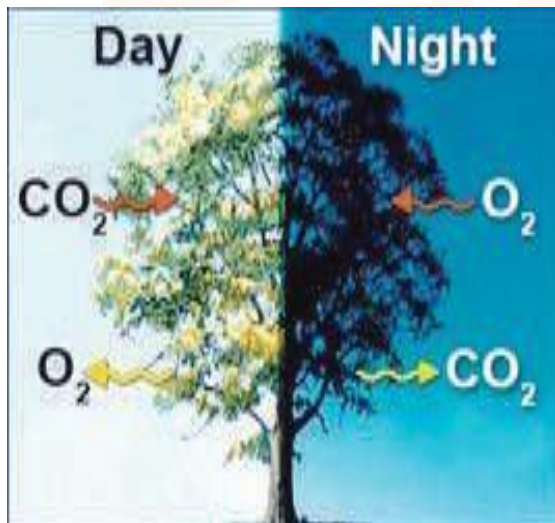


Figure 12.11 Structure of Oxysomes



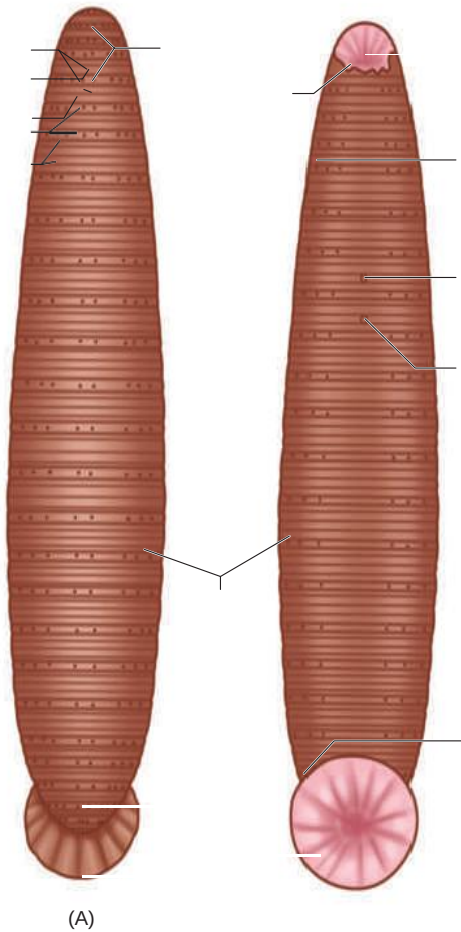


Figure 13.1 External morphology of Leech

A. Dorsal View B. Ventral view

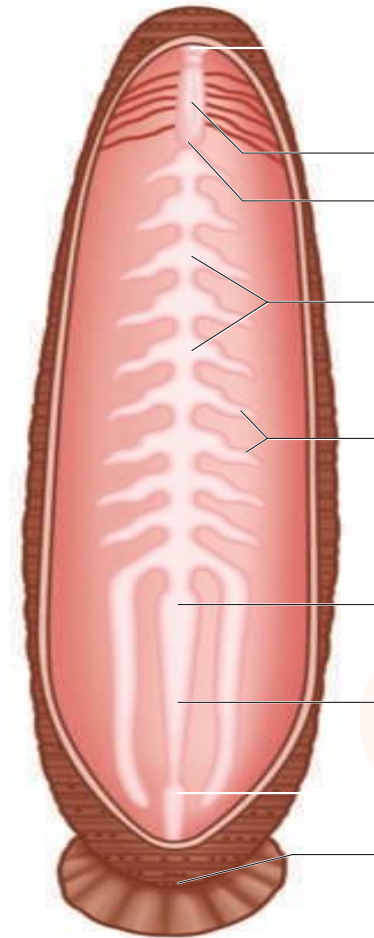


Figure 13.2 Digestive system of Leech

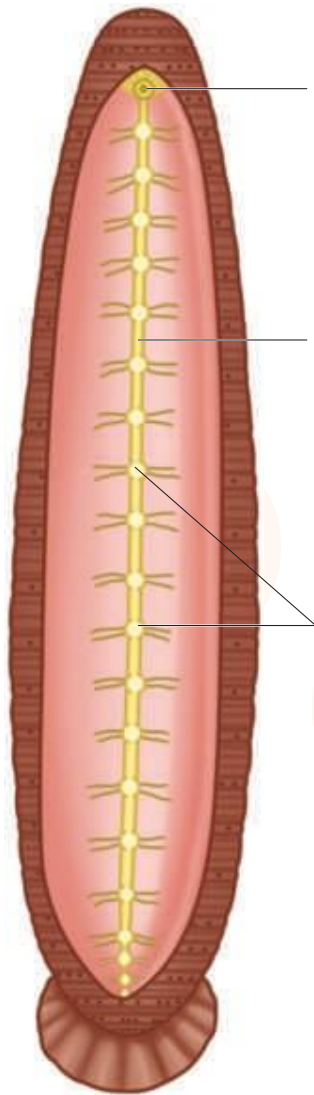


Figure 13.3 Nervous system of Leech

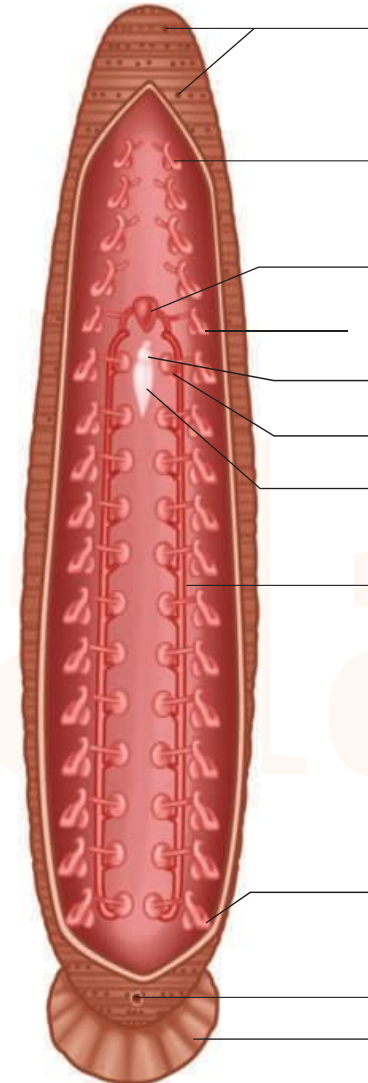


Figure 13.4 Reproductive system of Leech

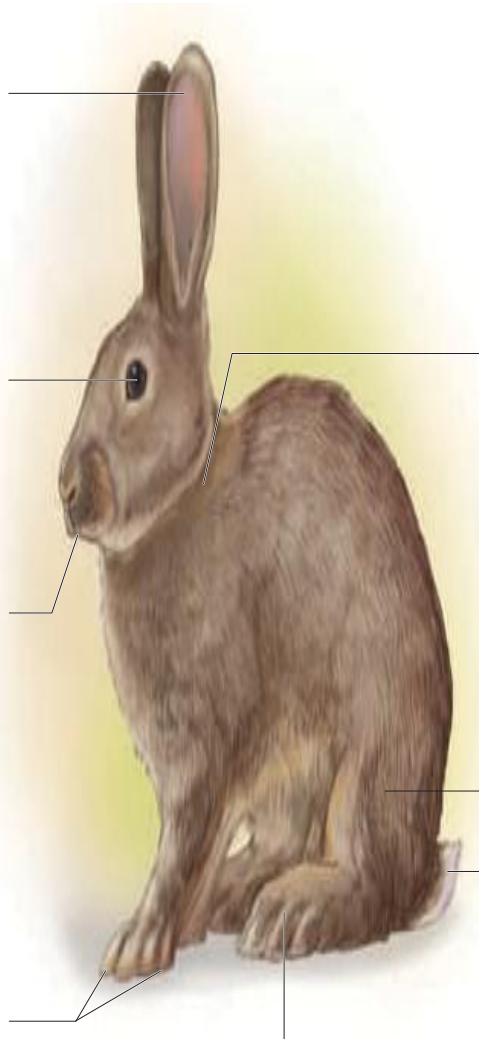


Figure 13.5 Rabbit- External features

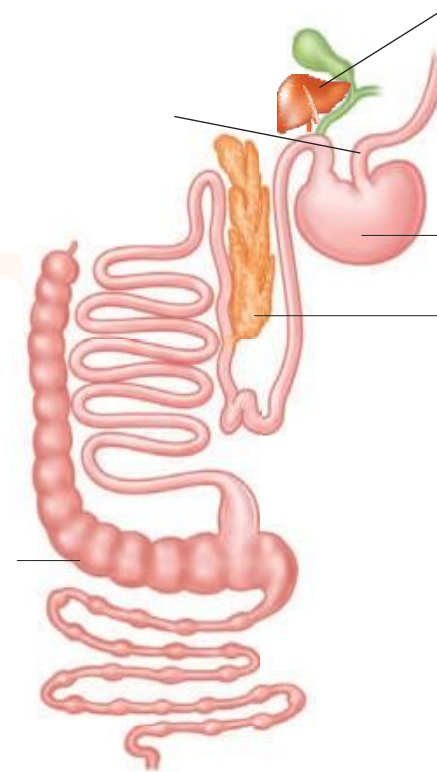


Figure 13.6 Digestive System of Rabbit

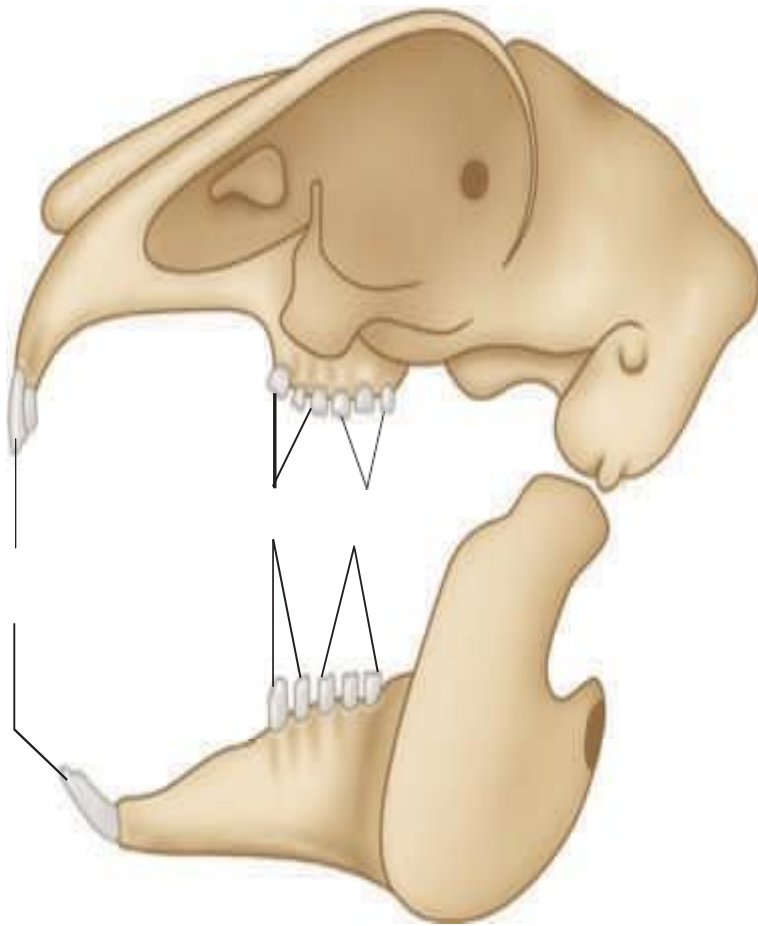


Figure 13.7 Dentition of Rabbit (Arrangement of teeth in jaws)

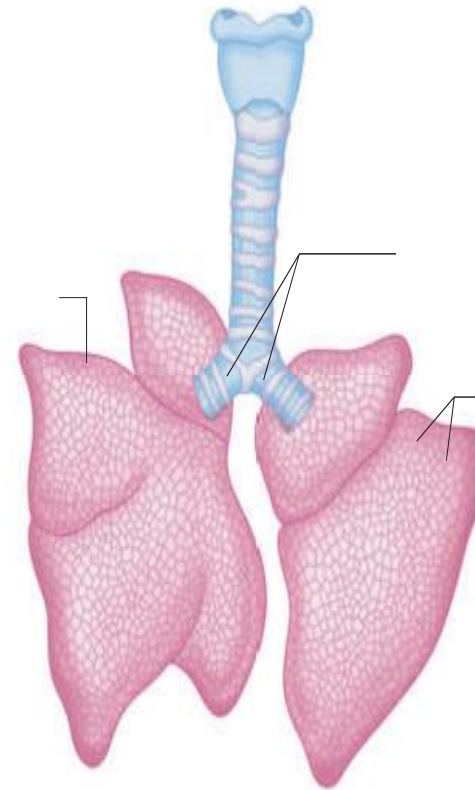


Fig. 13.8 Lungs of Rabbit

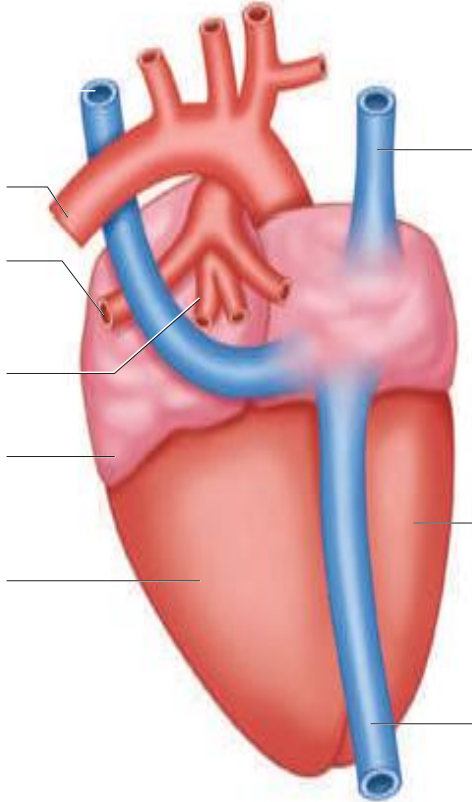


Fig. 13.9 Heart of Rabbit (Ventral view)

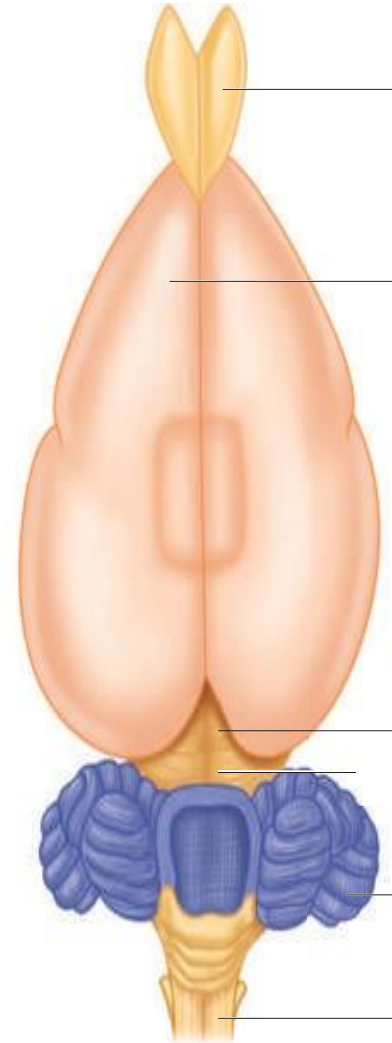


Fig. 13.10 Brain of Rabbit (Dorsal view)

