B.Sc

Name of Course:

B.Sc III Year (2012-13)

Name of the Paper:

Ethology, Biometry and Bioinformatics

Paper Number:

XIV

# Course Outcomes in detail

# A) Objectives:

1) To make students interest in understanding the animal behaviour.

3) To make attract students to study Bioinformatics.

 To prepare students to develop interest in study computer aided techniques and their applications.

# B) Outcomes:

1) The students would be able to understand about the collection, classification and grap hic representation of Data.

2) Student shows ability to know about communications in animals.

Name of Programme:

B.Sc

Name of Course:

B.Sc III Year (2012-13)

Name of the Paper:

Pisciculture

Paper Number:

XV (A)

# Course Outcomes in detail

# A) Objectives:

- 1) To make students interest in understanding the management of fish farms and different species of fishes.
- 2) To make attract students to study fishing methods, fish diseases.
- 3) To prepare students to develop interest in study fish by products.

- The students would be able to understand how to prepare and manage fish farms and the biology of Indigenous and exotic carps
- 2) Student shows ability to know about the different characters of fish species.

B.Sc

Name of Course:

B.Sc III Year (2012-13)

Name of the Paper:

Practical Paper (Ecology, Zoo-geography

Ethology, Biometry and Bioinformatics)

Paper Number:

XVI

# Course Outcomes in detail

# A) Objectives:

- 1) To create awareness in students to estimate Dissolved O2, Dissolved Co2, Chlorides and Salinity from water sample.
- 2) To make attract students to study fishing methods, fish diseases.
- 3) To prepare students to study ecological adaptations.

# B) Outcomes:

- 1) The students would be able to understand how to solve problems based on Mean, Mode, Median, etc.
- 2) Ability how to access the biological data from NCBI and Pub Med.

Name of Programme:

B.Sc

Name of Course:

B.Sc III Year

(2012-13)

Name of the Paper:

Practical Paper (Aquaculture and Pisciculture)

Paper Number:

XVII (A)

# Course Outcomes in detail

# A) Objectives:

- 1) To create awareness in students to identify the fish species, to estimate the physic-chemical parameters and perform dissection.
- 2) To make attract students to construct an aquarium and
- 3) To prepare students to visit to Fish Breeding Farm.

#### B) Outcomes:

- 1) The students would be able to know about the feeding habits of different fish species by examining the stomach content.
- 2) Student would be able to study fish by products.

Sharda Mahavidyalaya

Parbhani

B.Sc

Name of Course:

B.Sc II Year (2013-14)

Name of the Paper:

Genetics

Paper Number:

VI

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to develop interest in Genetics.
- 2) To make aware students to understand the gene and human genetics.
- To make awareness about the interaction of genes and functions of genetic materials along with genetic code.

#### B) Outcomes

- 1) The students become able to understand the Blood groups and Rh factor.
- The learner becomes able to understand the different syndromes and Human pedigree analysis.
- 3) Ability to know about mutation also.

Name of Programme:

B.Sc

Name of Course:

B.Sc II Year

(2012-13)

Name of the Paper:

Comparative Anatomy and Physiology

Paper Number:

VIIth

#### Course Outcomes in detail

#### A) Objectives:

- 1) To prepare students to understand the different anatomical systems of human being.
- 2) To make aware students to understand the physiology of nerve and muscle.
- 3) To make easy to understand Sliding filament theory of muscle contraction.

- 1) The students become able to understand the digestive, Respiratory, Excretory system as well as nerve and muscle physiology.
- 2) The learner becomes able to understand the comparative anatomy of vertebrates

B.Sc

Name of Course:

B.Sc I Year (2013-14)

Name of the Paper:

Life and Diversity of Animals-I (Non-chordates)

Paper Number:

Ist

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to develop interest in the topics of Invertebrates.
- 2) To make aware to understand the diversity of animals.
- 3) To make awareness about the different phylum of Invertebrates.

