### PRESIDENCY HIGHER SECONDARY SCHOOL-PUDUCHERRY

XII-(BIO-ZOOLOGY AND ZOOLOGY)PRACTICAL MINIMUM MATERIAL)

# Marking of wild life sanctuary and National Park's in India Map

# 1. Kaziranga National Park

Location: Golaghat and Nagaon Districts of Assam

**Comments:** 1. It 430 square kilometre area

- 2. It dense forest is home more than 2200 Indian one horned Rhinoceros
- 3. It approximately  $2/3^{rd}$  of their world population
- 4. It was declared as tiger reserve in 2006

### 2. Point Calimere

**Location:** Kodiakkarai – Nagapattinam district

### **Comments:**

- 1. It was created for the conservation of near threatened species
- 2. Black buck, antelope
- 3. An endemic mammal species of India

### 3. Gir National Park

**Location:** Tala Gir Gujarat

#### **Comments:**

- 1. It natural habitat of world popular Asiatic lion
- 2. It covers total 1412 square kilometres of which 258 km
- 3. Fox are some of the smaller carnivores found in Gir Forest.

# 4. Periyar Wild life Sanctuary

**Location:** Kerala

#### **Comments:**

- 1. Apart from Elephants and other animal to be seen
- 2. Indian wild dog and very rarely tiger.
- 3. Now estimated 40 tigers here.

# 5. Mudumalai Wild life Sanctuary

Location: Nilgiri Hills, Nilgiri District

### **Comments:**

- 1. There are at least 266 species of birds in the sanctuary
- 2. It protected endangered and vulnerable species including Indian Elephant, Bengal Tiger

#### PREPARED SLIDES

# 1. Human Sperm

- 1. Human sperm it is microscopic structure
- 2. It contain Head, neck, middle piece and tail
- 3. Tail is a longest part of sperm

#### 2. Human Ovum

### **Comments:**

- 1. Human ovum is microscopic structure
- 2. It surrounded by three layer
  - a. Vitelline membrane
  - b. Zona pellucid
  - c. Corona Radiata
- 3. The cytoplasm of the egg is called ooplasm

### 3. Paramecium

#### **Comments:**

- 1. Conjugation is a form of sexual reproduction
- 2. Two individuals called conjugants.
- 3. It exchanges nuclear material.

# 4. Entamoeba Histolytica

### **Comments:**

- 1. It is Endoparasitic protozoan
- 2. It causes of amoebic dysentery
- 3. Symptoms: bleeding, abdominal pain etc

# 5. Thymus

### **Comments:**

- 1. It is primary lymphoid organ
- 2. It located above the heart
- 3. It secretion of thymosin hormone
- 4. It contain outer corten, Inner medulla

# 6. Lymph Node

### **Comments:**

- 1. It is a small bean shapes structure
- 2. Its three zone: cortex, paracorbex, medulla
- 3. It contains B- lymphocytes, macrophages, dendritic cells

### PRESERVED SPECIMENS

### 1. Mutualism

#### **Comments:**

- 1. Both species are benefited from the Interaction
- 2. The hermit crab takes shelter an empty molluscan shell
- 3. Sea anemone grows on the shell
- 4. The crap protected seom its enemies by stinging cells

#### **COMMENSACISAM**

- 1. An association of two or more species which one derives benefits and other neither benefits nor harmed
- 2. Dorsal sin of suckerfish is modified into sucker.

#### **RNA**

### **Comments:**

- 1. It is a clover leaf structure
- 2. It is a small RNA molecule, typically between 70 to 90 nucleotides in length
- 3. The site of protein synthesis

# **HOMOLOGOUS ORGANS**

#### **Comments:**

- 1. Structure is similar in origin different functions Eg: bat, whale, horse, human
- 2. There animals same structures develop along different dissection
- 3. It is divergent evolution

### ANALOGOUS ORGANS

#### **Comments:**

- 1. Organism having different structure but similar function Eg: Wings of birds
- 2. Convergent evolution

# **ANIMAL CLONING**

#### **Comments:**

- 1. Dolly was the First mammal (sheep) clone
- 2. It develop by Ian wilmut and Campbell 1997
- 3. The process to produce genetically identical individuals of organism

# **HUMAN INSULIN**

### **Comments:**

- 1. It recombinant DNA technology
- 2. It started 1970
- 3. Insulin is a First pharmaceutical product

#### **GENETICS**

# Normal Human Karyotype

#### **Comments:**

- 1. A complete set of chromosomes are separated seom a cell and arranged in pairs
- 2. Diagrammatic representation of chromosomes is called Ideogram.
- 3. 22 pairs of chromosomes autosomes xx- female xy allosomes

### **PATU'S SYNDROME**

#### **Comments:**

- 1. It is trisomic consition of chromosome 13.
- 2. Symptoms: mental deficiency
- 3. Small head, small eye, malformation of brain

# **TURNER'S SYNDROME**

- 1. It is a genetic disorder
- 2. It loss of X- chromosome 44A+ XO=45
- 3. These individuals are sterile remale short stature and webbed neck.
- 4. Under develop breasts/ gonads

# DEDIGREE ANALYSIS HAEMOPHILLA

### **Comments:**

- 1. It is bleeds disease (Royal disease)
- 2. This disease bleeds for long period 30 minutes to 24 hours
- 3. It failure of blood coagulation.
- 4. It causes of recessive X- linked gene

### SICKLE CELL ANBMIA

- 1. It is an autosome linked recessive trial
- 2. Sickle cell anemia is a classical example of point mertation
- 3. Genotype Hbs Hbs carring HbA Hbs