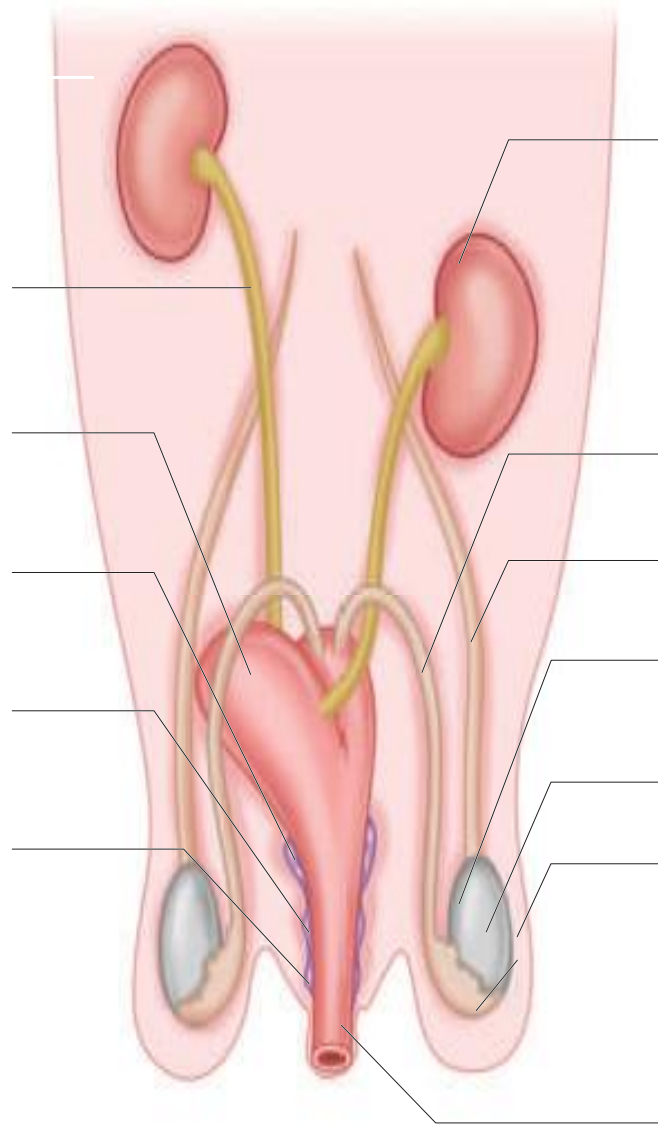


Fig. 13.11 Male reproductive system of Rabbit

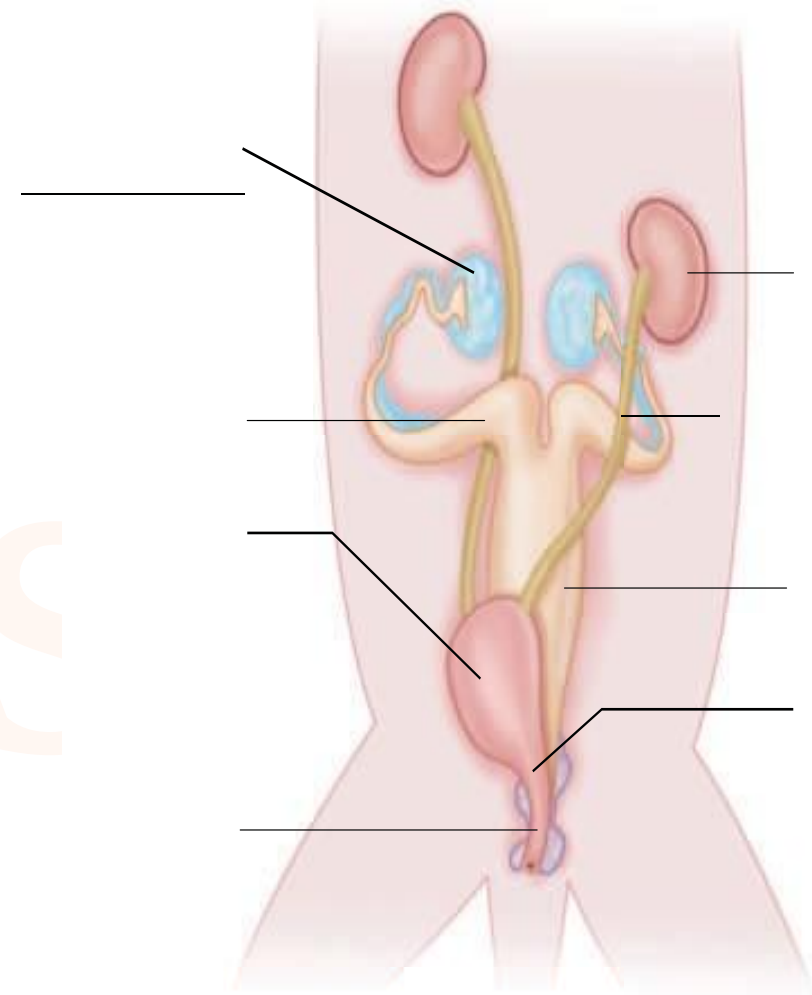


Fig. 13.12 Female reproductive system of Rabbit

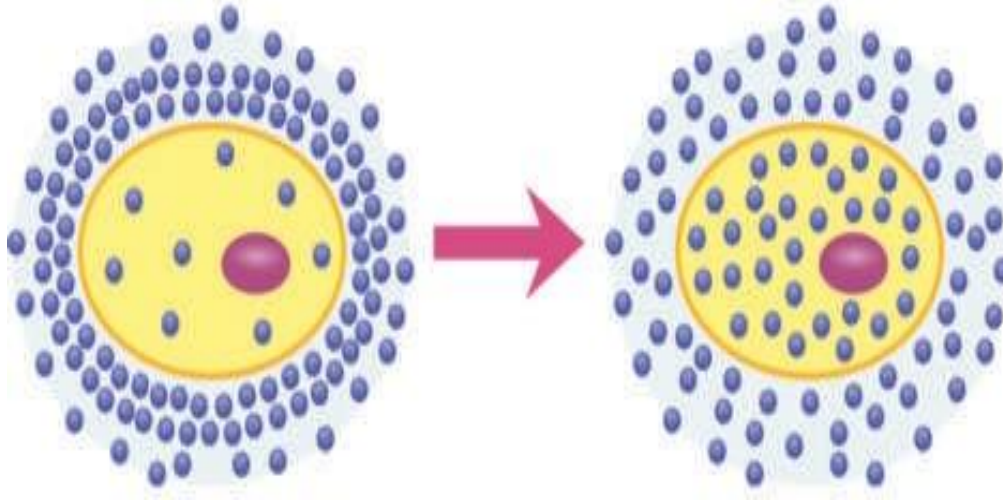
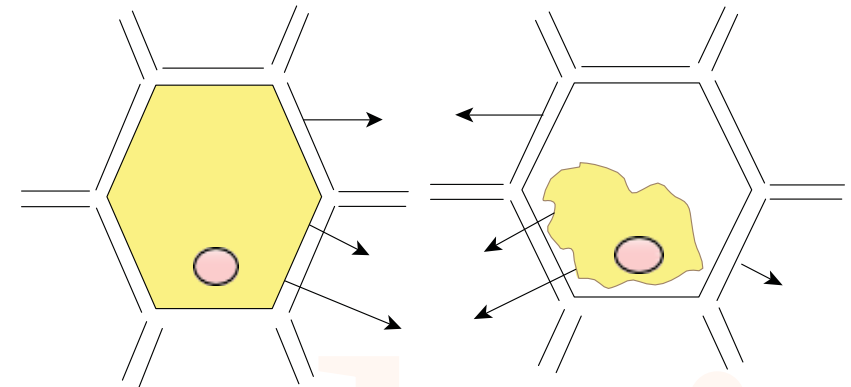