#### B) Outcomes

- 1) The students become able to understand the diversity of Invertebrates.
- 2) Becomes able to understand the classification and structures of the given type specimen from the invertebrate phylum.

Name of Programme:

B.Sc

Name of Course:

B.Sc I Year (2013-14)

Name of the Paper:

Cell Biology

Paper Number:

II

#### Course Outcomes in detail

#### A) Objectives:

- 1) To prepare students to attract and develop interest in the topics of Cell.
- 2) To make aware to understand the different types of Cell.
- 3) To make awareness about the different contents of the cell along with their structures.

- 1) The students become able to understand the difference between single and multiple cells.
- 2) Becomes able to understand the structure and functions of the given cell organells.

B.Sc

Name of Course:

B.Sc I Year (2013-14)

Name of the Paper:

Life and Diversity of Animals-II (Chordates)

Paper Number:

III

#### Course Outcomes in detail

#### A) Objectives:

- 1) To prepare students to develop interest in the topics of Chordates.
- 2) To make aware to understand the different classes of Vertebrates.
- 3) To make awareness about the different systems of vertebrate examples along with their classification.

#### B) Outcomes

- The students become able to understand the difference between Chordates and Nonchordates.
- 2) The learner becomes able to understand the structure, functions and economic importance of Chordates.

Name of Programme:

B.Sc

Name of Course:

B.Sc I Year (2013-14)

Name of the Paper:

**Developmental Biology** 

Paper Number:

IV

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to develop interest in Developmental Biology.
- To make aware students to understand the different types and gamates of Frog.
- To make awareness about the very interesting Embryo Transfer Technique and GIFT.

- 1) The students become able to understand the structure of Sperm and Ova.
- 2) The learner becomes able to understand the regeneration of Non- chordates and chordates.

B.Sc

Name of Course:

B.Sc I Year (2013-14)

Name of the Paper:

Practical Paper based on Theory paper I and II

Paper Number:

V

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to develop interest in the specimen study of the all phylum and classes with different examples.
- 2) To make aware to understand the skeleton of human being and Rat or Rabbit.
- 3) To make awareness about how to prepare slides of the provided material with the systematic procedures.
- 4) To attract students towards Mitosis and Meiosis.

- 1) The students become able to identify and classify the different specimens from different phyla and classes.
- 2) The learner becomes able to prepare permanent mounts of the material provided.
- 3) Ability to identify the different stages of Frog and Chick Embryology.

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Comparative Anatomy and Physiology

Paper Number:

VIIth

#### Course Outcomes in detail

# A) Objectives:

- 1) To prepare students to understand the different anatomical systems of human being.
- 2) To make aware students to understand the physiology of nerve and muscle.

### B) Outcomes:

- 1) The students become able to understand the digestive, Respiratory, Excretory system as well as nerve and muscle physiology.
- 2) The learner becomes able to understand the comparative anatomy of vertebrates.

Name of Programme:

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Genetic Engineering and Evolution

Paper Number:

VIIIth

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to understand the concept of Genetic engineering and theories of organic evolution
- 2) To make aware students to understand the Adaptations

- 1) The students become able to understand the tools in recombinant DNA technology and cloning.
- 2) The learner becomes able to make differentiation in different types of adaptations

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Endocrinology, Histology and Biochemistry

Paper Number:

IXth

# Course Outcomes in detail

### A) Objectives:

- 1) To create awareness among students about the different endocrine glands.
- 2) To make attract students to understand the metabolisms.

### B) Outcomes:

- 1) The students would be able to differentiate among endo and exocrine glands.
- 2) Ability to identify and describe structure and function of different mammalian organs and tissues.

Name of Programme:

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Practical Paper based on Paper No. VI<sup>th</sup> and VIII<sup>th</sup>

Paper Number:

Xth

#### Course Outcomes in detail

### A) Objectives:

- 1) To make students able to solve the different problems based on blood group inheritance and sex-linked inheritance.
- To make attract students to identify and describe adaptations and evidences by using photographs or charts.

