

BIOLOGY LABORATORY

LIST OF REQUIREMENTS – FOR A CLASS OF 30 STUDENTS

CLASSES VIII – X

| <u>APPARATUS</u> | <u>QUANTITY</u> |
|---|------------------------|
| 1) Dissecting Microscope | 4 |
| 2) Compound Microscope | 4 |
| 3) Hand Lens | 30 |
| 4) Forceps | 30 |
| 5) Needles | 30 |
| 6) Test Tubes | 100 |
| 7) Beaker | 5 |
| 8) Funnel | 5 |
| 9) Thistle Funnel | 2 |
| 10) Droppers | 4 |
| 11) Conical Flask | 4 |
| 12) Glass Slides | 1 Box |
| 13) Cover Slips | 5 pkts |
| 14) Filter Paper | 3 pkts |
| 15) Vaseline | 1 bottle |
| 16) Dessicator | 1 |
| 17) Semi permeable membrane (Parchment paper) | |
| 18) Petri Dish (small) | 5 sets |
| 19) Watch Glass | 20 |
| 20) 'Y' shaped glass tube | 1 |
| 21) Bell Jar | 2 |
| 22) Ganong's Potometer | 1 |

Reagents such as:

| | |
|-----------------------------|-------------|
| 1) Iodine solution | 250 ml |
| 2) Fehling's A & B solution | 500 ml each |
| 3) Benedict's solution | 500 ml |
| 4) Sodium hydroxide | 250 ml |
| 5) Millon's reagent | 1 bottle |
| 6) Copper Sulphate solution | 250 ml |
| 7) Nitric acid | 250 ml |
| 8) Sudan III | 100 gm |
| 9) Eosin | 1 bottle |
| 10) Cobalt chloride | 100 gm |
| 11) Potassium Hydroxide | 100 gm |
| 12) Sucrose | 500 gm |
| 13) Potassium permanganate | 100 gm |
| 14) Methylene blue | 1 bottle |

Charts & Models of:

- 1) Sycon
- 2) Metridium (Sea anemone) / Physalia, Corals
- 3) Tapeworm, Liverfluke
- 4) Ascaris (Roundworm)
- 5) Pheretima (Earthworm), Leech
- 6) Julus (millipede), Centipede
- 7) Palaemon (Prawn), Crab
- 8) Butterfly, Cockroach, Moth

- 9) Scorpion, Spider
- 10) Apple Snail (Pila) / Octopus / Sepia / Mussel
- 11) Starfish / Sea urchin
- 12) Scoliodon (Shark)
- 13) Labeo (Rohu Fish)
- 14) Common Toad, Frog
- 15) Garden Lizard, Turtle / Tortoise
- 16) Pigeon
- 17) Rabbit
- 18) Bat
- 19) Circulatory system
- 20) Digestive system
- 21) Respiratory system
- 22) Skeletal system
- 23) Types of Joints
- 24) Reproductive system
- 25) Endocrine system
- 26) Nervous system
- 27) Parts of a flower---- Hibiscus
- 28) Parts of a plant cell
- 29) Parts of an animal cell
- 30) Plant tissues
- 31) Animal tissues
- 32) L.S. of Ovule during fertilization

- 33) Structure of a Tooth
- 34) Structure of a Villus
- 35) Working model of human Lungs / model of respiratory system of man
- 36) Internal structure of Bean seed
- 37) Internal structure of Maize grain
- 38) Stages of Mitosis
- 39) Human excretory system
- 40) Longitudinal section of human Kidney
- 41) Structure of kidney tubule
- 42) Parts of Eye
- 43) Parts of Ear
- 44) Model of Heart – external & internal view
- 45) Model of Brain / V.S. of Brain of man
- 46) Model of Skin
- 47) Types of Blood Cells

Permanent Slides of:

- a) Plant cell and animal cell (as per middle school syllabus)
Specific requirements for classes IX & X as per ICSE syllabus
- b) Human blood
- c) Amoeba / Paramecium
- d) Hydra
- e) Mitosis stages

**NOTE: THE REQUIREMENT FOR LABORATORY EQUIPMENT IS SUBJECT TO CHANGE
BASED ON CHANGES IN THE ICSE SYLLABUS.**