Figure 14.1 Diffusion across cell membranes



Normal plant cell

Plasmolysed plant cell

Figure 14.2 Plasmolysis

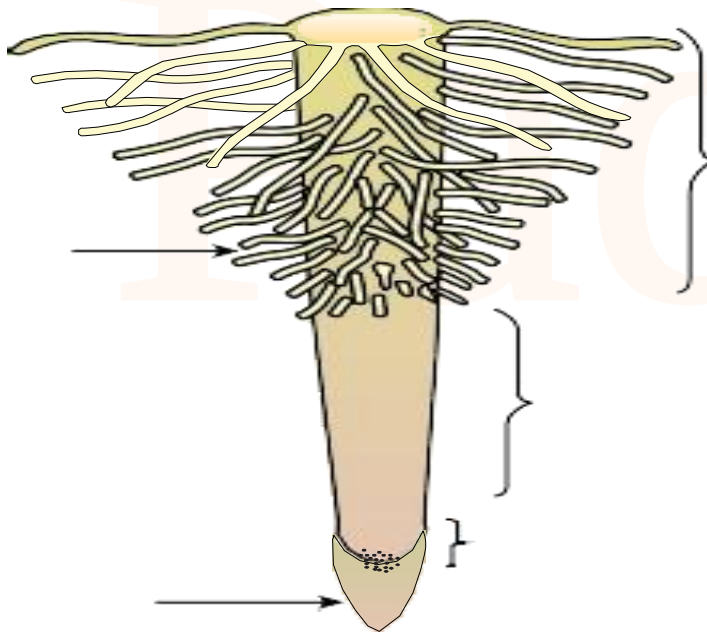


Figure. 14.3 Root Tip with Root Hairs

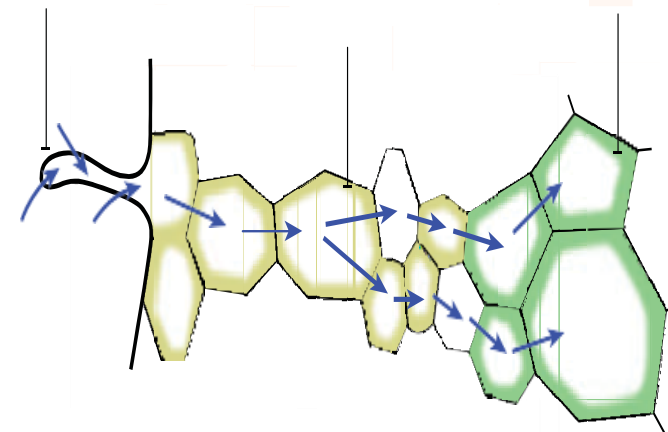


Figure. 14.4 T. S. of the root showing movement of water from soil to xylem

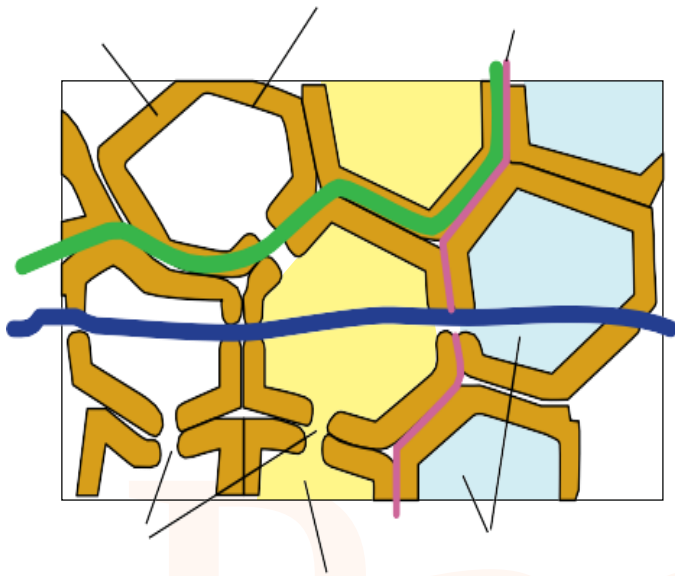


Figure. 14.5 Symplastic and Apoplastic pathways of Water

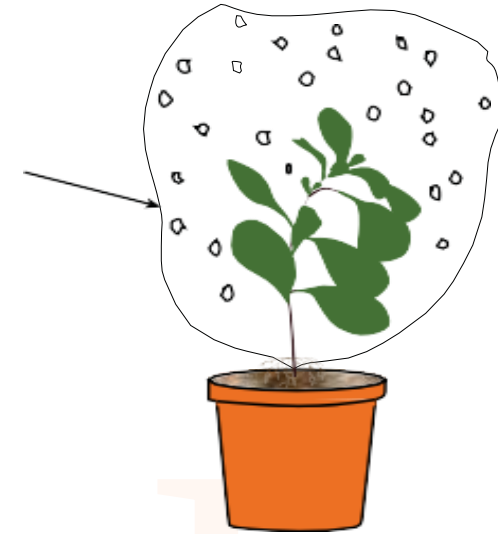


Figure. 14.6 Process of Transpiration

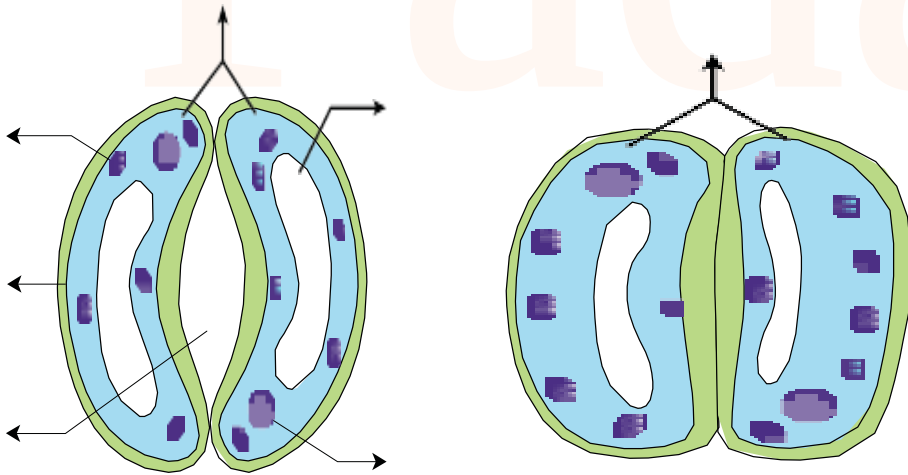


Figure. 14.7 Guard cell in turgid and flaccid condition

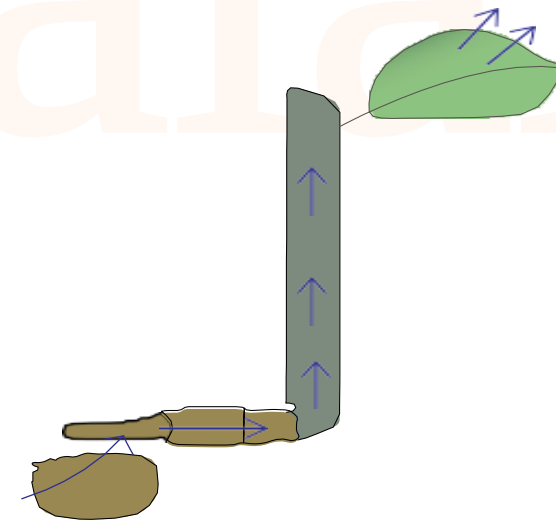


Figure. 14.8 Ascent of Sap



Erythrocytes



Thrombocytes

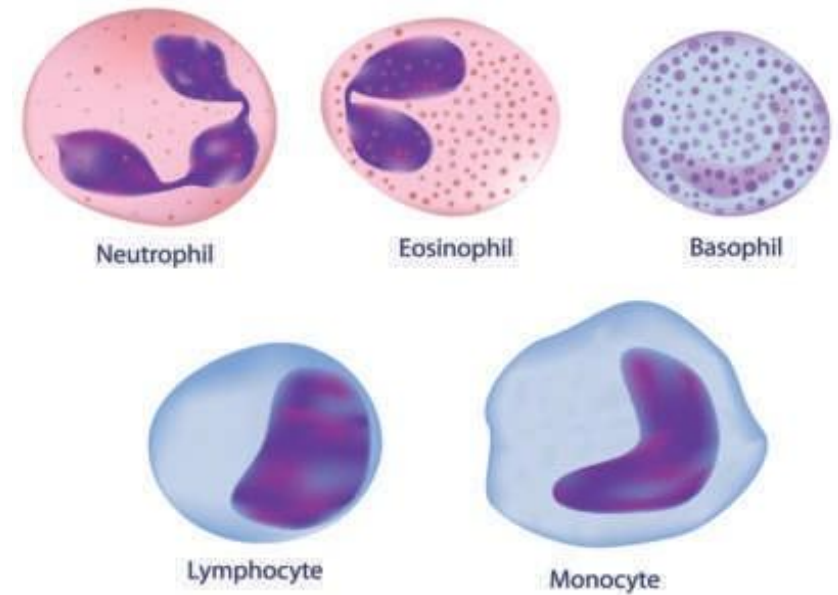


Figure. 14.9 Leucocytes

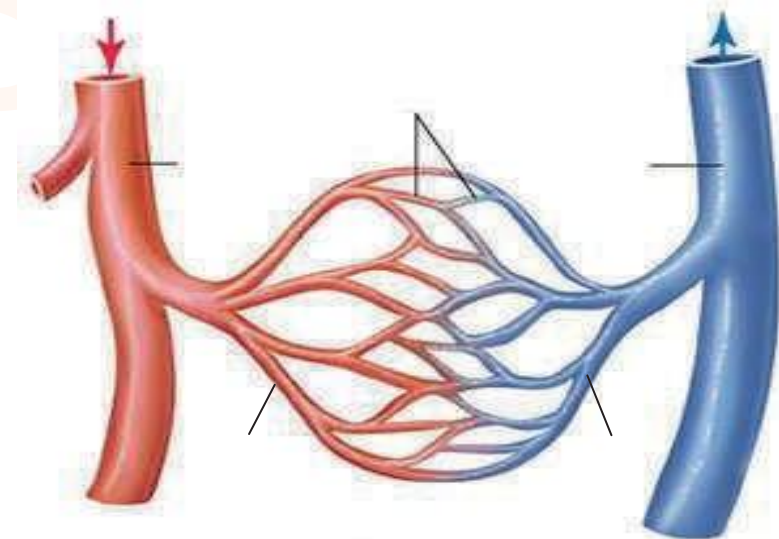


Figure. 14.10 Structure of blood vessel

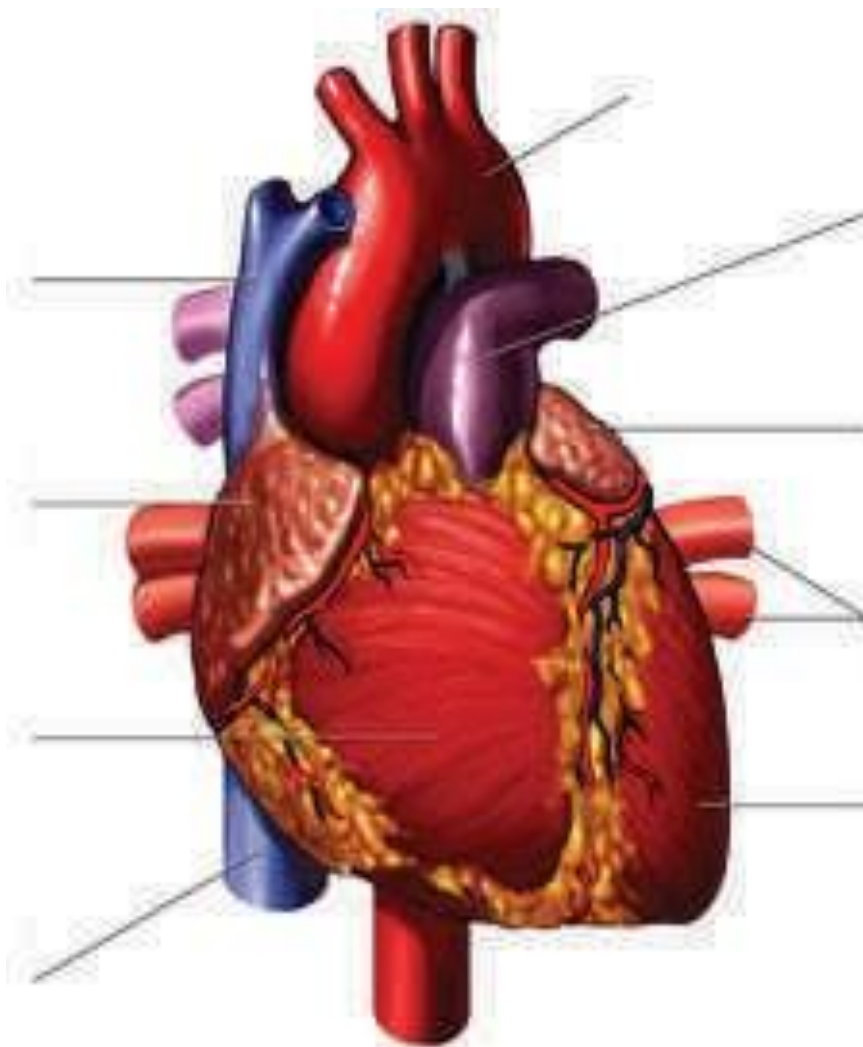


Figure. 14.11 External structure of human heart

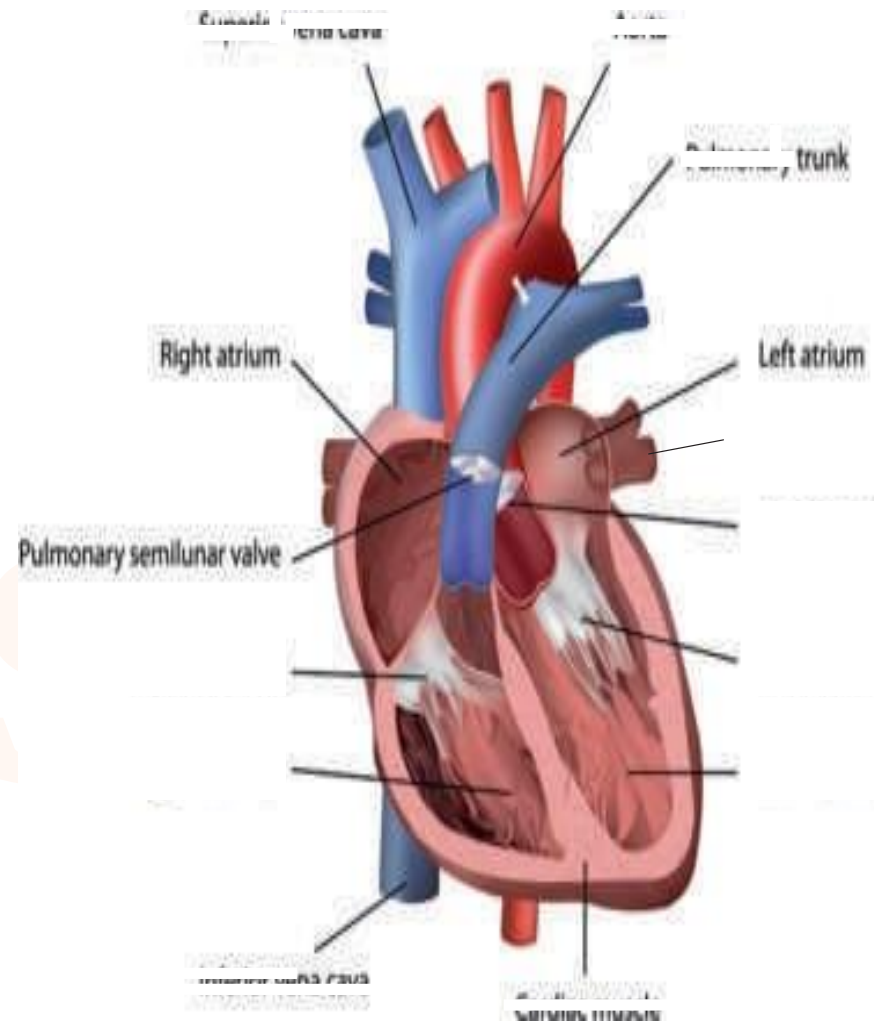


Figure. 14.12 Internal structure of human heart

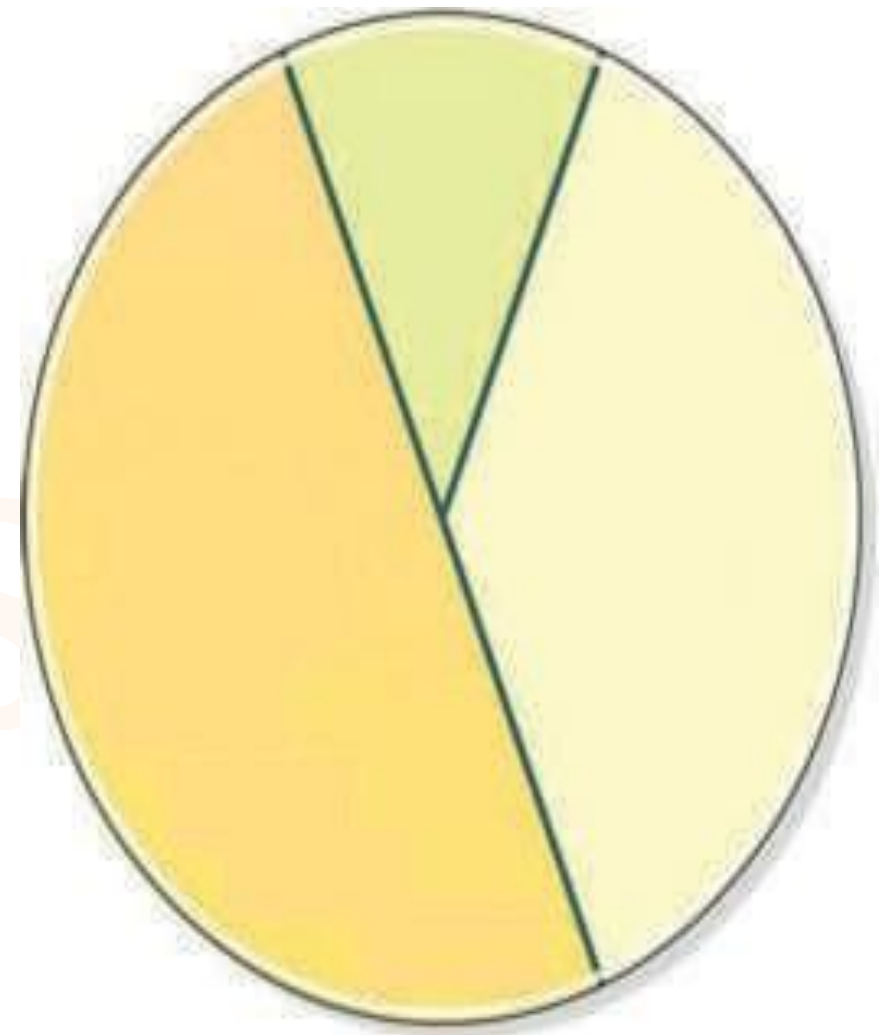
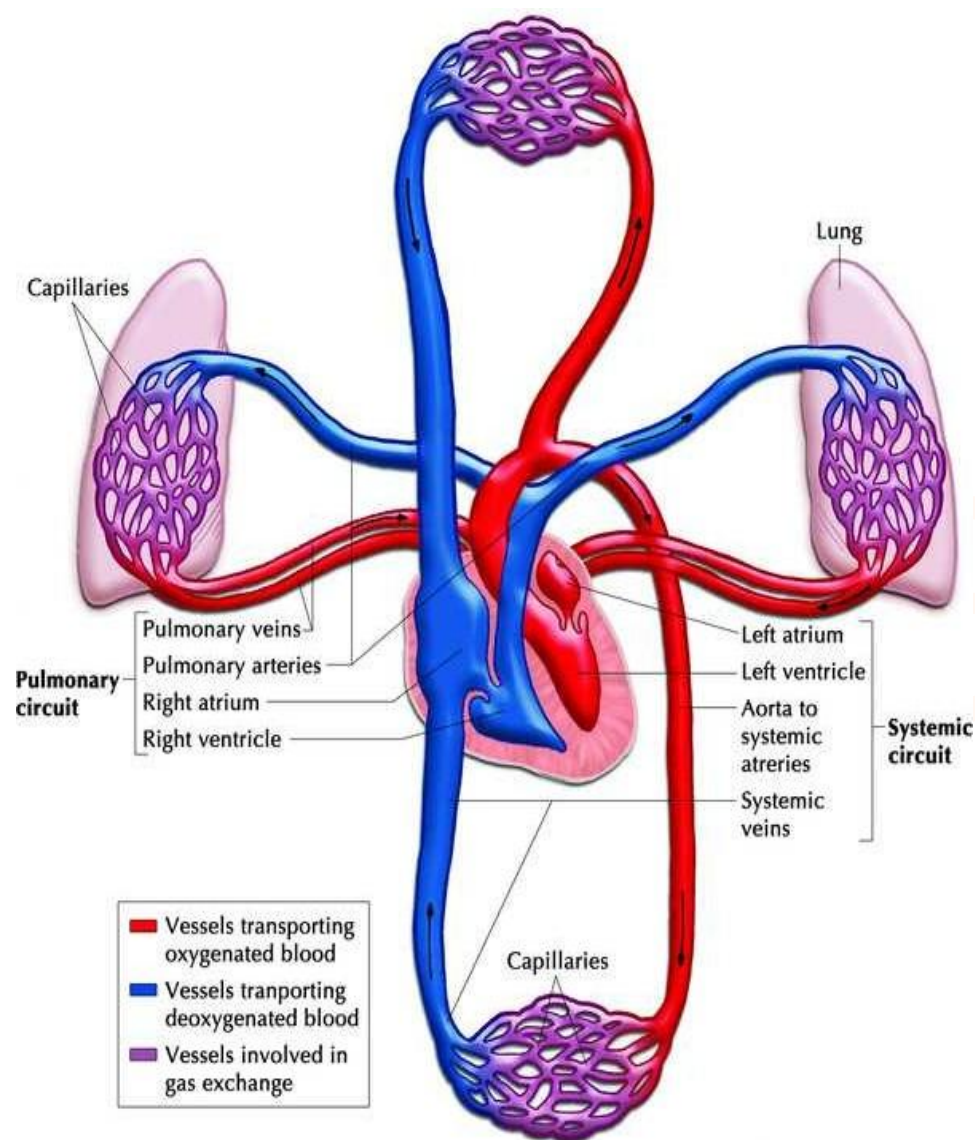