#### B) Outcomes:

1) The students would be able to solve problems and demonstrate the given specimen.

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Practical Paper based on Paper No. VIIth and IXth

Paper Number:

XI<sup>th</sup>

#### Course Outcomes in detail

# A) Objectives:

- 1) To make awareness in the students about counting of RBC and WBC and determination of blood group.
- 2) To make attract students to identify and describe different histological structures of different.
- To prepare students to develop interest in detecting digestive enzymes and nitrogenous waste products.

#### B) Outcomes:

- 1) The students would be able to perform practical skillfully.
- 2) Students become able to measure the Blood Pressure by using B.P Apparatus.
- 3) Ability to identify glands in the chart.

Name of Programme:

B.Sc

Name of Course:

B.Sc II Year (2014-15)

Name of the Paper:

Ecology and Zoogeography

Paper Number:

XIIth

#### Course Outcomes in detail

#### A) Objectives:

- 1) To make students able to understand ecosystem and its components.
- To make attract students to study different spheres of earth and Biogeochemical cycles.
- 3) To prepare students to develop interest in wildlife conservation.

- 1) The students would be able to understand the population ecology.
- 2) Students become able to know about the Energy resources and their limitations.

B.Sc

Name of Course:

B.Sc III Year (2015-16)

Name of the Paper:

Aquaculture

Paper Number:

XIII (A)

Course Outcomes in detail

# A) Objectives:

- 1) To make students able to understand Aquaculture.
  - 2) To make attract students to study different culture methods.
  - 3) To prepare students to develop interest in study and constructing an aquarium.

### B) Outcomes:

1) The students would be able to understand the types of aquaculture and characteristics of water.

Name of Programme:

B.Sc

Name of Course:

B.Sc III Year (2015-16)

Name of the Paper:

Ethology, Biometry and Bioinformatics

Paper Number:

XIV

Course Outcomes in detail

#### A) Objectives:

- 1) To make students interest in understanding the topic.
- 2) To make attract students to study Bioinformatics.
- 3) To prepare students to develop interest in study computer aided techniques and their applications.

- 1) The students would be able to understand about the collection, classification and grap hic representation of Data.
  - 2) Student shows ability know about communications in animals.

B.Sc

Name of Course:

B.Sc III Year (2015-16)

Name of the Paper:

Pisciculture

Paper Number:

XV (A)

# Course Outcomes in detail

# A) Objectives:

- 1) To make students interest in understanding the management of fish farms and different species of fishes.
- 2) To make attract students to study fishing methods, fish diseases.
- 3) To prepare students to develop interest in study fish by products.

# B) Outcomes:

- 1) The students would be able to understand how to prepare and manage fish farms and the biology of Indigenous and exotic carps
- 2) Student shows ability to know about the different characters of fish species.

Name of Programme:

B.Sc

Name of Course:

B.Sc III Year

(2015-16)

Name of the Paper:

Ecology, Zoo-geography

Ethology, Biometry and Bioinformatics

Paper Number:

XVI

# Course Outcomes in detail

# A) Objectives:

- 1) To create awareness in students to estimate Dissolved O2, Dissolved Co2, Chlorides and Salinity from water sample.
- 2) To make attract students to study fishing methods, fish diseases.
- 3) To prepare students to study ecological adaptations.

- 1) The students would be able to understand how to solve problems based on Mean, Mode, Median, etc.
- 2) Ability how to access the biological data from NCBI and Pub Med.

B.Sc

Name of Course:

B.Sc III Year (2015-16)

Name of the Paper:

Aquaculture and Pisciculture

Paper Number:

XVII (A)

Course Outcomes in detail

# A) Objectives:

- 1) To create awareness in students to identify the fish species, to estimate the physic-chemical parameters and perform dissection.
- 2) To make attract students to construct an aquarium and
- 3) To prepare students to visit to Fish Breeding Farm.

