

**Dr. LANKAPALLI BULLAYYA JUNIOR COLLEGE**  
**VISAKHAPATNAM-13**  
**Botany Practical Syllabus**

**Section-A**

<b>Morphology and Physiology</b>	
1	Solanaceae family
2	Study of Osmosis by Potato osmoscope
3	Separation of plant pigments through paper chromatography
	<b>Section-B</b>
	<b>Anatomy</b>
	Compound Microscope
	Preparation of Temporary Mount - Procedure
4	Anatomy of Dicot root
5	Anatomy of Monocot root
6	Anatomy of Dicot stem
7	Anatomy of Monocot stem
	<b>Section-C</b>
	<b>I. Morphology</b>
8	Tap root system
9	Fibrous root system
10	Alternate Phyllotaxy
11	Opposite Phyllotaxy
12	Whorled Phyllotaxy
13	Drupe
14	False Fruit (Pome)
15	Parthenocarpic Fruit
	<b>II. Algae, Fungi and Bryophytes</b>
16	Nostoc
17	Spirogyra
18	Rhizopus
19	Agaricus
20	Marchantia
21	Funaria
	<b>III. Pteridophytes, Gymnosperms and Angiosperms</b>
22	Pteris
23	Selaginella
24	Cycas (Microsporophyll)
25	Cycas (Megasporophyll)
26	Pisum sativum
27	Zea mays (Corn)
	<b>IV. Cell Biology (Slides)</b>
28	Prophase
29	Metaphase
30	Anaphase
31	Telophase

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**Zoology Practical Syllabus**

**Section-B**

**I. Invertebrate slides**

- 1 Amoeba
- 2 Euglena
- 3 Paramecium
- 4 Hydra

**II. Invertebrate Specimens**

- 1 Euspongia
- 2 Aurelia
- 3 Metridium/Adamsia
- 4 Liver Fluke
- 5 Taenia solium
- 6 Ascaris—male
- 7 Ascaris—Female
- 8 Nereis
- 9 Earthworm
- 10 Palaemon
- 11 Silk moth
- 12 Pila
- 13 Asterias

**III. Histology Slides**

- 1 Squamous epithelium
- 2 Columnar epithelium
- 3 Blood smear of a mammal
- 4 Striated muscle
- 5 Unstriated muscle
- 6 T.S of Stomach
- 7 T.S. of Intestine
- 8 L.S of Kidney

9	T.S. of Pancreas
10	T.S. of Testis
11	T.S. of Ovary
<b>IV. Vertebrate Specimens</b>	
1	Scoliodon
2	Catla
3	Frog
4	Cobra
5	Pigeon
6	Rabbit
<b>V. Mammalian Joints</b>	
1	Ball and socket joint
2	Hinge joint
3	Pivot joint
4	Gliding joint
<b>VI. Physiology Experiments</b>	
1	Identification of the presence of starch in the given samples.
2	Identification of the presence of glucose in the given samples.
3	Identification of the presence of lipids/fats in the given samples.
4	Identification of the presence of albumin in the given samples.
<b>Charts/Models</b>	
1	Frog : Digestive system
2	Frog : Male Reproductive system
3	Frog : Female Reproductive system
4	Human being : Digestive System
5	Human being : Arterial system.
6	Human being : Venous system.
7	Human being : Male Reproductive system.
8	Human being : Female Reproductive system