Figure. 14.13 Systemic and Pulmonary circulation

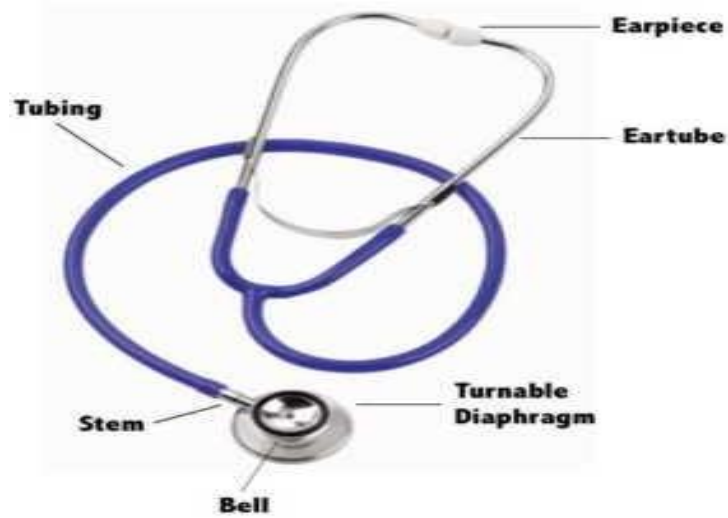


Figure. 14.14 Stethoscope



Figure. 14.15 Monometric (A) and Digital (B) type blood pressure apparatus

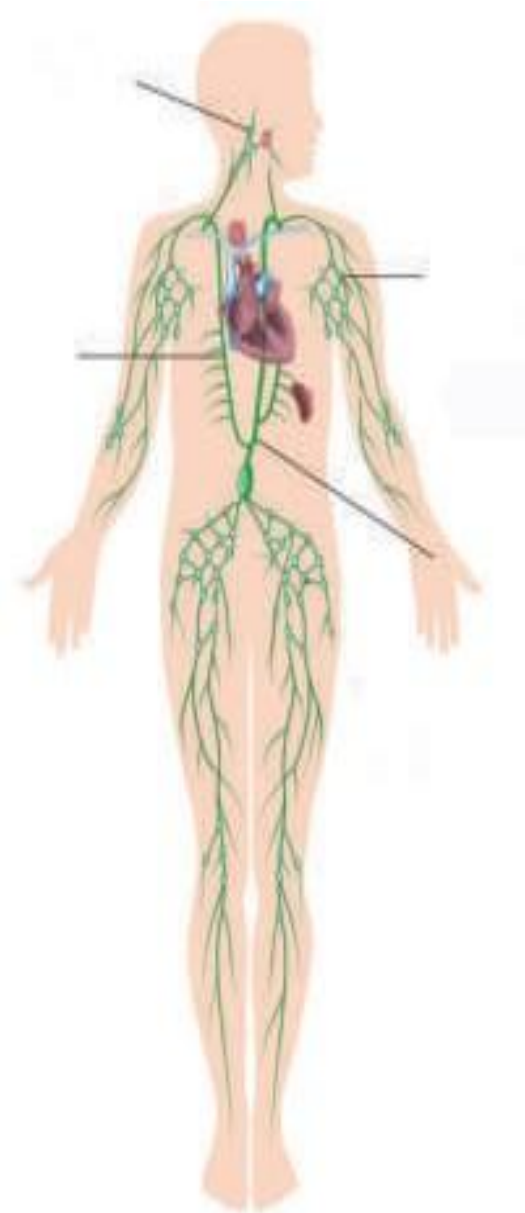


Figure. 14.16 Lymphatic System in Man

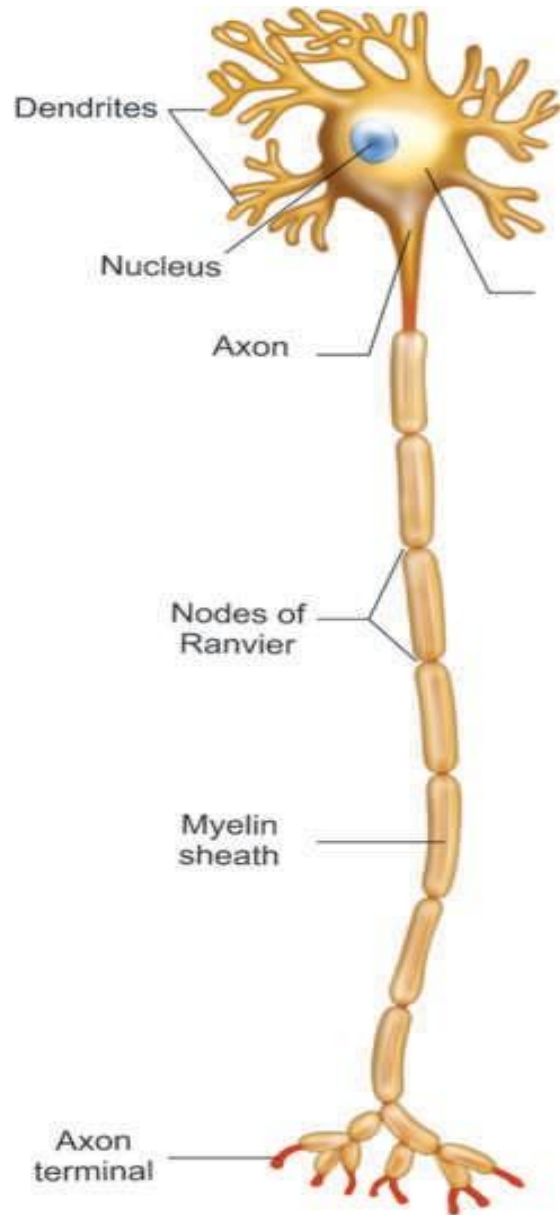


Fig. 15.1 Structure of Neuron



Fig. 15.2 Unipolar (A), Bipolar (B) and multipolar (C) neurons

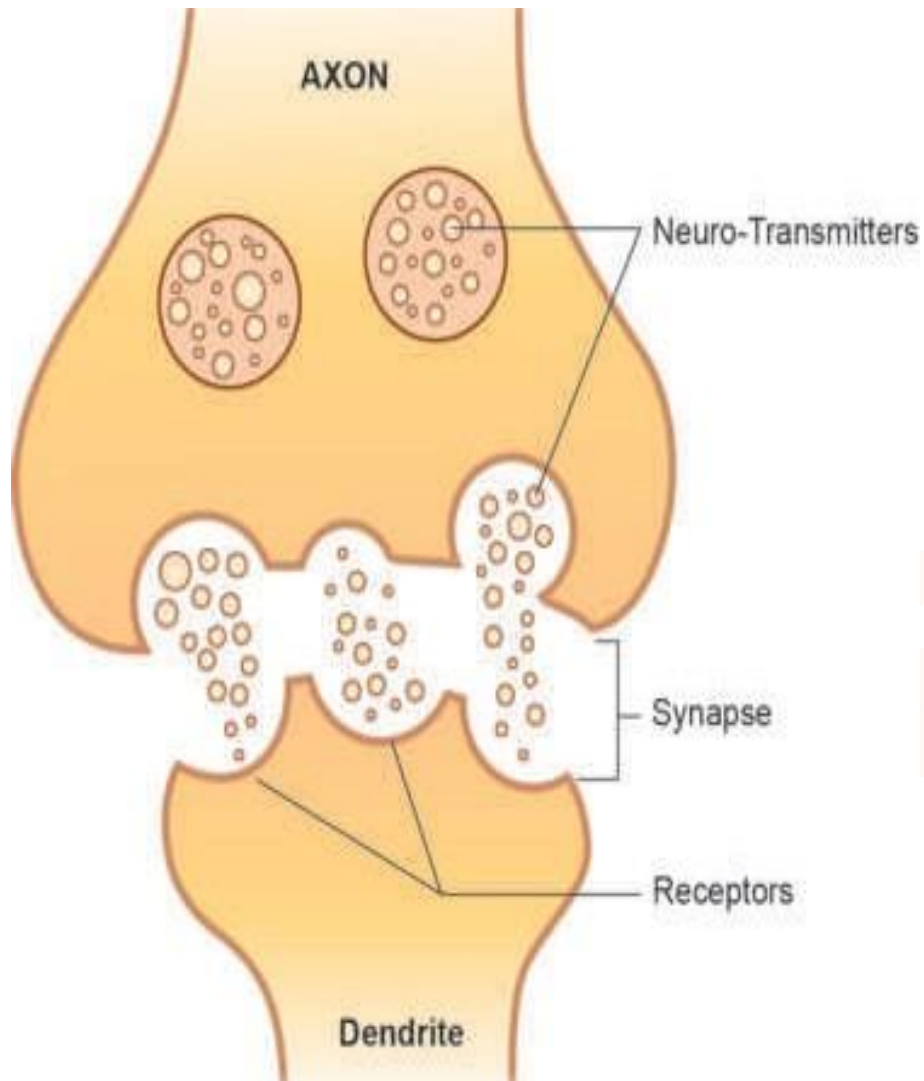


Fig. 15.3 Nerve impulse transmission

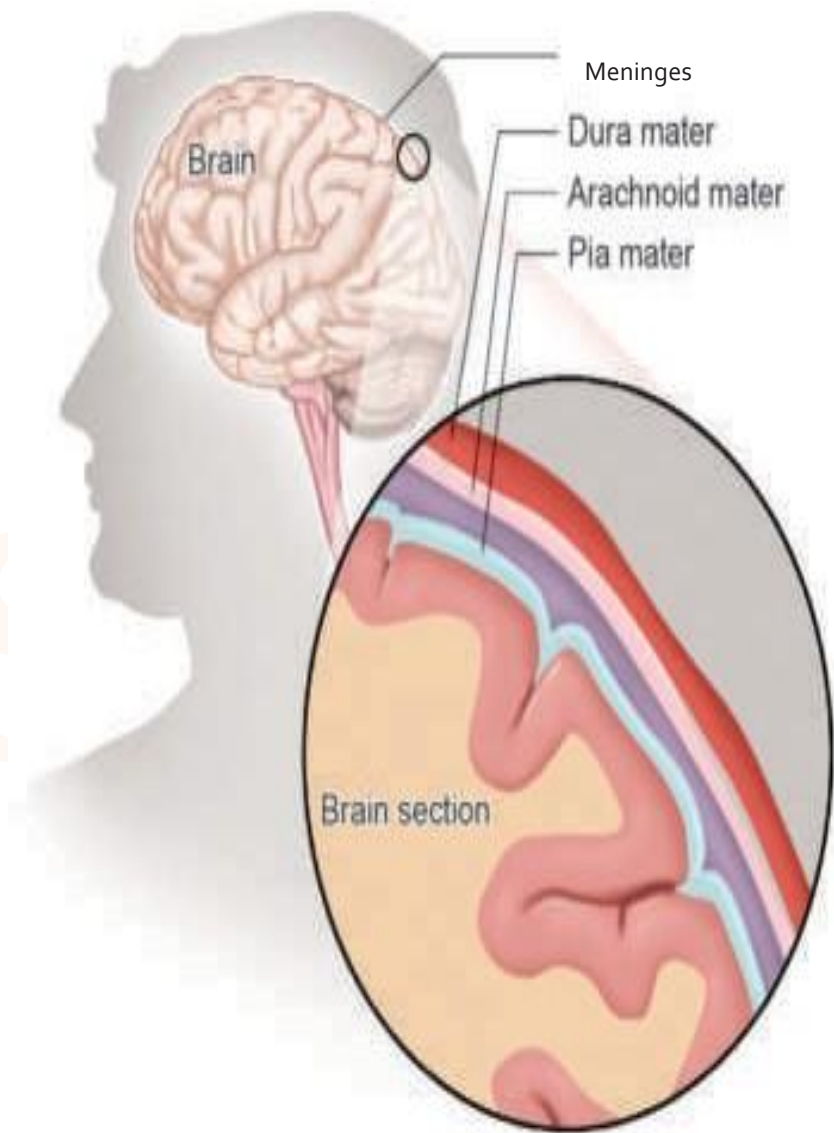


Fig. 15.4 Meninges of Brain

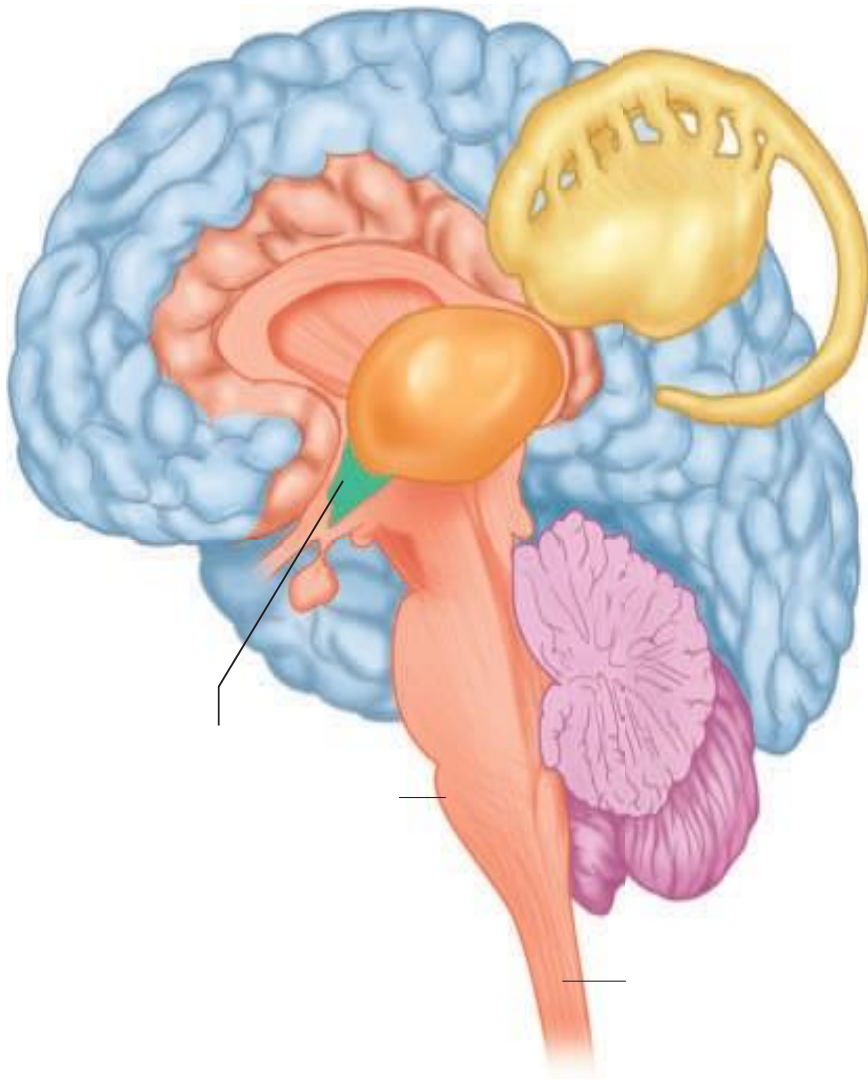


Fig. 15.5 Structure of Brain

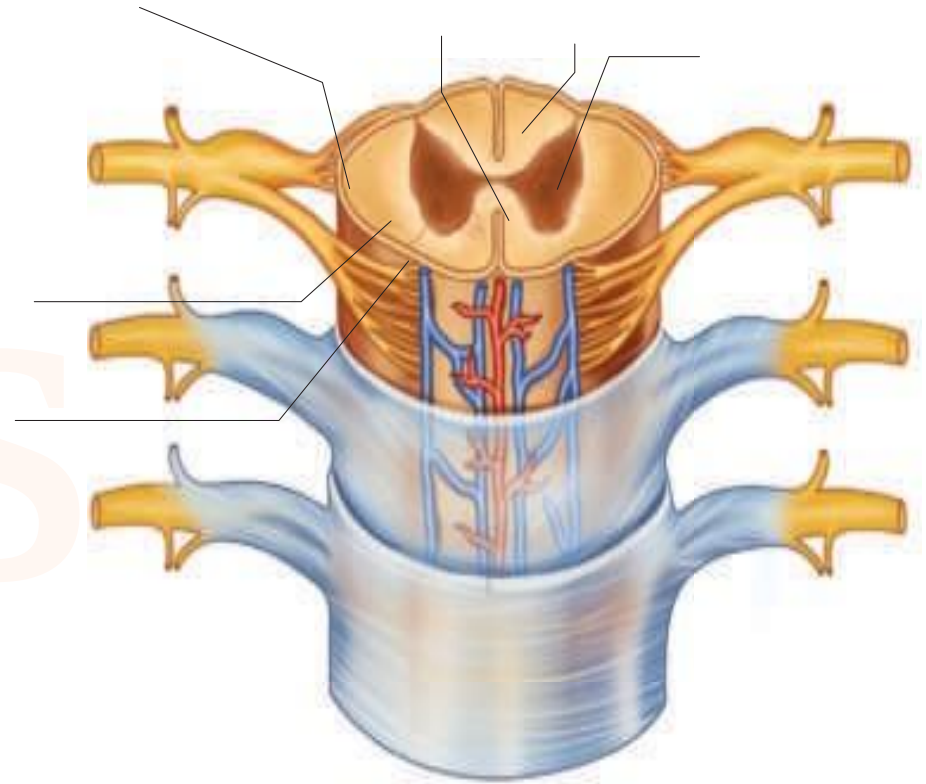


Fig. 15.6 Structure of spinal cord

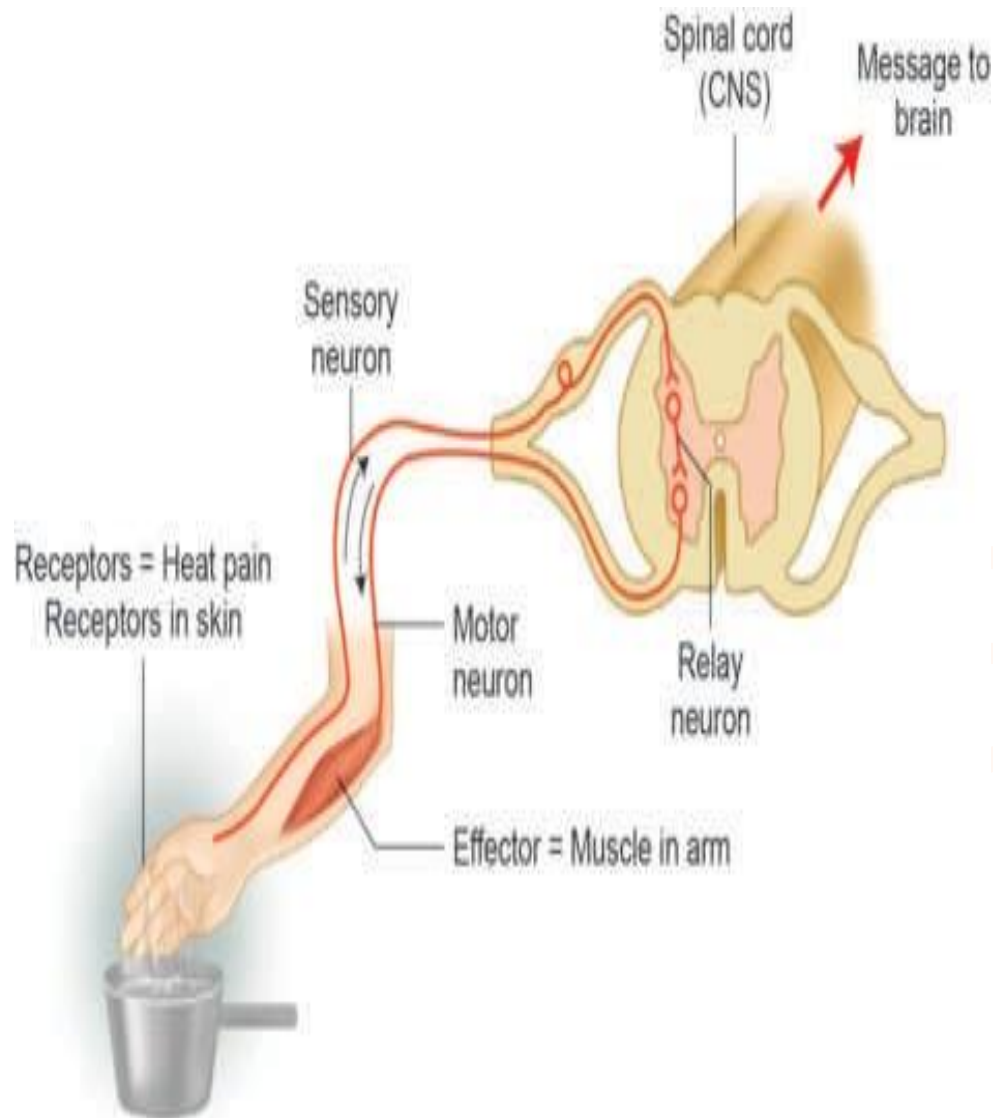


Fig. 15.7 Reflex action and its pathway

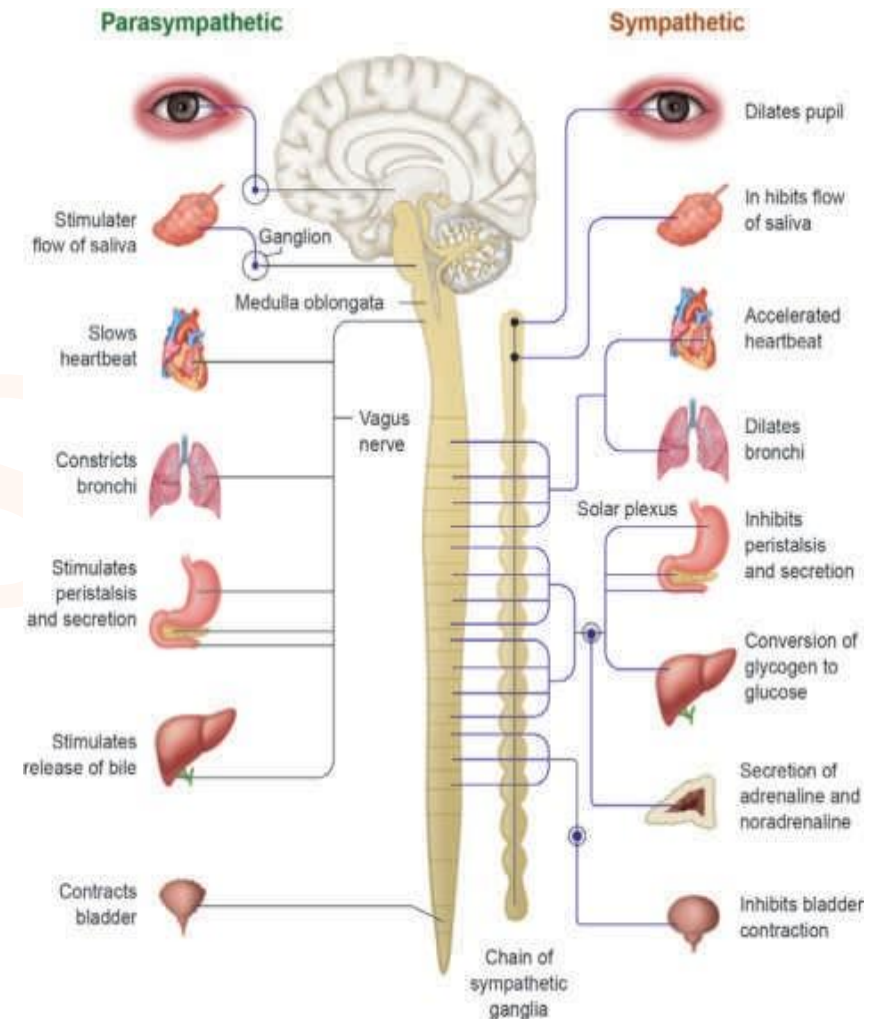


Fig. 15.8 Sympathetic and Parasympathetic nervous system

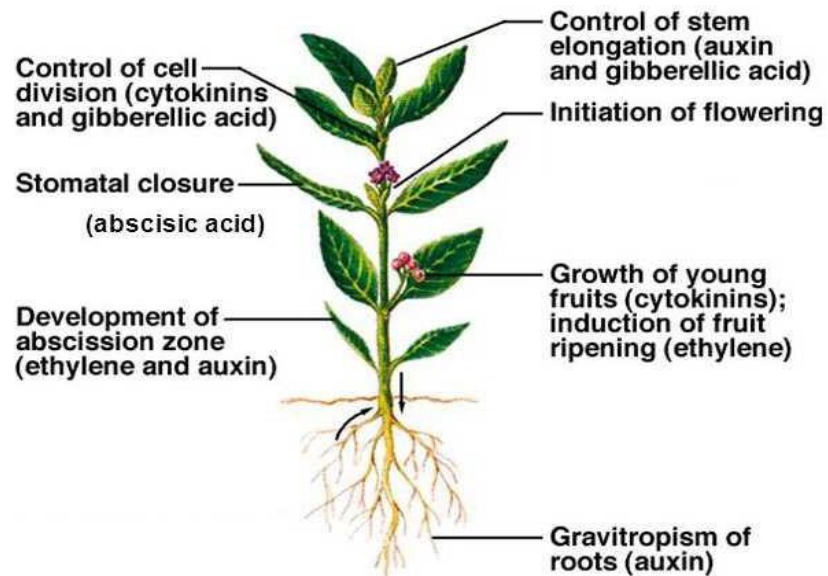


Figure 16.1 Hormonal interaction in plant growth and development

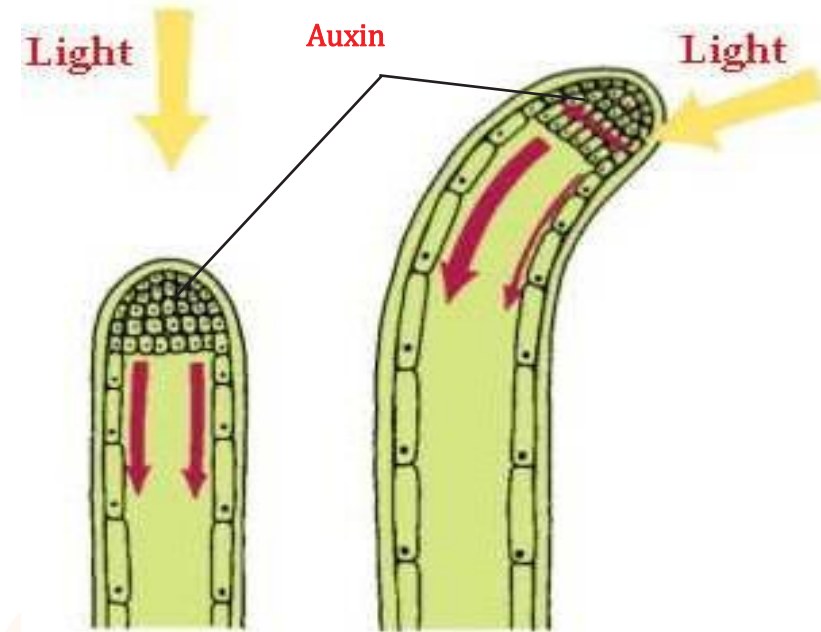


Figure 16.3 Cell Elongation

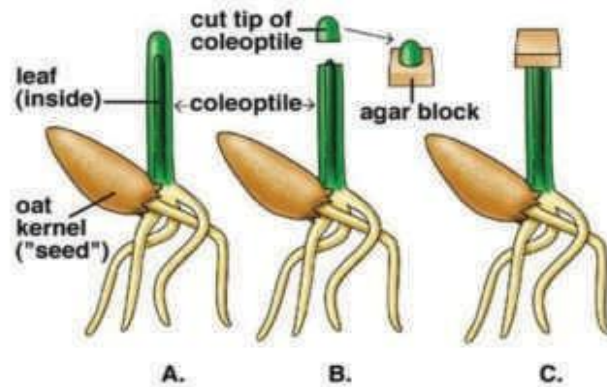


Figure 16.2 Went's Experiment

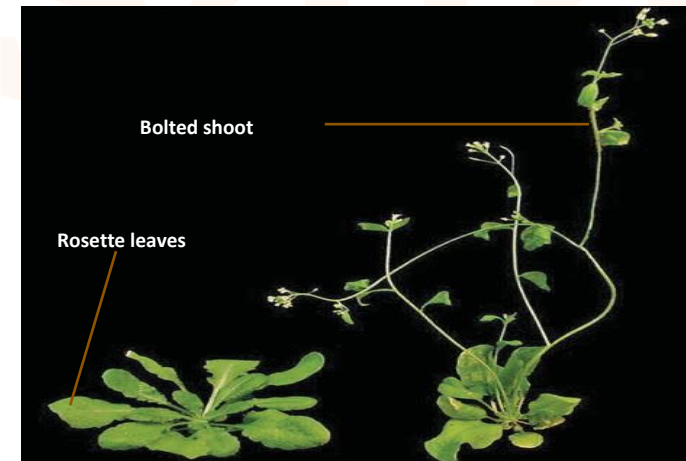


Figure 16.4 Bolting

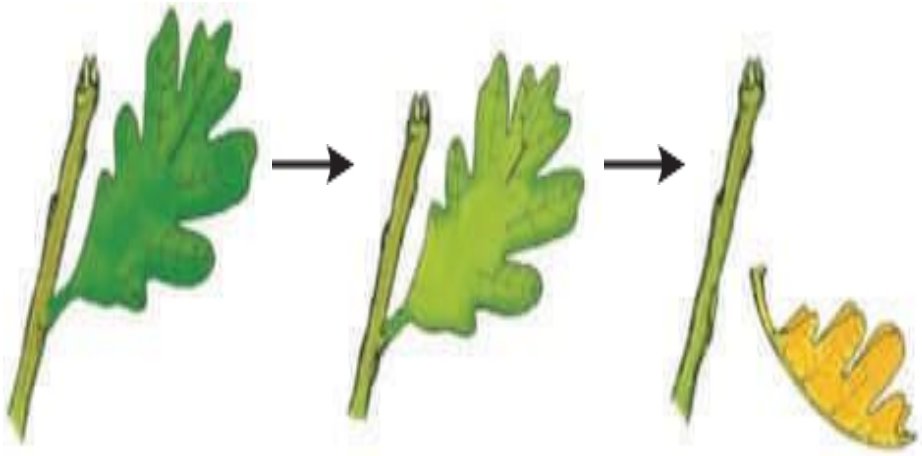


Figure 16.5 Senescence and abscission

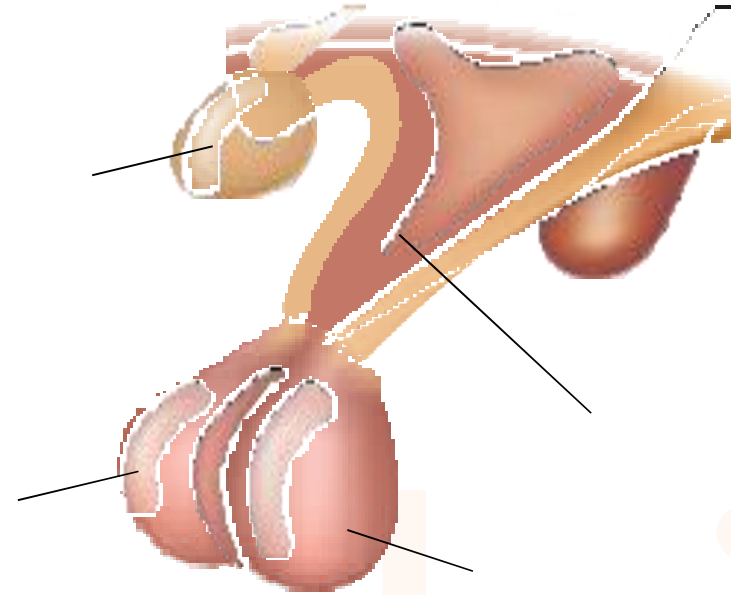
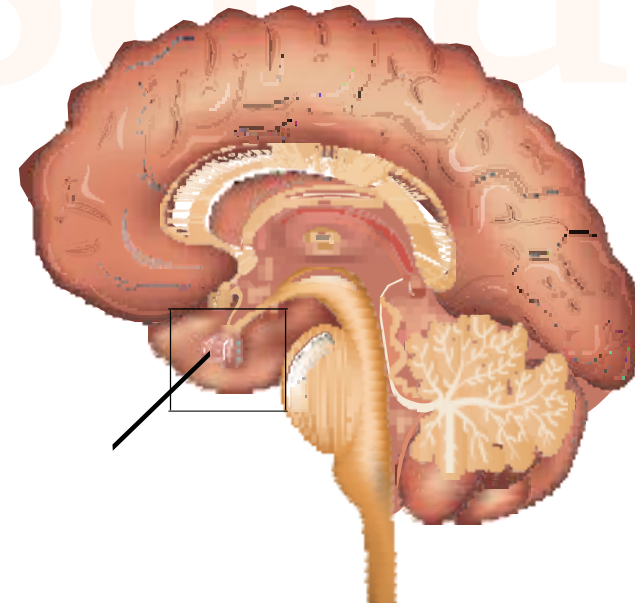