### B) Outcomes:

- 1) The students would be able to know about the feeding habits of different fish species by examining the stomach content.
- 2) Student would be able to study fish by products.

VICE-PRINCIPAL Sharda Mahavidyalaya Parbhani

B.Sc

Name of Course:

B.Sc I Year (2016-17)

Name of the Paper:

Life and Diversity of Animals-I (Non-chordates)

Paper Number:

Ist

#### Course Outcomes in detail

# A) Objectives:

- 1) To prepare students to develop interest in the topics of Invertebrates.
- 2) To make aware to understand the diversity of animals.
- 3) To make awareness about the different phylum of Invertebrates.

#### B) Outcomes

- 1) The students become able to understand the diversity of Invertebrates.
- 2) Becomes able to understand the classification and structures of the given type specimen from the invertebrate phylum.

Name of Programme:

B.Sc

Name of Course:

B.Sc I Year (2016-17)

Name of the Paper:

Cell Biology

Paper Number:

II

#### Course Outcomes in detail

#### A) Objectives:

- 1) To prepare students to attract and develop interest in the topics of Cell.
- 2) To make aware to understand the different types of Cell.
- To make awareness about the different contents of the cell along with their structures.

# 4) Outcomes will be an branching as a shall be seen when of (1)

- 1) The students become able to understand the difference between single and multiple cells.
- 2) Becomes able to understand the structure and functions of the given cell organells.

B.Sc

Name of Course:

B.Sc I Year (2016-17)

Name of the Paper:

Life and Diversity of Animals-II (Chordates)

Paper Number:

III

#### Course Outcomes in detail

# A) Objectives:

- 1) To prepare students to develop interest in the topics of Chordates.
- 2) To make aware to understand the different classes of Vertebrates.
- 3) To make awareness about the different systems of vertebrate examples along with their classification.

### B) Outcomes

- The students become able to understand the difference between Chordates and Nonchordates.
- 2) The learner becomes able to understand the structure, functions and economic importance of Chordates.

Name of Programme:

B.Sc

Name of Course:

B.Sc I Year (2016-17)

Name of the Paper:

Developmental Biology

Paper Number:

IV

#### Course Outcomes in detail

#### A) Objectives:

- 1) To prepare students to develop interest in Developmental Biology.
- To make aware students to understand the different types and gamates of Frog.
- 3) To make awareness about the very interesting Embryo Transfer Technique and GIFT.

- 1) The students become able to understand the structure of Sperm and Ova.
- 2) The learner becomes able to understand the regeneration of Non- chordates and chordates.

B.Sc

Name of Course:

B.Sc I Year (2016-17)

Name of the Paper:

Practical Paper based on Theory paper I and II

Paper Number:

V

# Course Outcomes in detail

# A) Objectives:

- 1) To prepare students to develop interest in the specimen study of the all phylum and classes with different examples.
- 2) To make aware to understand the skeleton of human being and Rat or Rabbit.
- 3) To make awareness about how to prepare slides of the provided material with the systematic procedures.
- 4) To attract students towards Mitosis and Meiosis.

# B) Outcomes

- 1) The students become able to identify and classify the different specimens from different phyla and classes.
- 2) The learner becomes able to prepare permanent mounts of the material provided.
- 3) Ability to identify the different stages of Frog and Chick Embryology.

Name of Programme:

B.Sc mulovil the garage and strength and an appear of the grown

Name of Course:

B.Sc II Year (2016-17)

Name of the Paper:

Genetics

Paper Number:

VI

#### Course Outcomes in detail

### A) Objectives:

- 1) To prepare students to develop interest in Genetics.
- 2) To make aware students to understand the gene and human genetics.
- 3) To make awareness about the interaction of genes and functions of genetic materials.

- 1) The students become able to understand the Blood groups and Rh factor.
- The learner becomes able to understand the different syndromes and Human pedigree analysis