Figure 16.7 Pituitary Gland



Figure 16.6 Ethylene



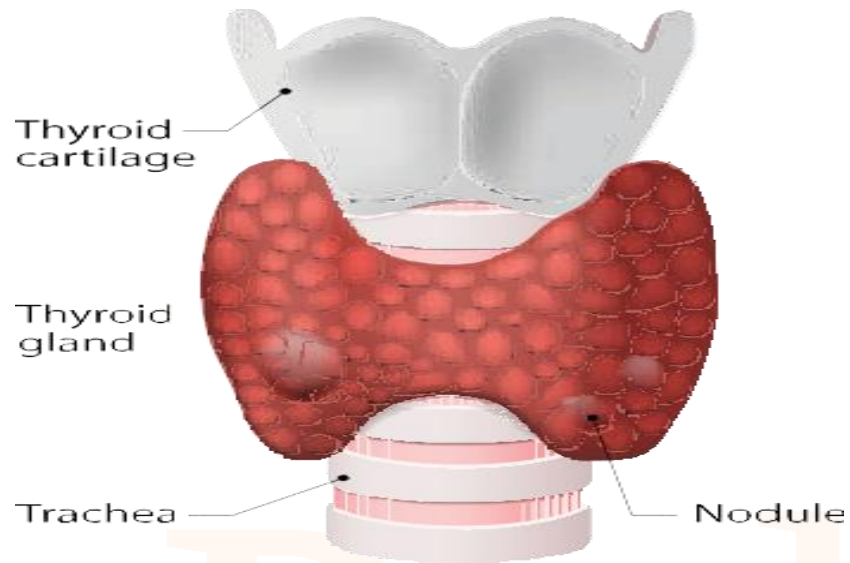


Figure 16.8 Thyroid Gland



Figure 16.9 Parathyroid Gland

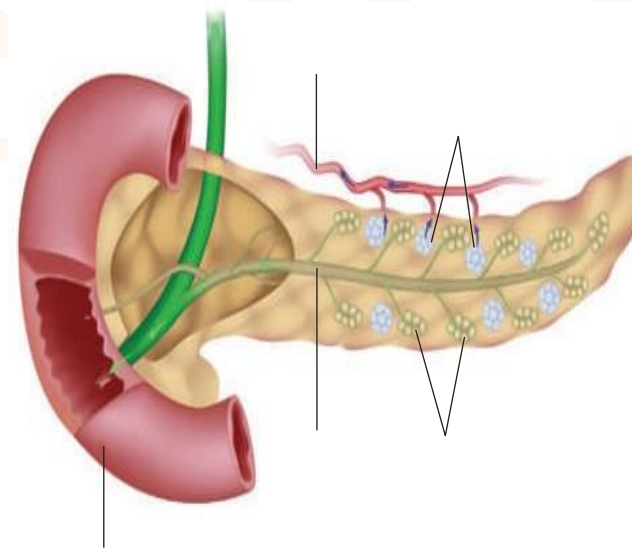


Figure 16.10 Pancreas

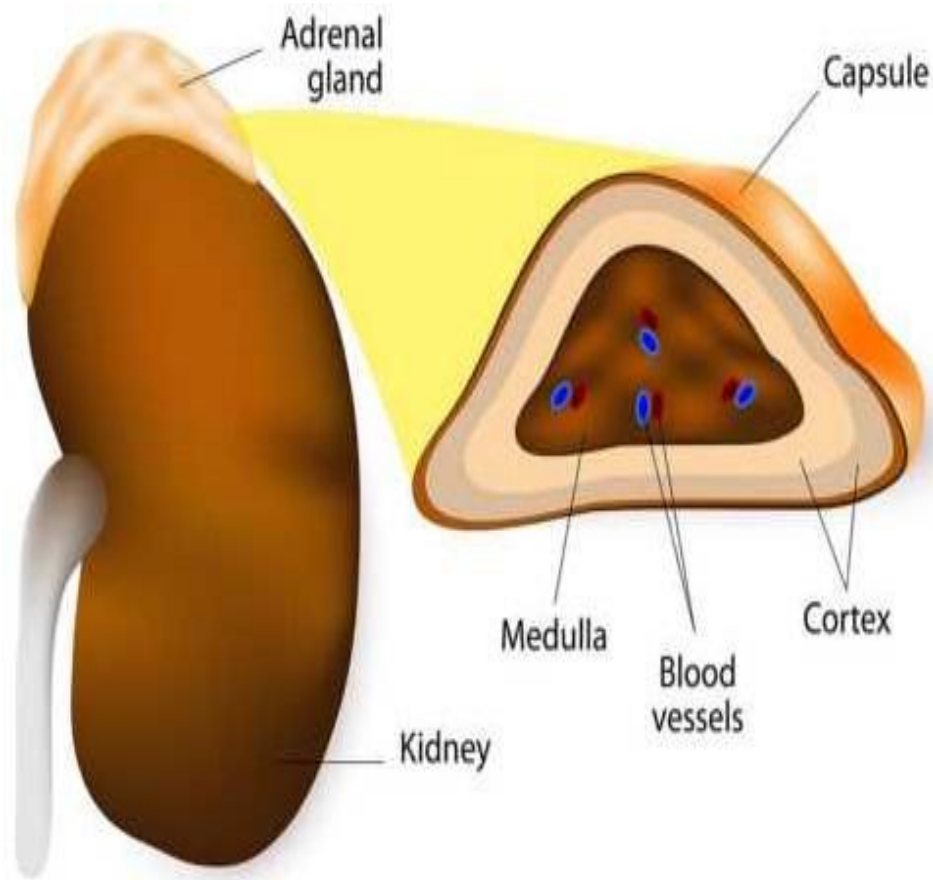


Figure 16.11 Adrenal Gland

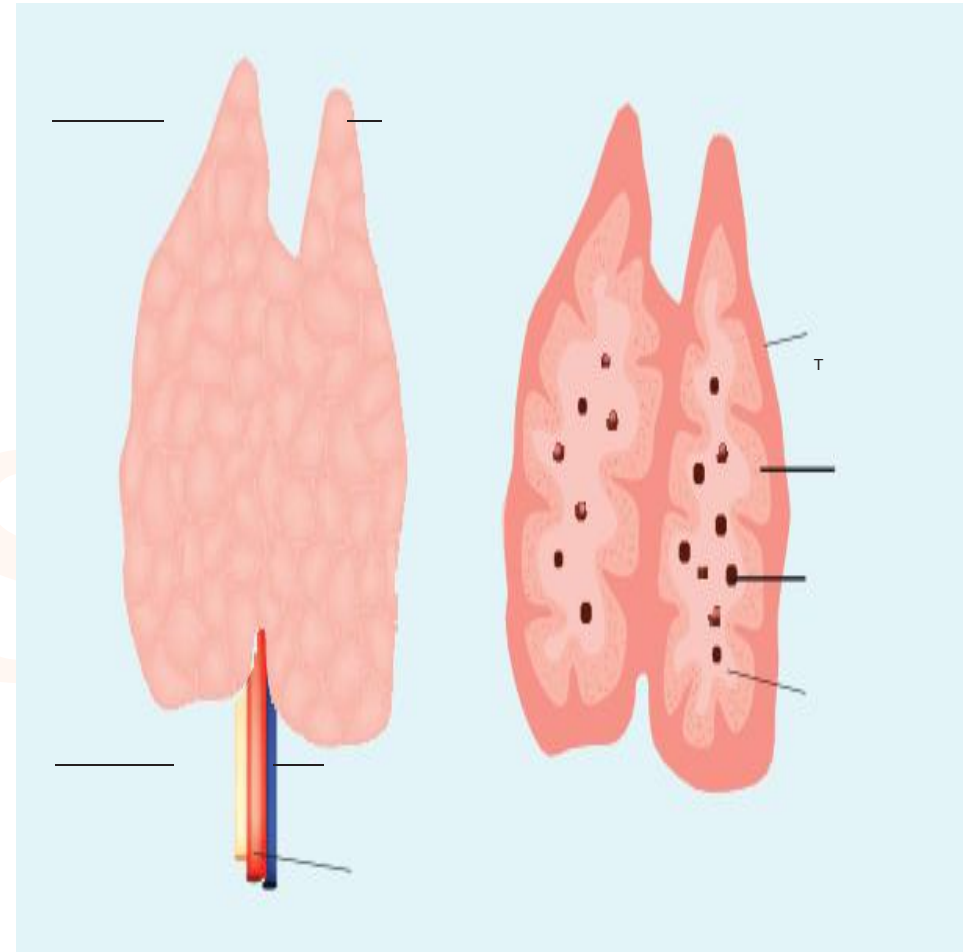


Figure 16.12 Thymus Gland



Figure 17.1 Vegetative reproduction by leaf

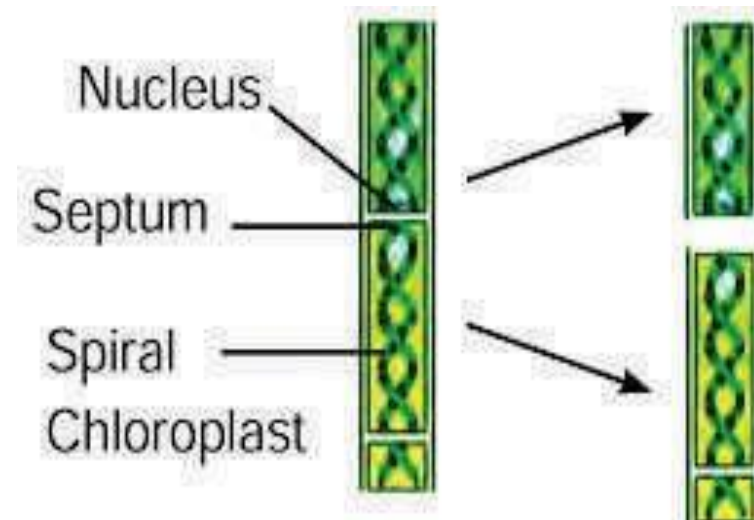


Figure 17.3 Fragmentation in Spirogyra

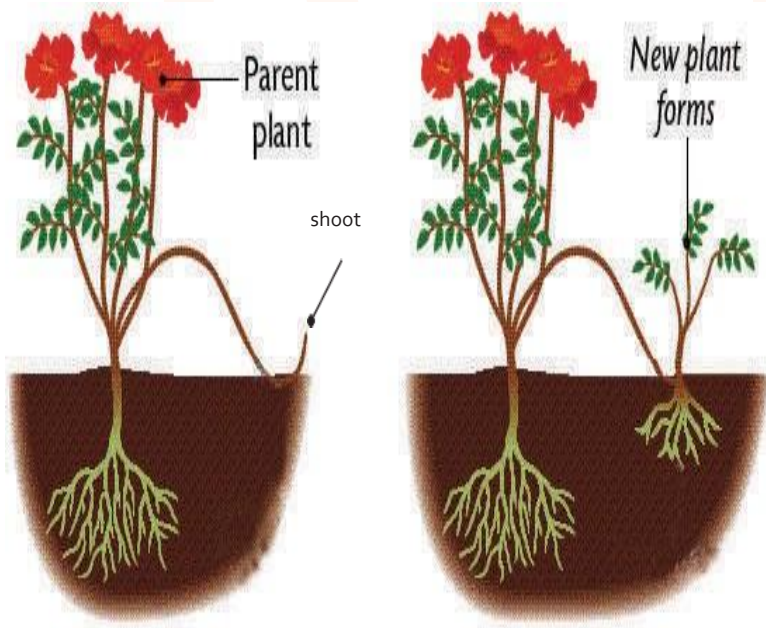


Figure 17.2 Vegetative reproduction by stem

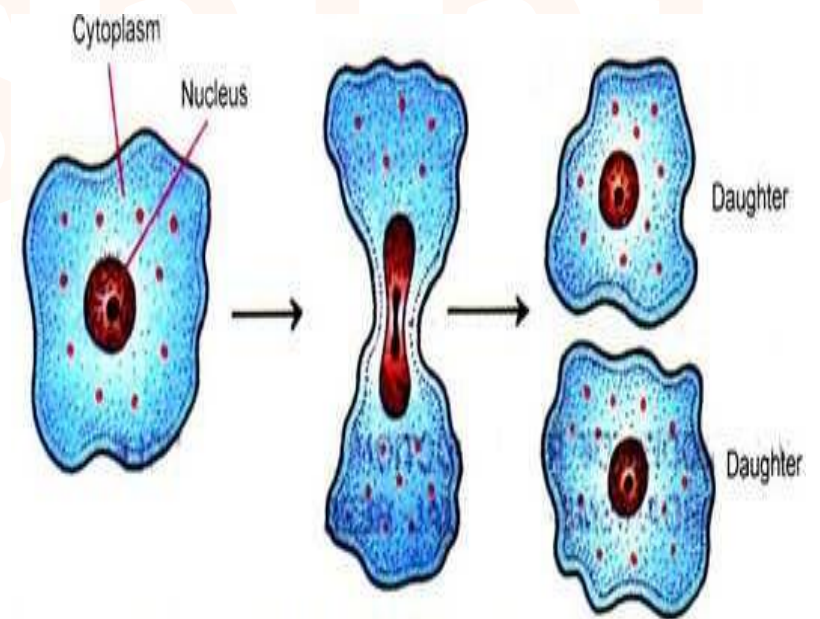


Figure 17.4 Fission in Amoeba

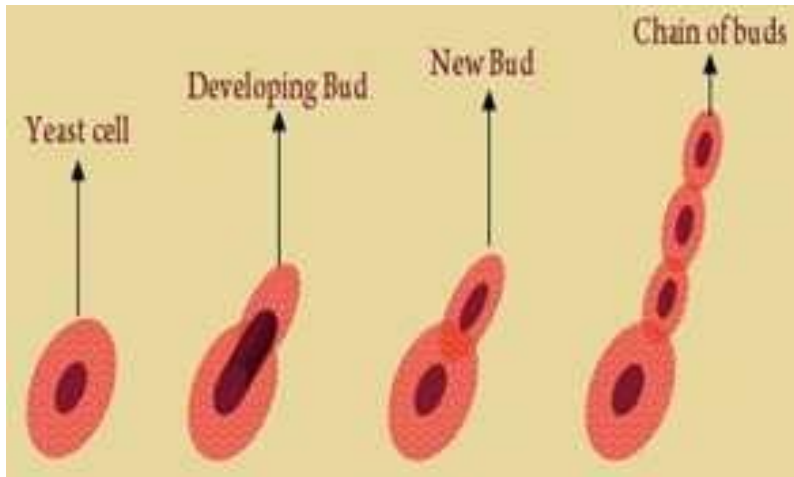


Figure 17.5 Budding in Yeast

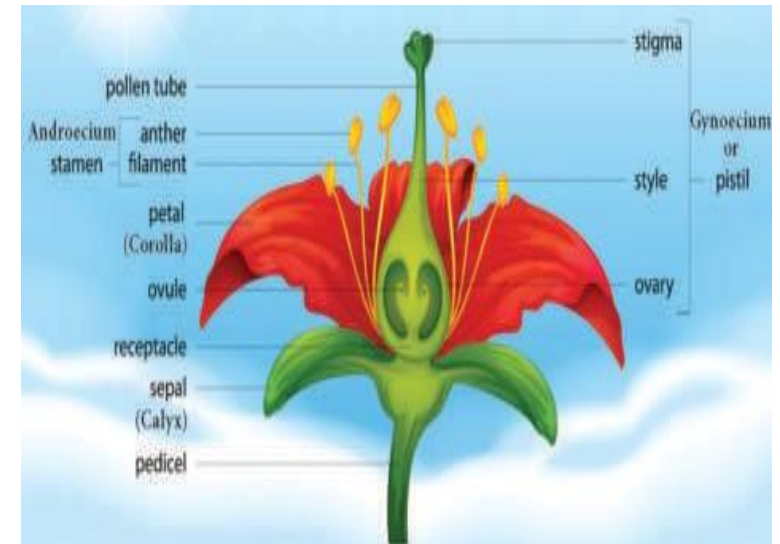


Figure 17.7 Parts of a flower

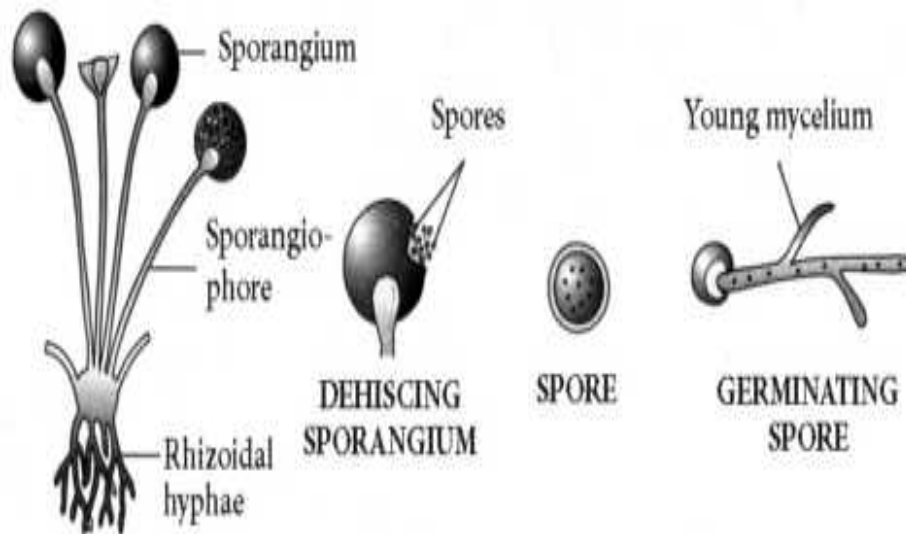


Figure 17.6 Spore formation in *Rhizopus*

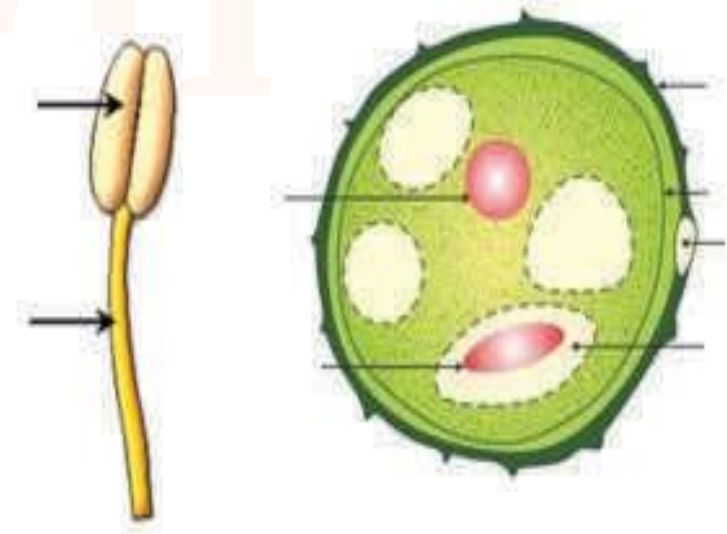


Figure 17.8 Structure of Anther

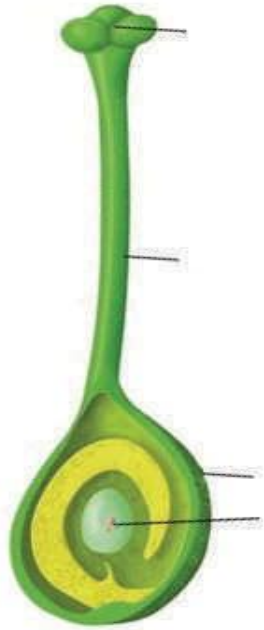


Figure 17.9 Gynoecium

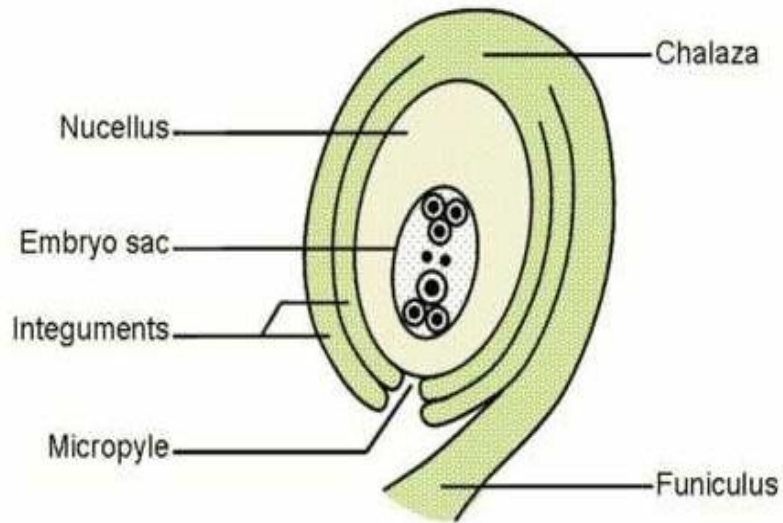


Figure 17.10 Structure of the Ovule

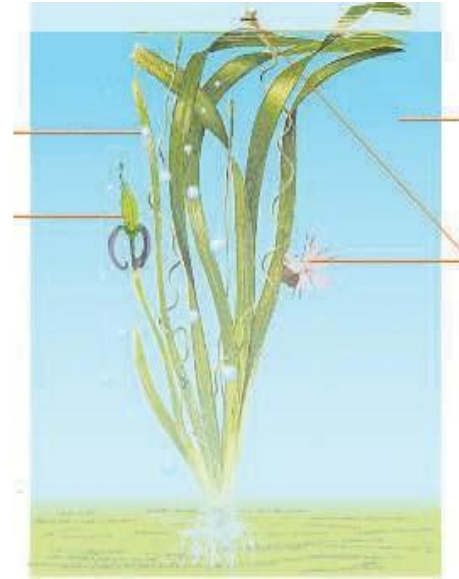


Figure 17.11 Hydrophily

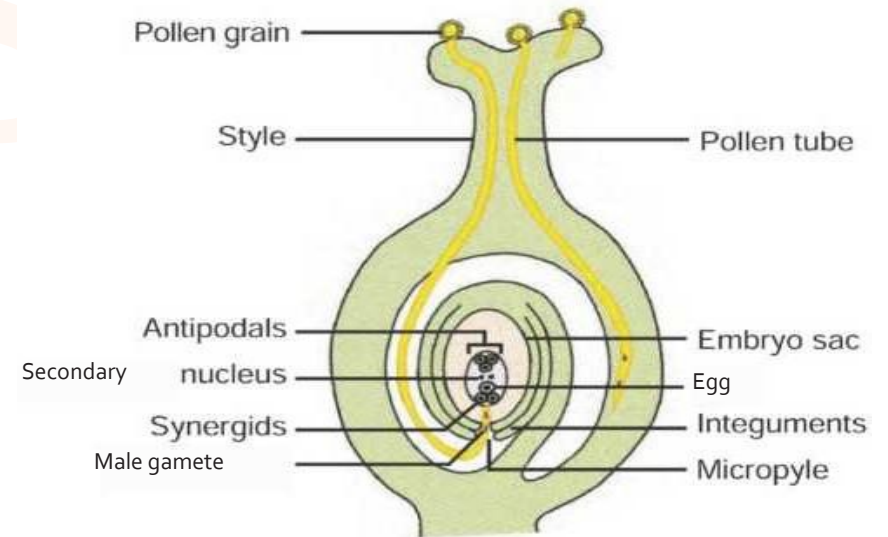


Figure 17.12 Process of Fertilization

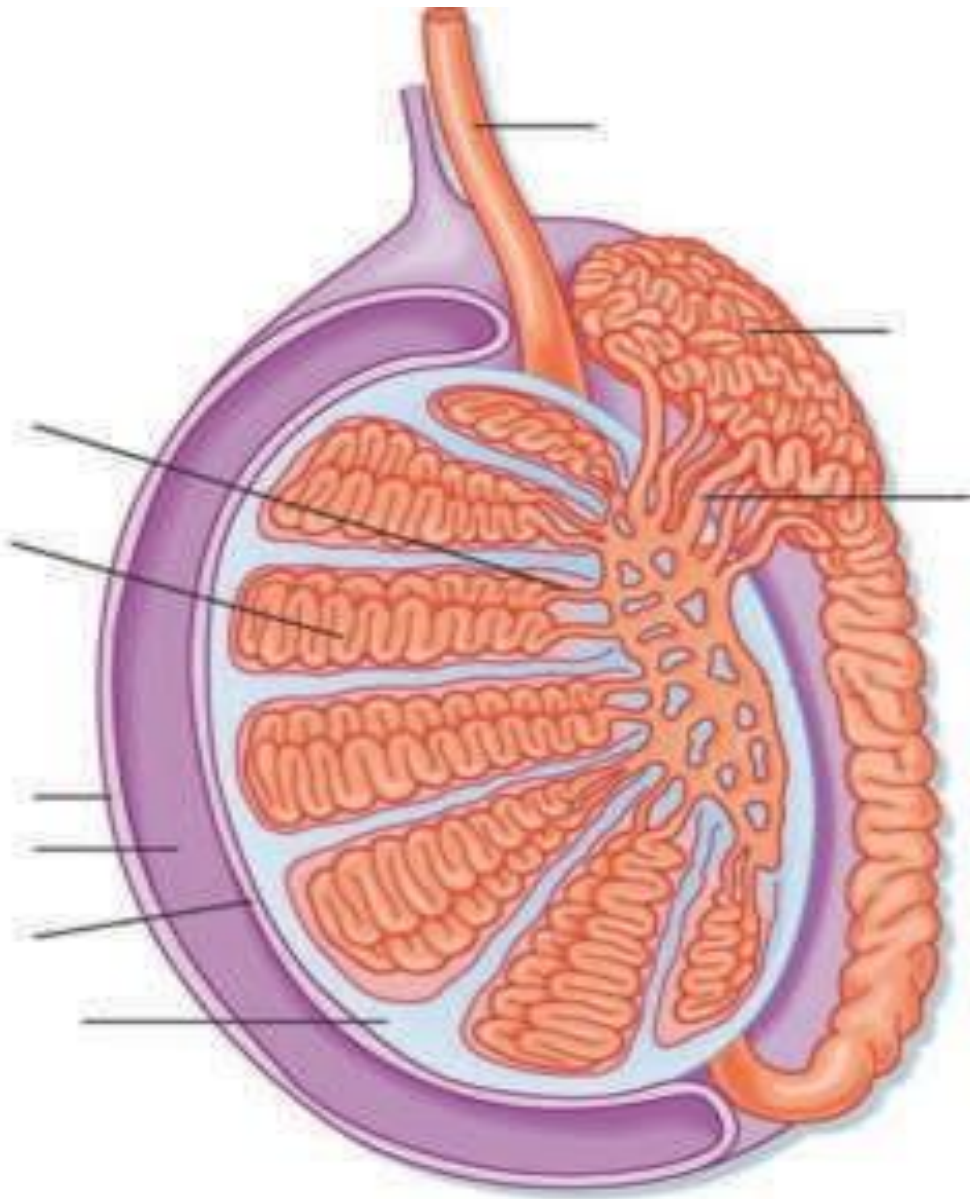


Figure 17.13 Cross section of human testes

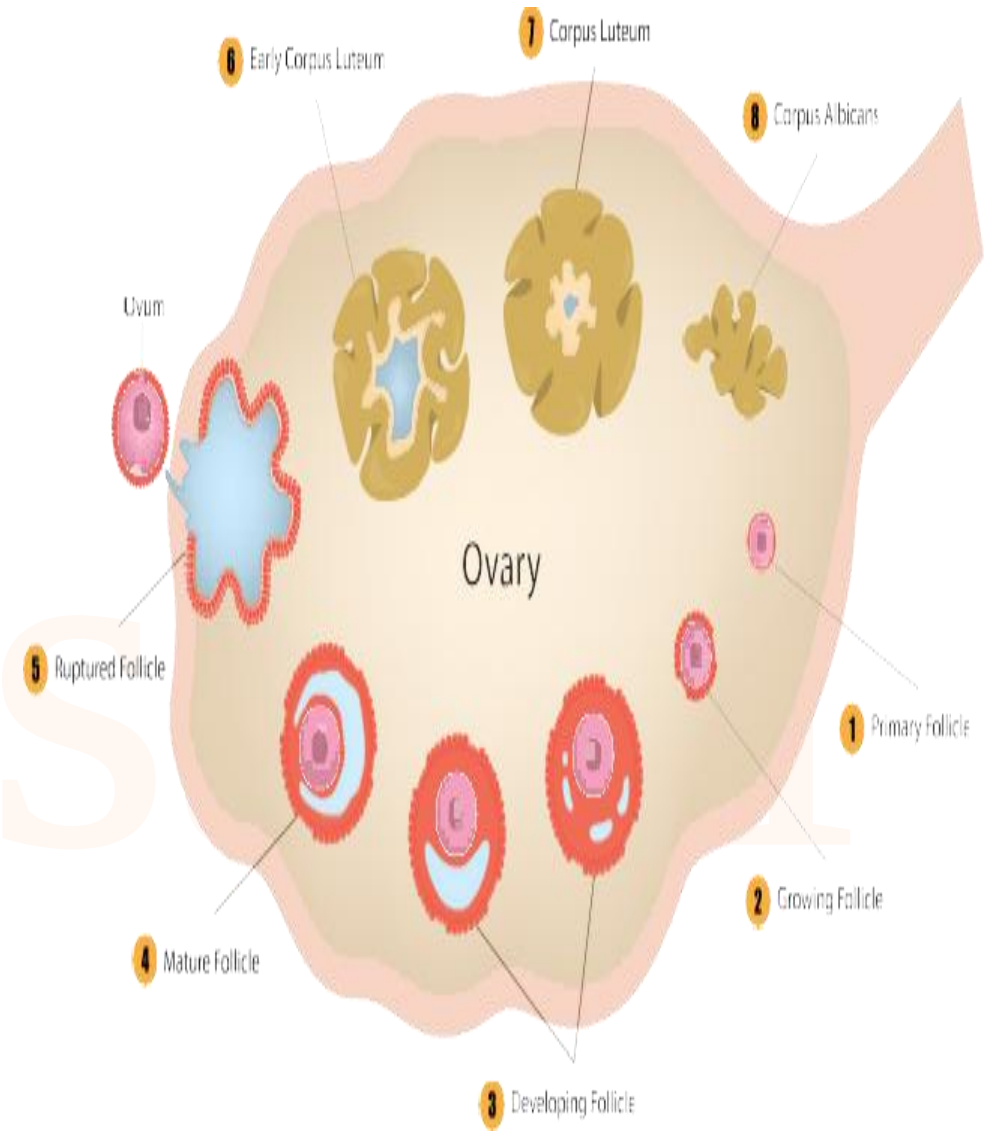


Figure 17.14 Cross section of human ovary

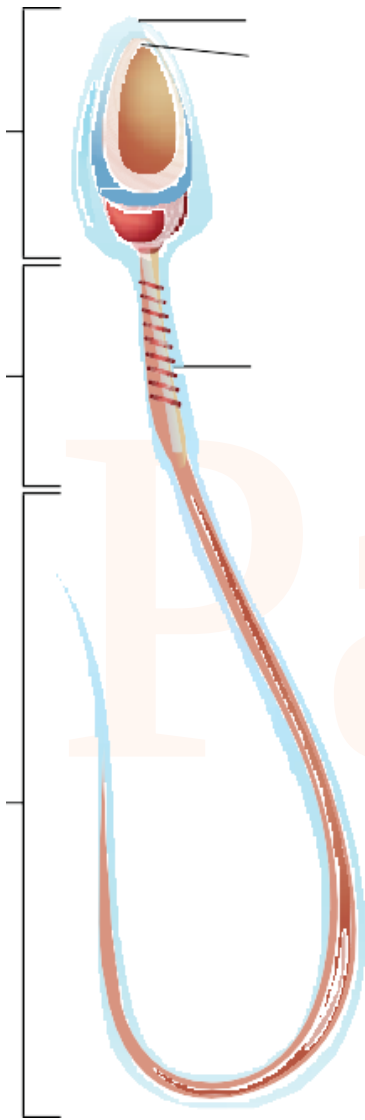


Fig. 17.15 Structure of Sperm

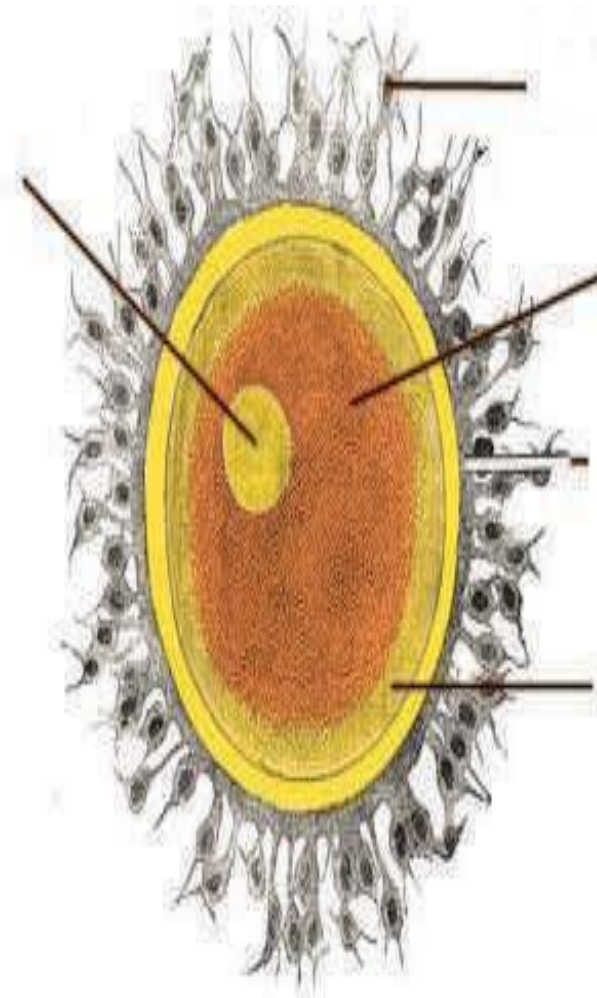


Fig. 17.16 Structure of Ovum

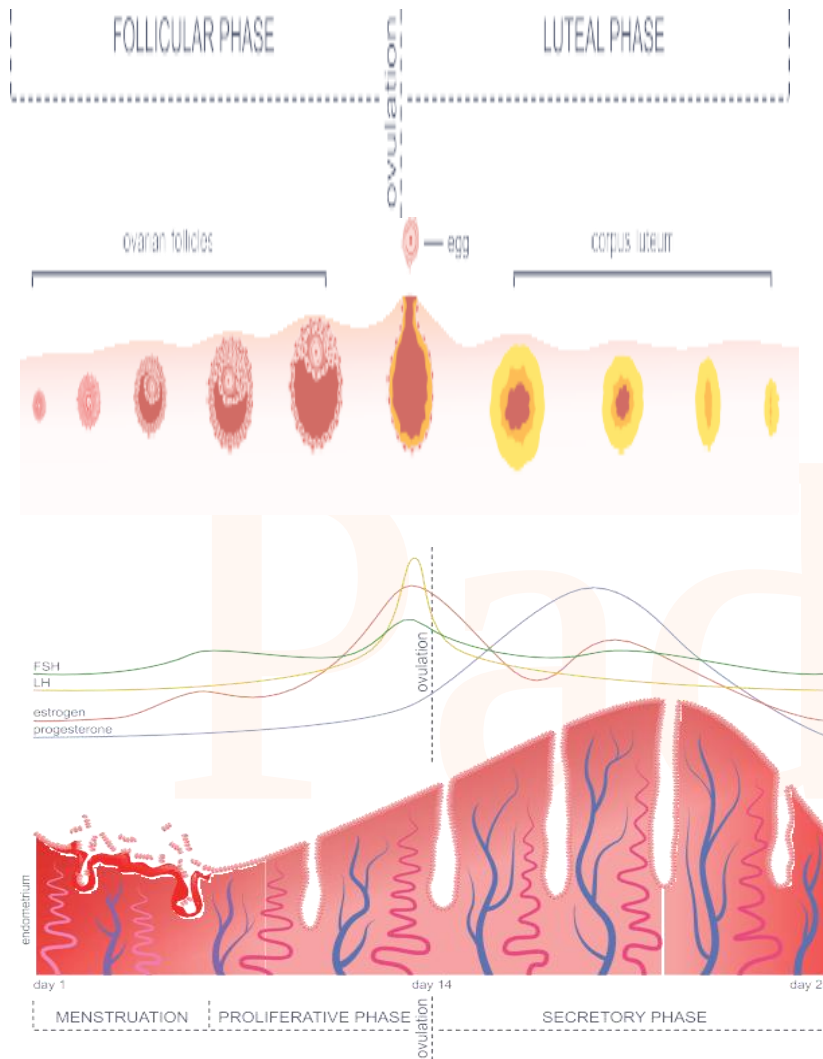


Fig. 17.17 Menstrual cycle

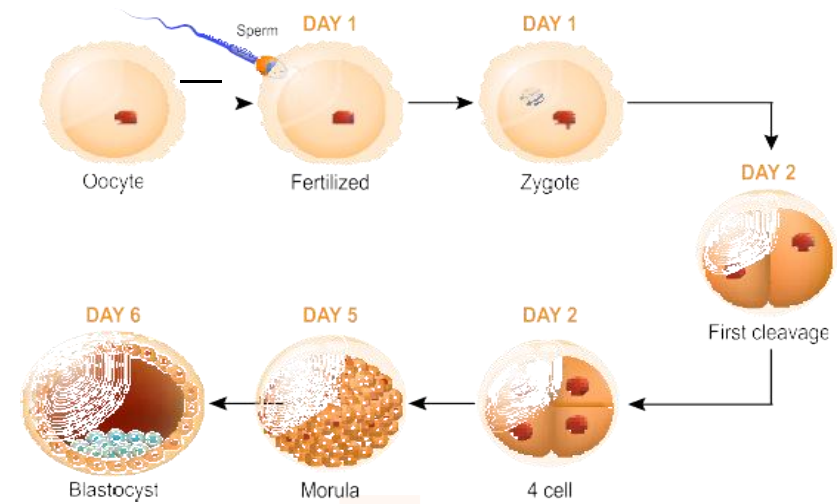


Figure 17.18 Developmental stages of zygote from cleavage to blastocyst formation



Figure 17.19 Copper-T

Table 18.1 Constrasting characters of pea plant used by Mendel

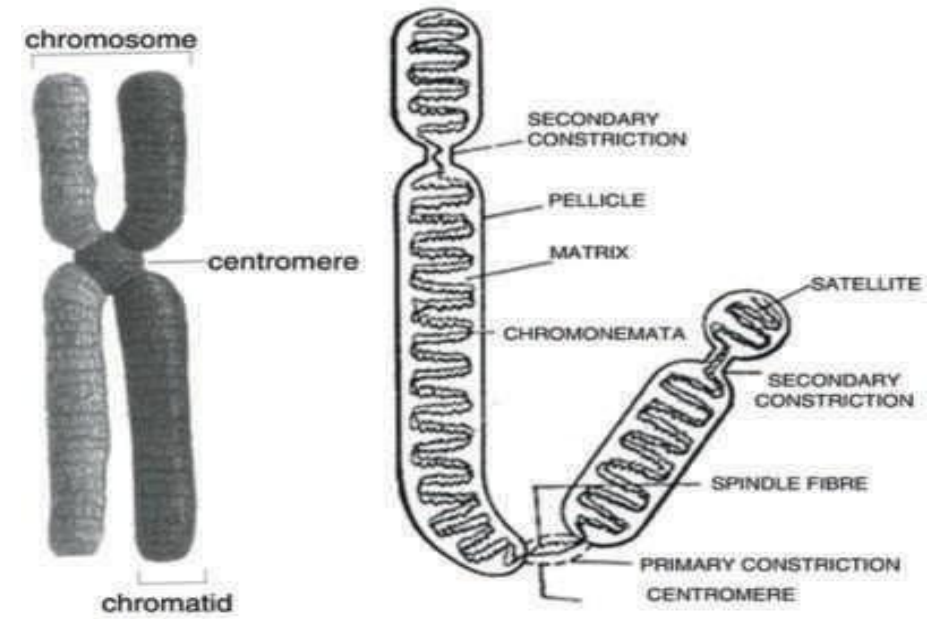


Fig.18.3 Structure of chromosome

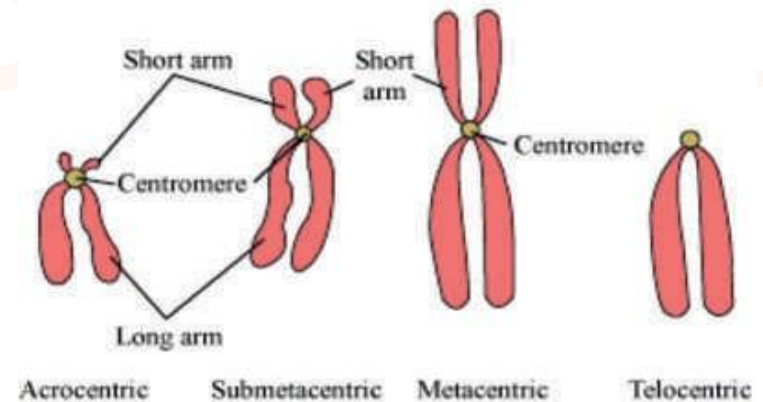


Fig.18.4 Types of chromosomes based on position of centromere

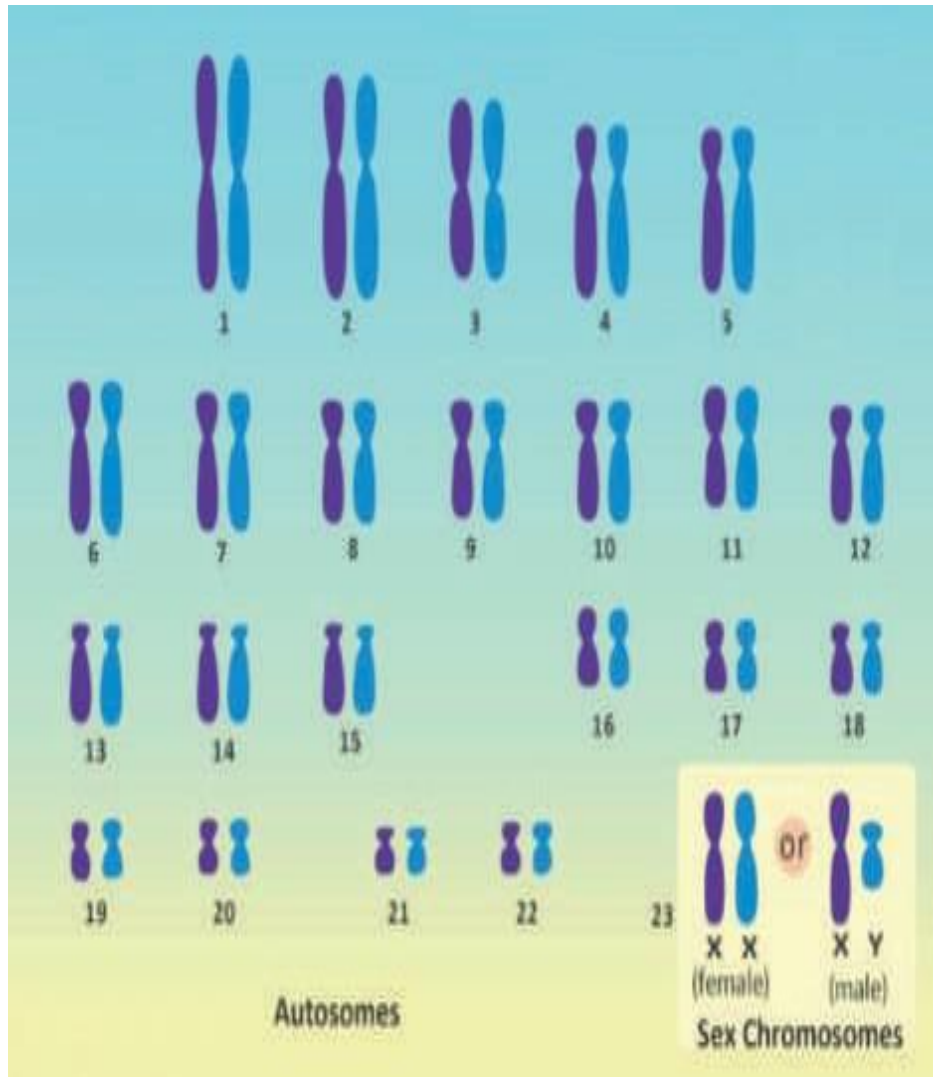


Fig.18.5 Normal human karyotype

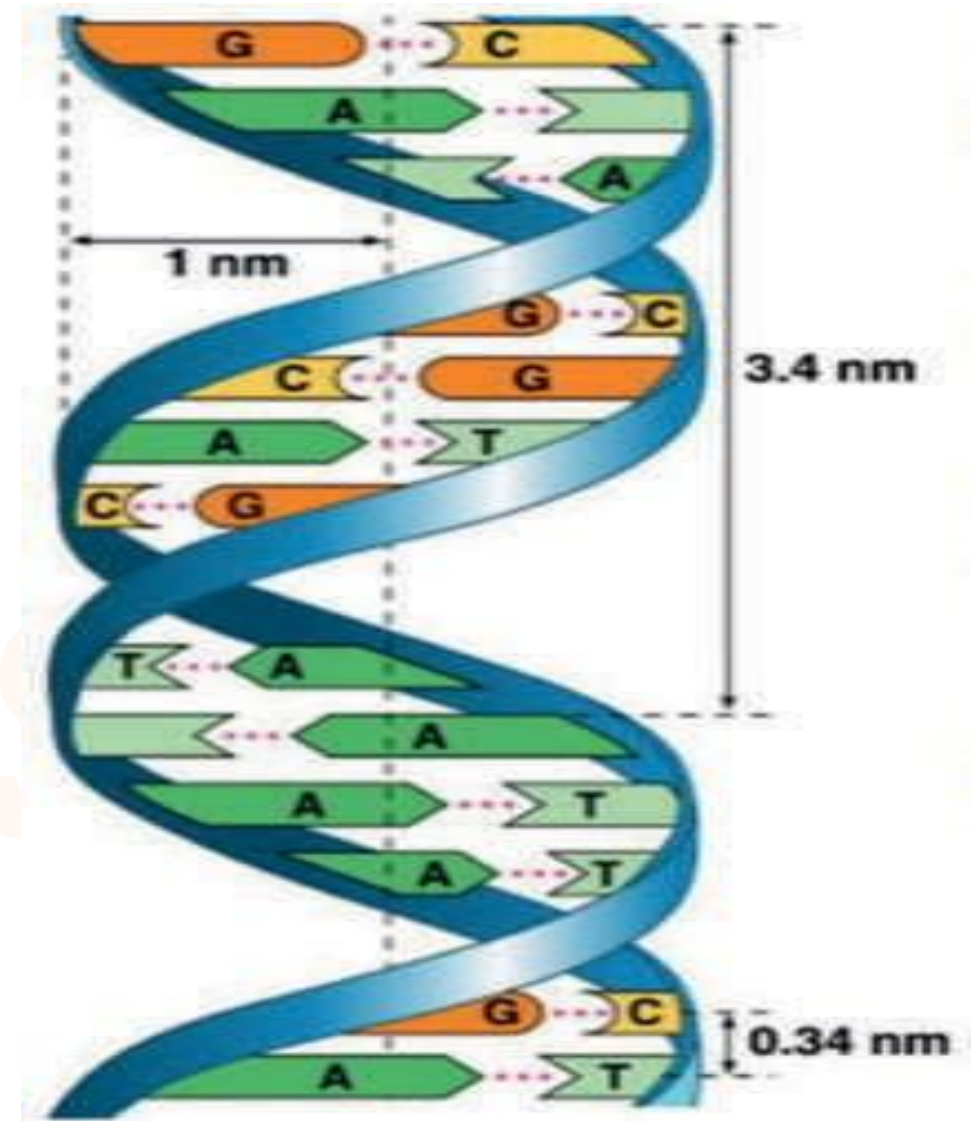


Fig.18.6 Structure of DNA

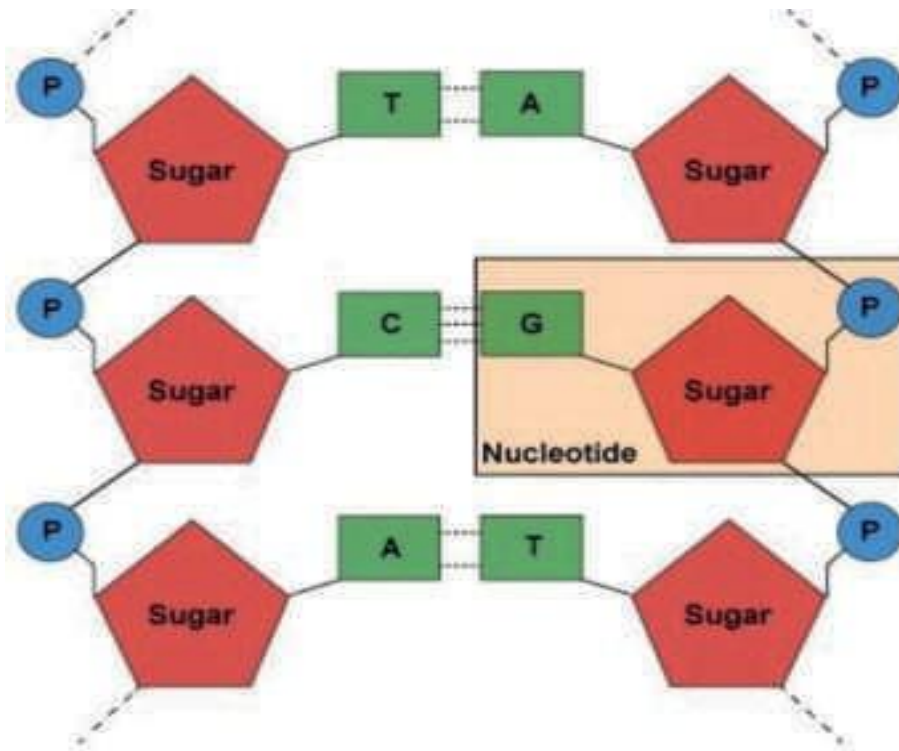


Fig.18.7 Nucleotides in a DNA

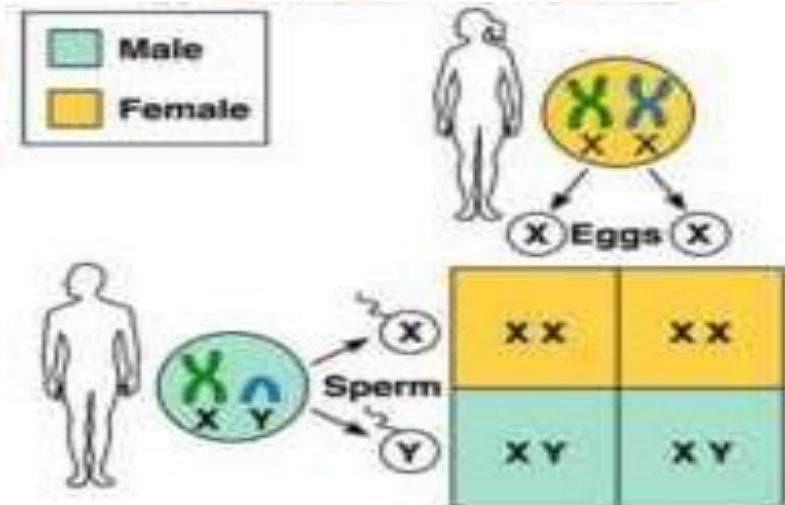
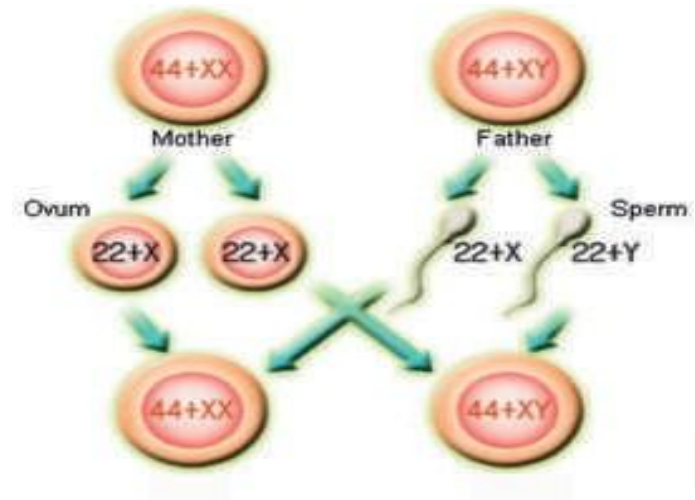


Fig.18.9 Sex determination in human

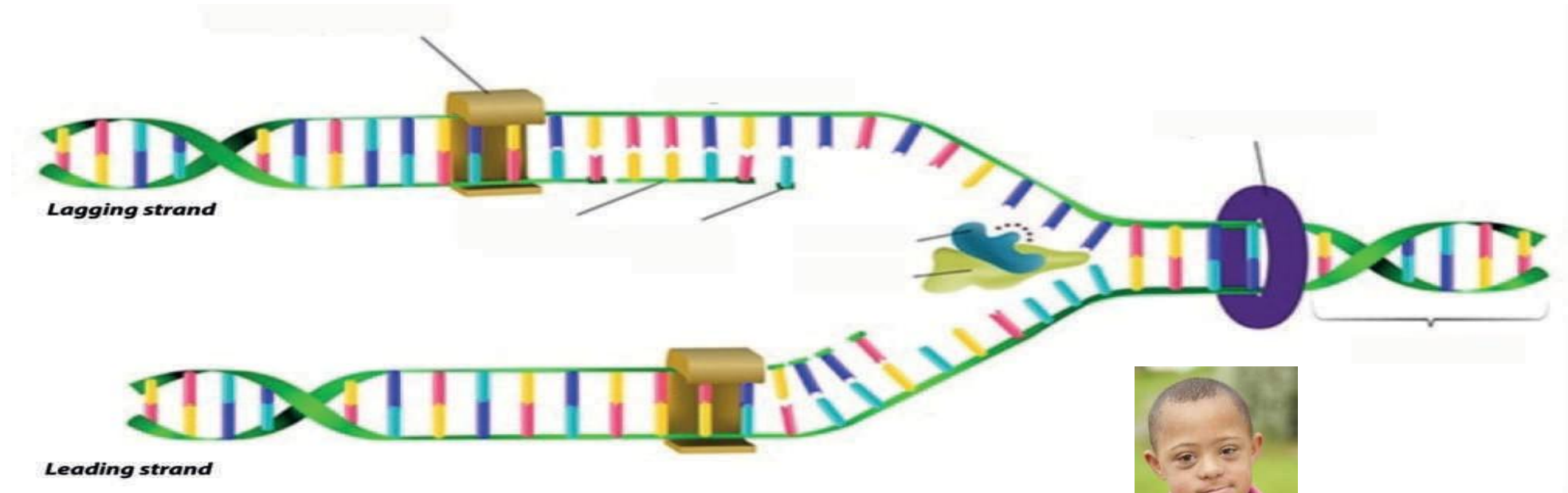


Fig.18.8 Replication of DNA

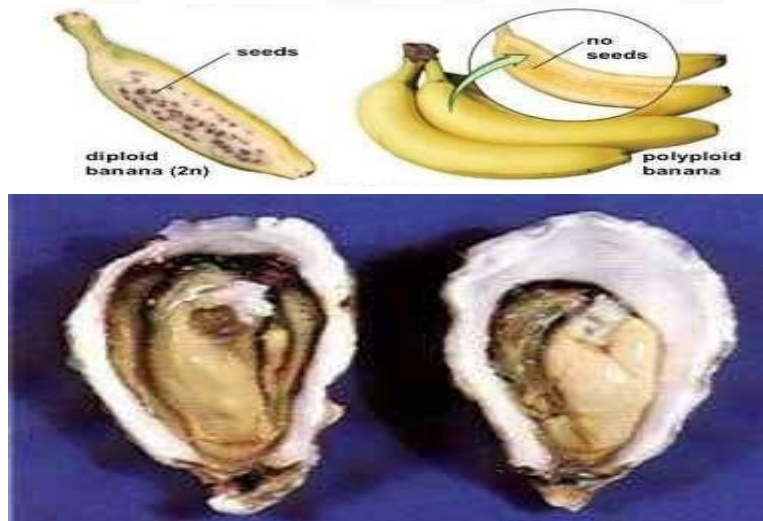


Fig.18.10 Euploidy

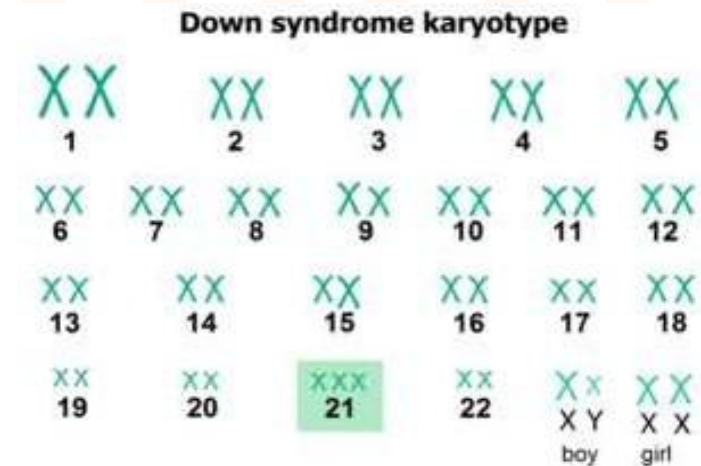


Fig.18.11 Aneuploidy

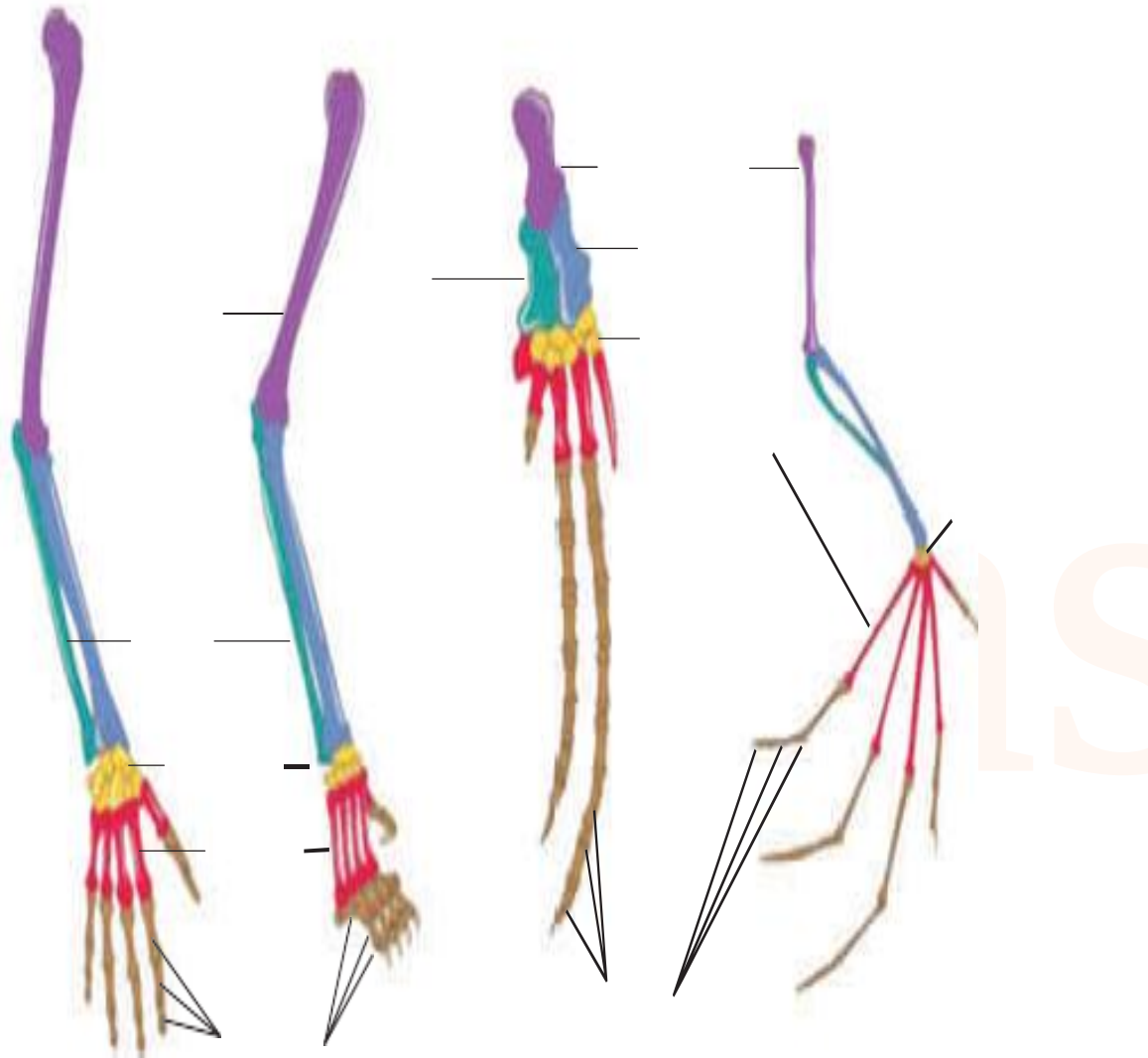


Figure 19.1 Forelimbs of vertebrates showing homologous structure

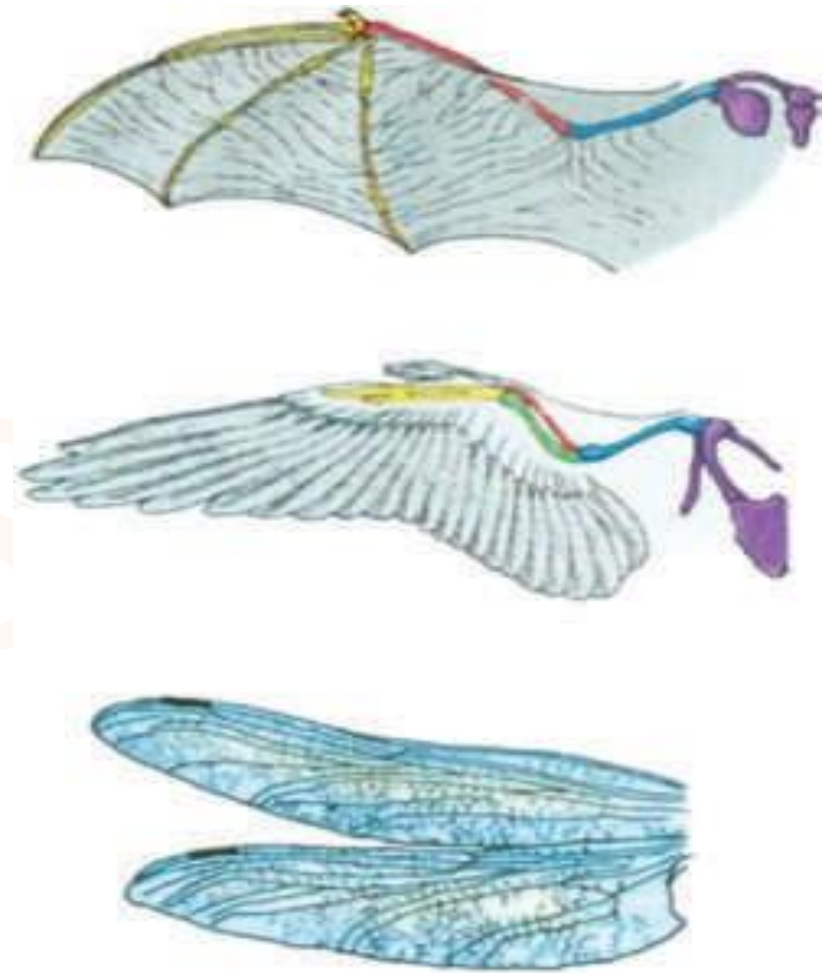


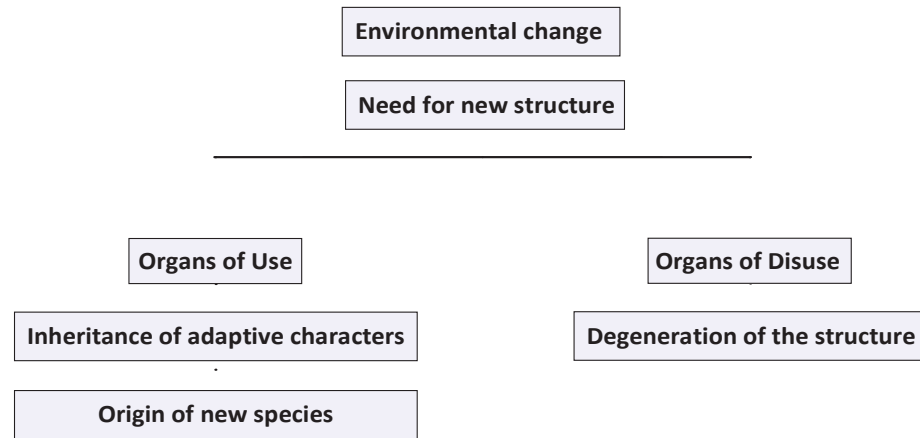
Figure 19.2 Analogous structure showing a bat wing, a bird wing and an insect wing



Figure 19.3 Embryonic development of vertebrates



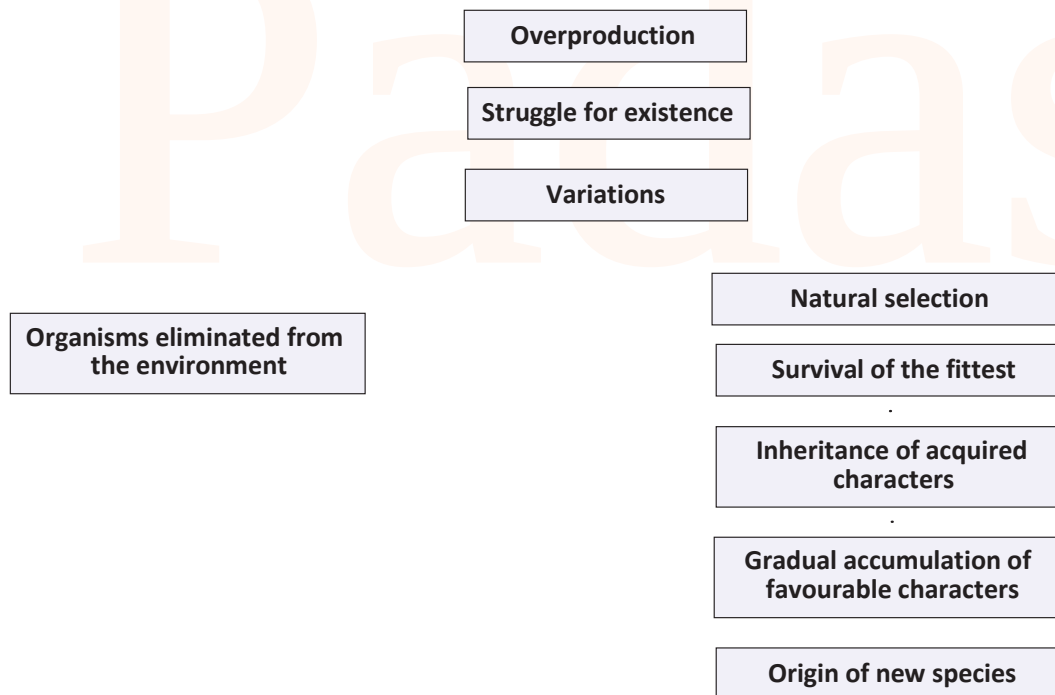
Figure 19.4 Archaeopteryx - Fossil bird



Flow chart showing the postulates of Lamarckism



Figure 19.5 Microbial diversity from sandstone and granite from the McMurdo Dry Valleys, Antarctica



Flowchart showing the postulates of Darwinism



Figure 20.1 IR-8



Figure 20.2 Protina–lysine rich Maize



Figure 20.3 Atlas 66-protein rich Wheat

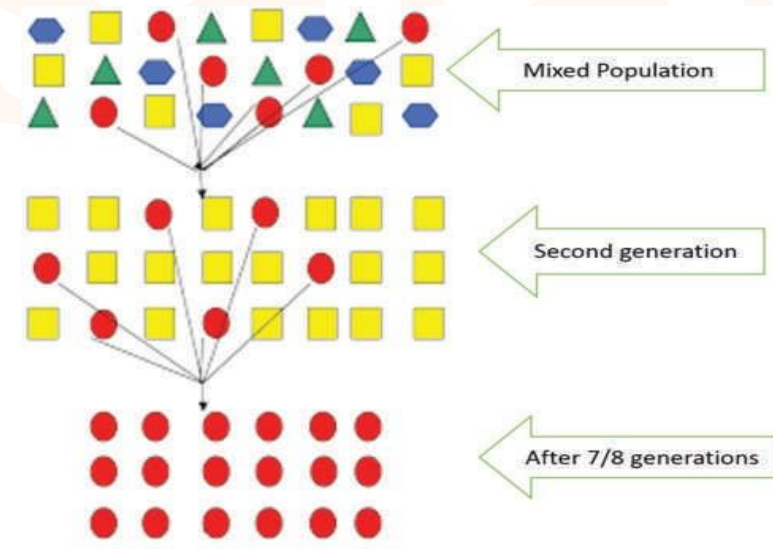


Figure 20.5 Mass Selection

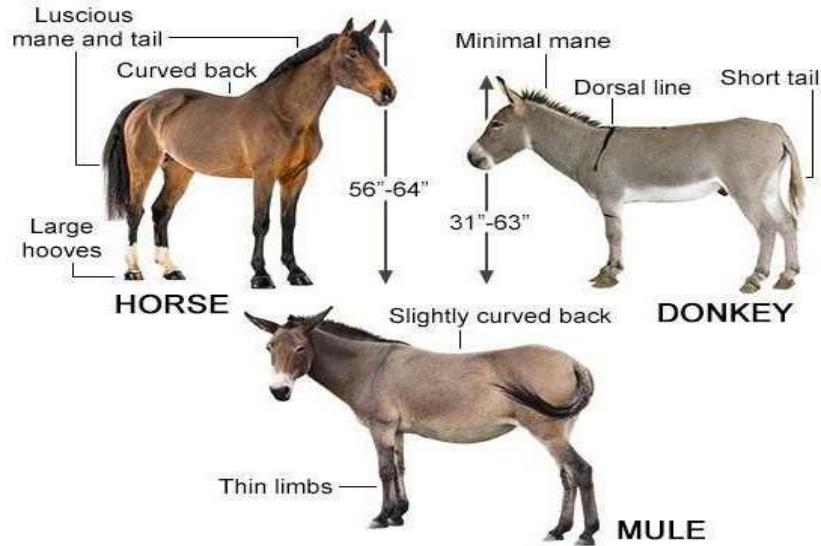


Figure 20.6 Cross breeding to produce Mule with superior characters

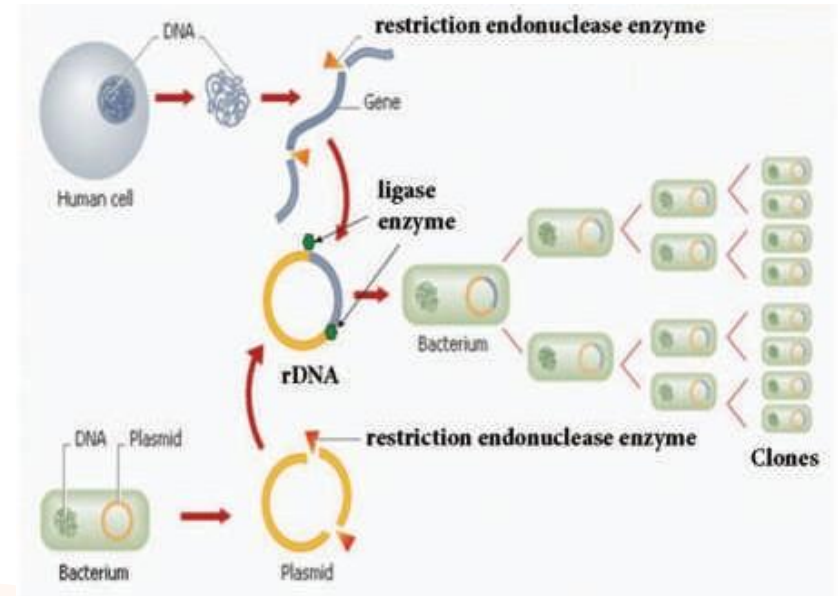


Figure 20.7 Genetic engineering technique(Gene cloning)

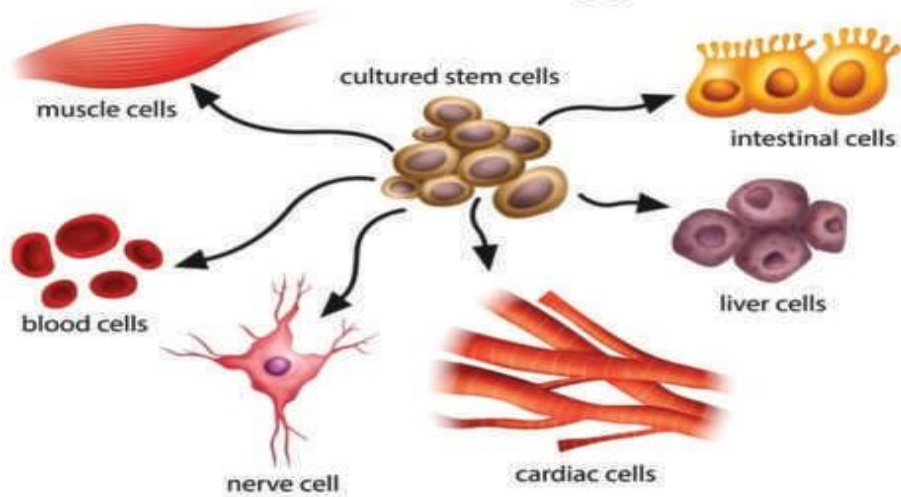
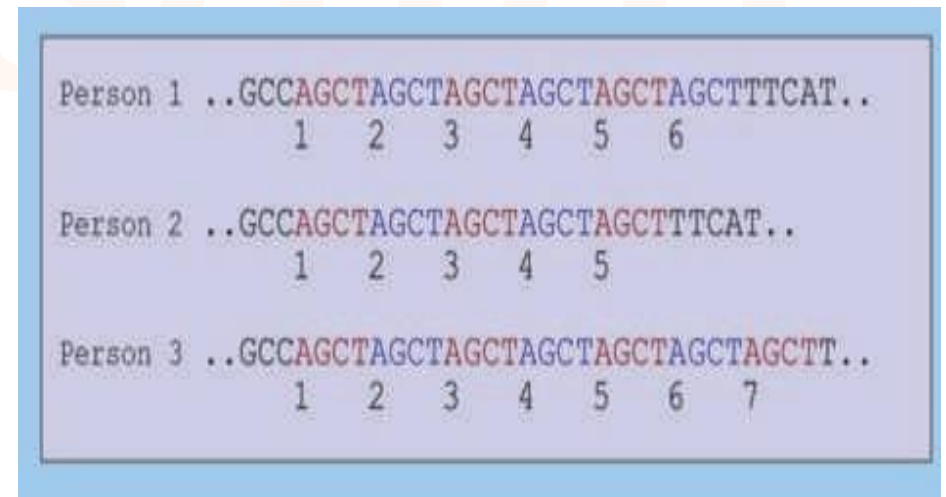


Figure 20.8 Differentiation of stem cells



VNTRs illustration of three persons



Figure 22.1 Solar Panel



Figure 22.3 Rain water Harvesting



Figure 22.2 Windmill



Figure 22.4 A view of sewage treatment plant

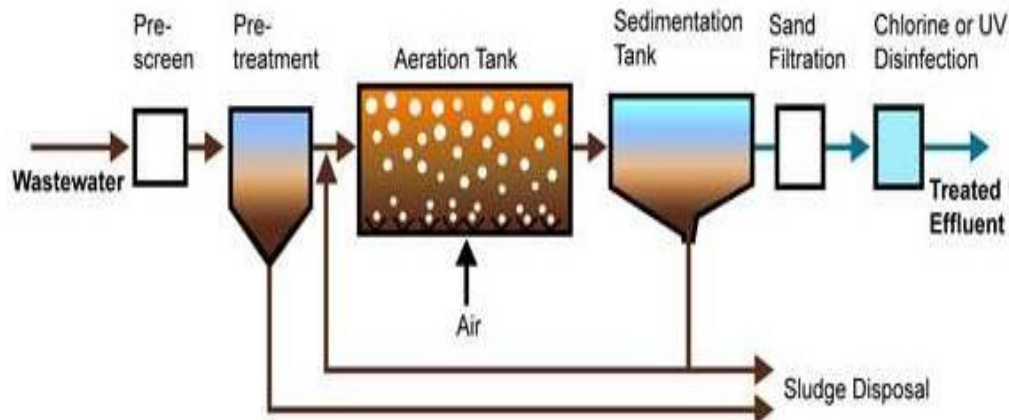


Figure 22.5 Conventional Wastewater Treatment



Figure 22.7 Collection of various types of solid wastes in separate bins



Figure 22.6 Collection of degradable and non- degradable solid wastes

Sl.No.	Lesson No.	Lesson Name	QR Codes	Page No
1.	12	Plant Anatomy and Plant Physiology	J5J19X JK2VB9 JZKQCK	173 181 184
2.	13	Structural Organization of Animals	KEUPC9 KUDJDK L9WEEW	187 192 197
3.	14	Transportation in Plants and Circulation in Animals	LP6DEK LPF9G8 M4P8FW	199 208 213
4.	15	Nervous System	MJ83H8 MYQXIJ NDZWI8	218 221 226
5.	16	Plant and Animal Hormones	NTIRJJ P92LKV PNBKKJ	229 230 239
6.	17	Reproduction in Plants and Animals	PNKGM7 Q3UFLV QIDAN7	243 246 256
7.	18	Heredity	QXM9MV QXW5PI RD64P7	261 267 271
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10.	21	Health and Diseases	TWSGTU TX2CVH UCBBV6	300 303 311
11.	22	Environmental Management	URU6WH V7D1XT VLLZXH	315 319 326
12.	23	Visual communication	VLVVZ5 W25UYT	329 333